

## DEPARTMENT OF THE INTERIOR

Franklin K. Lane, Secretary
United States Geological Survey
George Otis Smith, Director

## Bulletin 651

# SPIRIT LEVELING IN OHIO 

## 1898 T0 1916, INCLUSIVE

R. B. MARSHALL, Chief Geographer

Work done in cooperation with the State of Ohio
C. E. Sherman, Inspector

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# SPIRIT LEVELING IN OHIO, 1898 TO 1916, INCLUSIVE. 

R. B. Marshall, Chief Geographer.

## INTRODUCTION.



Cooperation.-The State of Ohio contributed financially to the work in the State during the years 1900 to 1915, inclusive, and was represented by C. N. Brown, inspector, in 1901-2 and by C. E. Sherman, inspector, from 1902 to 1916.

Previous publication.-All results of spirit leveling in Ohio previously published by the United States Geological Survey in Bulletins 411, 476 , and 518 and all the results of later work are included in this report. All elevations are in agreement with the 1907 adjustment of precise leveling and were not changed by the 1912 adjustment.

Primary or precise leveling has been extended over the entire State; every quadrangle and every county has several bench marks well distributed within its area. The bench marks are grouped by quadrangles, arranged alphabetically.

Personnel.-The field work during 1898 to 1902, inclusive, was done under the direction of H. M. Wilson and J. H. Renshawe, geographers in charge of eastern and central divisions of topography, respectively, Ohio being then apportioned half to each; that during 1903 to 1906, inclusive, was done under H. M. Wilson, geographer; that during 1907 was done under Frank Sutton, geographer; and that since 1907 was done under W. H. Herron, geographer. The work since January, 1908, was done under the general direction of R. B. Marshall, chief geographer. The names of the respective levelmen are given in the introductions to the several lists. The office work of computation, adjustment, and preparation of lists was done mainly by S. S. Gannett, geographer, under the general direction of E. M. Douglas, geographer.

Classification.-The elevations are classified as precise or primary, according to the methods employed in their determination. For precise-level lines instruments and rods of the highest grade are used, each line is run both forward and backward, and every precaution is taken to guard against error. The allowable divergence be-
tween the forward and the backward lines in feet is represented by the formula $0.017 \sqrt{\mathrm{D}}$, in which D is the distance in miles between bench marks. For primary lines standard $Y$ levels are used; lines are run in circuits or are closed on precise lines, with an allowable closing error in feet represented by $0.05 \sqrt{\mathrm{D}}$, in which D is the length of the circuit in miles, sufficient care being given to the work to maintain this standard. For levels of both classes careful office adjustments are made, the small outstanding errors being distributed over the lines.
Bench marles.-The standard bench marks are of two forms. The first form is a circular bronze or aluminum tablet ( $C$ and $E, \mathrm{Pl}$ II), $3 \frac{1}{2}$ inches in diameter and one-quarter inch thick, having a 3 -inch stem, which is cemented in a drill hole in solid rock in the wall of some public building, a bridge abutment, or other substantial masonry structure. The second form ( $F, \mathrm{Pl}$. II), used where masonry or rock is not available, consists of a hollow wrought-iron post $3 \frac{1}{2}$ inches in outer diameter and 4 feet in length, which is set about 3 feet in the ground. The bottom is spread out to a width of 10 inches in order to give a firm bearing on the earth. A bronze or aluminum-bronze cap is riveted upon the top of the post. A third style of bench mark with abbreviated lettering ( $B$ and $D, \mathrm{Pl}$ II) is used for unimportant points. This consists of a special copper nail $1 \frac{1}{2}$ inches in length driven through a copper washer seven-eighths inch in diameter. The tablets as well as the caps on the iron posts are appropriately lettered, and where States have cooperated in the work the fact of such cooperation is indicated by the addition of the State name ( $G$, Pl. II). A third form consists of a copper bolt 1 inch in diameter and 4 inches long, which is split at one end and expanded in a drill hole in masonry by driving on a brass wedge. But few of this class have been used in Ohio, and their use has now been discontinued.

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with $\frac{3}{16}$-inch steel dies on the tablets or post caps to the left of the word "feet." The office adjustment of the notes and the reduction to mean sea level datum may so change some of the figures that the original markings are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted values, and will use the markings as identification numbers only.

Datum.-All elevations determined by the United States Geological Survey and United States Coast and Geodetic Survey are referred to mean sea level, which is the level that the sea would assume if the influence of winds and tides were eliminated. This level is not the


GEOLOGICAL SURVEY BENCH MARKS.
$A$, Tablet used in cooperating States. The State name is inserted at $G$. $B$ and $D$, Copper temporary bench mark, consisting of a nail and copper washer. $A, C$, and $E$, Tablets for stone or concrete structures. $F$, Iron post used where there is no rock.

elevation determined from the mean of the highest and the lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. Mean sea level is the average height of the water, all stages of the tide being considered. It is determined from observations made by means of tidal gages placed at stations where local conditions, such as long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.

The connection with tidal stations for bench marks in certain areas that lie at some distance from the seacoast is still uncertain, and this fact is indicated by the addition of a letter or word to the right of the word "Datum" on tablets or posts. For such areas corrections for published results will be made from time to time as the preciselevel lines of the United States Geological Survey, the United States Coast and Geodetic Survey, or other Government organizations are extended. The precise-level net in Ohio is composed of the Coast and Geodetic Survey lines from Belpre west via Cincinnati to the State line, from Toledo south to Cincinnati, from Deshler to Chicago Junction, and from Alliance to Youngstown; the Army Engineers' lines along Ohio and Muskingum rivers; the Baltimore \& Ohio Railroad lines from near Lowellville to Chicago Junction and from Warwick to Wheeling; the Pittsburgh, Fort Wayne \& Chicago Railroad line from East Palestine to Massillon; and lines run by the United States Geological Survey, record of which is given in this bulletin, from Cleveland to Canton, from Ottawa via Roselm and Evansport to Haskins, from Chillicothe to Portsmouth, from Chillicothe to Columbus, and from Columbus to Uhrichsville and Station Fifteen. In the adjustment made by the Coast and Geodetic Survey the weights assigned to the various links of the net were dependent on their length, the method of leveling used, and the comparative results. The recent precise leveling by the Coast and Geodetic Survey, and by the Geological Survey, received the greatest weight and were very little distorted by adjustment, but the railroad lines were considerably altered. The best theoretical value for the junc-tion-point elevations were in most cases not actually adopted, the heights by the 1903 adjustment being allowed to stand where the difference was within the range of uncertainty, thus making less correction to lists already prepared and published. Thus the former elevations on lines from Toledo to Cincinnati, and from Cleveland
to Canton, are retained by the Coast and Geodetic Survey as the adopted elevations by the 1912 adjustment. The elevations adopted in this bulletin for Uhrichsville and points thence to Massillon, Zanesville, and Wheeling differ also from those adopted by the Coast and Geodetic Survey, the result of an easement made to give greater weight to the Baltimore and Ohio Railroad line between Uhrichsville and Wheeling, which was checked by primary circuits of 1908.

Topographic maps.-All of the quadrangles for which leveling data are given in this publication have been surveyed and the resulting topographic maps have been published or soon will be published by the United States Geological Survey.

These maps may be obtained for 10 cents each or $\$ 3$ for 50 , except the Cincinnati double sheet, which is 20 cents, on application to the Director of the Survey at Washington, D. C.

## PRECISE AND PRIMARY LEVELING.

## AKRON QUADRANGLE.

```
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
``` Precise leveling by Baltimore \& Ohio R. R.

\section*{From Akron southwest to Barberton.}

Akron, Summit County, 600 feet east of Union Station, in east end of retaining wall on north side of tracks; copper bolt (B. \& O.
b. m .441 ) west coping of culvert along Cleveland, Akron \& Columbus Ry. tracks ; copper bolt (B. \& O. b. m. 442)
993.911

Akron, 3.5 miles southwest of, on Cleveland, Akron \& Columbus Ry. bridge over old canal ; copper bolt (B. \& O. b. m. 443)
976.936

Barberton station; southeast corner of stone doorsill at entrance to ladies' waiting room (B. \& O. b. m. 441)
968.109

\section*{Primary leveling by W. E. Earle in 1903 and E. I. Shea in 1903.}

From Hudson west along highway to Peninsula, thence south via Everett to Akron.

Peninsula, in northwest corner of city hall; aluminum tablet stamped " 711 Cleveland"
Everett, east side of canal lock, on third stone from south gate; chiseled cross
719.97

Ira station, iron bridge over Cuyahoga River, northwest stone pillar, in top stone; chiseled cross
729. 722

Botzum, in northeast stone abutment of bridge over Ohio Canal; aluminum tablet stamped " 753 Cleveland"
752. 890

Cranmer flag station, 1,000 feet north of, southeast stone abutment of road bridge over canal, on second step from bottom ; chiseled cross'
765.99

Akron, 1.5 miles north of, fifth canal lock north of West North Street, in northeast corner of stone wall ; chiseled cross
Akron, 175 feet west of Howard Street station, iron bridge of Cleveland, Terminal \& Valley R. R. over Howard Street, in southeast stone abutment; chiseled cross
884. 62

\section*{From Akron west along highway via Copley to Sharon Center, thence north to West Richfield, thence east to Peninsula.}

Copley 15 miles east of iron bridge over Pigeon Creek, Northern

Ohio Ry., 20 feet east of crossroad, southeast corner of stone abutment; chiseled cross

\section*{Feet.}
976.59

Copley, in southwest corner of Disciples Church ; aluminum tablet
stamped " 1049 Cleveland "-------------. 1, 049. 163
Copley, 1.3 miles west of, in northwest corner of road forks, 75 feet east of road crossing north and south, at house of E. Bigelow, in south top stone to small culvert; chiseled cross

1, 081.76
Copley, 2.3 miles west of, at southeast corner of J. M. Andrews house, northwest corner of forks of road on Medina-Summit county line, in large top stone of culvert; cut
```

1,044.03

```

Sharon Center, 1 mile east of, Sharon Township, east side of road,
southwest corner of foundation of barn owned by Jennie Hollinger;
aluminum tablet stamped " 1044 Cleveland "---------- 1, 043. 707
Granger, 1.25 miles east of, Granger Township, southeast corner of forks of roads, in south side of top stone of stone culvert; aluminum tablet stamped " 1072 Cleveland"

1,072.311
Richfield, 1 mile south of, west side of road, 1,100 feet north of forks of Medino-Brecksville road, top of culvert; chiseled cross
West Richfield, in southeast corner of Carter House; aluminum tablet stamped " 1279 Cleveland"

1,279. 027
Peninsula, 2 miles west of, south side of road, at forks east, west,
and northeast, in top stone to culvert; chiseled cross
From East Akron southwest along highway to Barberton, thence west along Erie R. R. to Wadsworth, thence north along highway to Sharon Center.

Akron, northeast corner of east porch of county jail ; aluminum tablet stamped " 1027 Cleveland" (on checked spur line)

1, 027. 182
\begin{tabular}{l} 
Barberton, 1.5 miles north of, in southeast corner of stone bridge with \\
iron hand rails over drain east of Lawndale ; chiseled cross_--.-- \\
\hline 65.61
\end{tabular}
Barberton, at right side of main entrance stairway of Barberton Inn, in face of support to veranda; aluminum tablet stamped " 981 Cleveland" (probably destroyed, 1915)
981.269

Barberton, 1.5 miles west of station, Erie Railroad milestone 210 ; cross chiseled on top

1, 012. 70
Sherman, 35 feet east of Erie Railroad station, in top of milestone 212 ; bronze tablet stamped " 1085 Cleveland"
\(1,085.476\)
Wadsworth, Wadsworth National Bank, 1 foot south of doorway, in
face of foundation stone; bronze tablet stamped " 1170 Cleveland "-1,170. 404
Wadsworth, 4 miles north of, at southeast corner of crossroads, in top of large stone post ; chiseled cross

1, 089. 27
Sharon Center, Sharon Township, at southwest corner of Universalist Church, in face of stone foundation; bronze tablet stamped " 1128 Cleveland "
\(1,127.748\)
ALGER QUADRANGLE.
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by E. C. Bibbee in 1913.
From Foraker west along Erie R. R. to point 4 miles east of Lima.
Foraker, at southwest corner of \(T\) road west, opposite schoolhouse; highest point on cast-iron drain under pike

Foraker, 160 feet southwest of station, 100 feet southeast of Seymor's elevator, 20 feet east of public road; top of bolthead in northeast corner of foundation of platform scales

Feet.
976.40

Foraker, 1.1 miles west of, on Erie R. R., on east abutment south side of bridge over Scioto River ; chiseled square
974. 98

Foraker, 2.5 miles west of, 40 feet west of railroad crossing; chiseled square on east abutment north side of iron bridge_
973.08

McGuffey, Erie R. R. bench mark 1 (railroad elevation 981.06)
McGuffey, 350 feet west of station; spike in base of telegraph pole marked " 35 "
981.25

McGuffey, 1 mile west of, 300 feet east of pole marked " 36 "; spike in base of telegraph pole
977.31
982.19

Alger, 1.2 miles east of, 10 feet north of railroad right of way, in cleared field, 15 feet north of Erie R. R. bench mark 10, 150 feet east of telegraph pole marked " 3630 "; copper nail in top of whiteoak stump
977. 29

Alger, in southwest corner of Marion T. W. P. building yard, 150 feet north of station, 100 feet south of Exchange Hotel; iron post stamped " 978 Ohio"
978. 447

Alger, 50 feet west of station; spike in telephone pole (Erie R. R. b. m. 977.29)
977. 44

Alger, 0.6 mile west of, on east abutment north side of iron girder bridge No. 20 over Cottonwood ditch; chiseled square
979.91

Alger, 1.5 miles west of, in base of telegraph pole marked " 39-20" ; iron spike
989.87

Alger, 2 miles west of, on property line of Erie R. R., 30 feet west of center of public road; copper nail in root of water-maple tree 14 inches in diameter
991.14

Alger, 3 miles west of, 2 feet south of north property line, 30 feet west of public road at crossing; iron post stamped " 1001 Ohio"

1,001. 281
Harrods, at northwest corner of intersection of Walnut and Railroad streets, 300 feet northwest of station; chiseled square on concrete sidewalk
986. 58

Harrods, at road crossing at north end of station; top of rail_--.-.--
Harrods, 1 mile west of, at first railroad crossing, 60 feet north of railroad, 25 inches west of public road; spike in top of corner fence post
999.99
\(\begin{array}{ll}\text { Erie R. R. bench mark, elevation } 996.26 \text { feet } & 996.0-\ldots\end{array}\)
Harrods, 2 miles west of, 40 feet south of railroad, 20 feet east of public road at crossing; spike in base of 1-foot hickory tree
996.73

Harrods, 2.8 miles west of, on north side of railroad, 350 feet west of telegraph pole marked " \(44-30\) "; spike in base of telegraph pole (railroad bench mark, value not known)

1, 003.76
Westminster, 0.4 mile east of, northwest corner of switch stand opposite switch block; spike
990.02

Westminster, 160 feet west of station, 50 feet east of public road; spike in base of telegraph pole (Erie R. R. bench mark 63)
974.51
\(\begin{aligned} & \text { Westminster, } 1 \text { mile west of, north side of base of telegraph pole } \\ & \text { opposite Erie R. R. bench mark } 67 \text {; spike.-.----------- } 961.49\end{aligned}\)


From McGuffey along highway south, west, and north to point near Harrods.
McGuffey, in northeast corner of school yard; iron post stamped " 977 Ohio"
Feet. ..... 976. 635
McGuffey, 0.6 mile south of, on south abutment west side of iron bridge over Cottonwood ditch at crossroads; chiseled square ..... 973. 84
McGuffey, 1.6 miles south of, on south abutment west side of south twin bridge at crossroads ; chiseled square ..... 969.92
McGuffey, 2.5 miles southwest of, 6 feet west of northwest corner of iron bridge over Scioto River at T road south; copper nail in top of piling ..... 970.92
McGuffey, 2.9 miles south of, at northwest corner of T road west, 85 feet west of Scioto River, near residence of Harlan Nickels; iron post stamped " 970 Ohio" ..... 970.046
McGuffey, 4 miles southwest of, 200 feet west of residence, southwest corner fence post of John Sander's garden; spike in base_ ..... 971. 64
McGuffey, 5.2 miles southwest of, on south side of road near north- west corner of sec. 33 , Marion Township; spike in base of fence post ..... 991. 61
McGuffey, 6.4 miles southwest of, 3.5 miles south of Alger, on Ada pike, on east side of road opposite \(T\) road west; iron post stamped " 996 Ohio" ..... 995.967
West Newton, 1.8 miles east of, 100 feet north of Eureka schoolhouse, opposite \(T\) road north; spike in base of fence post ..... \(1,018.55\)
West Newton, 0.8 mile east of, opposite \(T\) road north, near center of sec. 31, Marion township; spike in base of fence post ..... 1, 037.06
West Newton, at northwest corner of crossroads opposite West New- ton post office; iron post stamped " 1047 Ohio" ..... 1,047. 311
West Newton, 0.4 mile west of, opposite \(T\) road west; spike in base of telephone pole ..... \(1,045.75\)
West Newton, 1.4 miles west of, at entrance to Mount Zion Baptist Church, 70 feet east of crossroads; chiseled square on second step from bottom ..... 1, 041.01
West Newton, 2.4 miles west of, 160 feet south of crossroads; high- est point on southeast corner of concrete walk leading to Joseph Clevencer's residence ..... \(1,045.05\)
Harrods, 2.7 miles southwest of, 200 feet south of J. Parker's resi- dence; highest point on west end of cast-iron drain under pike ..... 1,020.06
Harrods, 2 miles southwest of, at northwest corner of crossroads, 200feet northwest of Auglaize U. B. Church, near southeast cornerof NE. \(\frac{1}{4}\) sec. 21, Auglaize Township; iron post stamped " 999Ohio "998. 496Harrods, \(\mathbf{1 . 5}\) miles south of, at T road east, opposite District 9 school-house; spike in base of northeast corner fence post990.82
Harrods, 1 mile southwest of, 100 feet southwest of Geo. Chamber's residence; chiseled square on south abutment west side of iron bridge972. 20
From point 2.3 miles west of West Newton along highways southwest to point 3.2 miles north of New Hampshire, thence east to Jumbo.
New Hampshire, 72 miles north of, 50 feet southwest of R. C. Cook's residence, opposite \(T\) road south; spike in base of fence post....... \(1,053.65\)
New Hampshire, 6.2 miles northeast of, in northeast corner of Sugar Tree schoolhouse yard; iron post stamped " 1065 Ohio" 1,064. 747

New Hampshire, 5.2 miles north of, 1 mile west of Sugar Tree schoolhouse, 10 feet north of southeast corner of T road south; Feet. highest point on east end of steel drain under pike 1, 065.58
New Hampshire, 4.2 miles north of, at northwest corner of crossroads, near residence of J. W. Sproul ; highest point on west end of steel drain

1, 069.59
New Hampshire, 3.2 miles north of, at northeast corner of \(\mathbf{T}\) road south, 125 feet northeast of Willow Branch schoolhouse, 100 feet south of Waynesfield cemetery; iron post stamped "1041 Ohio"-- 1, 041. 296
New Hampshire, 4.2 miles northeast of, 15 feet northeast of southeast corner of T roads, 425 feet east of P. Emerick's residence; highest point on limestone rock

1, 049.08
New Hampshire, 4.9 miles northeast of, on southeast corner of porch in front of subdistrict 5 Wayne Township brick schoolhouse, 200 feet west of crossroads ; chiseled square

1, 037.86
Holden, 1.8 miles west of, at northeast corner of crossroads; highest point on east end of 3 -foot steel drain 1, 031. 30
Holden, 0.8 mile west of, 500 feet north of G. D. Mean's residence, on south side of road, 0.25 mile east of northwest corner of sec. 24 , Wayne township; iron post stamped " 1030 Ohio"

1, 029.933
Holden, on south edge of porch in front of Fletcher M. E. Church; chiseled square

1, 039.79
Holden, 1 mile east of, on west side of road opposite \(T\) road east, 500 feet west of Street schoolhouse; spike in base of telephone pole

1, 047,35
Holden, 1.6 miles southeast of, 25 feet south of southwest corner of crossroads, near mail box of J. Bartlett; copper nail in root of 2 -foot ash tree

1, 027.76
Holden, 2.6 miles southeast of, at northwest corner of T road west, opposite Hinkle M. E. Church ; iron post stamped " 1055 Ohio ".-.- 1, 054. 800
Holden, 3.7 miles east of, at southwest corner of \(T\) road south; highest point on old chisel in corner fence post 1 foot above ground \(1,031.84\)
Holden, 4.4 miles east of, at northwest corner of porch at entrance to red schoolhouse; chiseled square

1, 038. 70
Holden, 5.2 miles east of, 1,200 feet west of John Byrnes's residence; highest point on north end of steel drain under pike\(1,038.27\)

Jumbo, 1.2 miles west of, at northeast corner of T road north, 700 feet west of Fairview Cemetery ; iron post stamped " 1043 " \(1,042.767\)
Jumbo, 0.3 mile west of, at entrance to McDonald Christian Chapel; chiseled square on southeast corner of concrete porch
\(1,084.79\)
Jumbo, at southwest corner of crossroads in front of Jumbo schoolhouse ; chiseled square on southeast corner of concrete cistern top_ 1, 086. 62
Bellecenter, 4.7 miles northeast of, 1 mile south of Jumbo, at northeast corner of crossroads, opposite residence of Fred Crook; iron post stamped "1077"

1,077.233
From point 3.2 miles north of New Hampshire along highway to New Hampshire, thence west to point 2 miles north of Gutman.
New Hampshire, 2.2 miles north of, at southeast corner of \(T\) road east, 0.25 mile north of Lone Oak Farm, residence of J. L. Focht; highest point on top of concrete coruer fence post
\(1,034.65\)
New Hampshire, 1.1 miles north of, in top of corner fence post at northeast corner of crossroads; copper nail_

1,033. 18

New Hampshire, at northeast corner of sidewalk at southwest corner of crossroads, opposite post office; highest point in center of letter Feet. " \(O\) " in name ROY 1,035. 34
New Hampshire, 1.2 miles west of, at northeast corner of \(T\) road north ; copper nail in top of fence post

1, 029.96
New Hampshire, 2.2 miles west of, 1 foot east of concrete corner fence post at northeast corner of crossroads ; copper nail in top of 4 by 6 inch brace 4 inches above ground

1, 049.12
New Hampshire, 2.7 miles west of, 40 feet south of center of \(T\) road west; chiseled square on north end of west side of concrete parapet of tile culvert

1, 040.61

From New Hampshire along highways southeast and east to Belle Centre.
New Hampshire, 1.1 miles south of, 10 feet north of southwest corner of crossroads ; highest point on south end of steel drain under pike_ 1, 034. 42
New Hampshire, 1.6 miles south of, at entrance to Stokes township schoolhouse (subdistrict 10), 50 feet south of line between Auglaize and Logan counties ; chiseled square on northeast corner of porch
New Hampshire, 2.4 miles south of, 10 feet south of northeast corner of T road east, 650 feet north of E. L. Klines's residence; highest point on north end of steel culvert under wagon road1, 029.40

New Hampshire, 3 miles south of, at northeast corner of T road east, opposite residence of W. L. Van Horn; highest point on north end of 2 -foot steel drain \(1,015.10\)
New Hampshire, 3.8 miles southeast of, at northeast corner of crossroads, opposite Van Horn cemetery; iron post stamped " 1023 Ohio"

1,023. 290
New Hampshire, 4.6 miles southeast of, 60 feet southeast of T road north near old church, 1,000 feet northwest of W. McClurg's residence ; spike in base of telephone pole on south side of road
New Hampshire, 5.6 miles southeast of, 700 feet west of Stoe township District No. 1 schoolhouse, on top and in center of south girder of iron bridge over Hog Creek; bolthead painted white_ 1,008. 56
Bellecenter, 7.3 miles northwest of, at Capt. Dunlap's residence, south side of \(\mathbf{T}\) road north; iron post stamped "Prim. Trav. Sta. No. 91, elev. 1013 "
Bellecenter, 6.3 miles northwest of, in southeast corner of small overhead cattle bridge, 500 feet southwest of R. D. Harman's residence; copper nail
\[
1,009.09
\]

Bellecenter, 5.1 miles northwest of, in yard of L. G. Wilmot; copper nail in root of 7 -foot red-oak tree

1,007. 92
Rellecenter, 3.9 miles west of, 600 feet east of crossroads, 750 feet east of J. K. Elder's residence, 500 feet northeast of North Fork school house (district 6) ; chiseled square on west abutment south side of small iron bridge
Bellecenter, 3 miles west of, 8 feet south of south fence line in open pasture field, 300 feet west of \(W\). Richard's residence ; copper nail in root of 2 -foot oak tree

1, 023.90
Bellecenter, 2.5 miles west of, 20 feet south of southwest corner of T road west, 100 feet northwest of LeRoy Bassil's residence, 0.4 mile north of Roebuck schoolhouse (district 5) ; iron post stamped " 1051 Ohio"

Bellecenter, 2 miles west of, on west end of first concrete step from Feet. bottom at south entrance to Roebuck schoolhouse ; chiseled square_ 1, 054. 24
Bellecenter, 0.9 mile west of, at southwest corner of \(T\) road south; nail head in top of fence post

1,047. 17

Bellecenter, 2.5 miles northeast of, 60 feet south of \(T\) road west, 300 feet north of Casper Bell's residence, on east side of road, in base of telephone pole; spike
Bellecenter, 3.1 miles northeast of, on west side of road opposite \(T\) road east, 380 feet north of M. S. Moon's residence; iron post stamped " 1097 Ohio"
\(1,097.184\)
Bellecenter, 3.7 miles northeast of, 160 feet northwest of Harmony
Church, at lane crossing, in root of hickory tree; copper nail_1,074.38
Bellecenter, 4.2 miles northeast of, 1,500 feet north of Harmony schoolhouse, in root of walnut tree opposite \(T\) road west; copper nail 1,064. 27
Bellecenter, 4.4 miles northeast of, 0.5 mile north of Harmony schoolhouse, on south abutment west side of iron bridge over north fork of Miami River ; chiseled square
Bellecenter, 4.7 miles northeast of, at northeast corner of crossroads, opposite residence of Fred. Crock; iron post stamped " 1077 Ohio"- 1, 077. 232
Bellecenter, 5 miles northeast of, 1 mile south of Jumbo, at southeast corner of \(T\) road south, in corner fence post, 100 feet northeast of Langer Head schoolhouse, 1 foot above ground; spike

1, 074. 77

\section*{ALLIANCE QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\). ]
1 Precise leveling by U. S. Coast and Geodetic Survey
From Alliance northeast along Pennsylvania R, R, to Snodes.
Alliance, Stark County, about 1.5 miles east of, on Pennsylvania R. R. right of way, east abutment of bridge 66, on the northwest corner ; square cut (C. \& G. S. b. m. Bridge 66)
Alliance, West Main Street, southeast corner of Knights of Pythias Hall, in south face of base stone, one-third meter above cement walk; red-metal disk (C. \& G. S. b. m. Q \(\mathrm{Q}_{6}\) ).

1, 102. 991
Alliance, northeast corner of Freedom and Main streets, southwest corner of the Lewis Block, about 2 inches from north wall; iron bolt, anchored to foundation and extending slightly above the level of cement walk (C. \& G. S. b. m. City)
Alliance, southeast corner of Freedom and Court streets, in front face of city hall, about one-third meter from south side, on horizontal surface of water table; chiseled square, marked "U. S." (C. \& G. S. b. m. R \({ }_{6}\) )

1, 119. 212
Alliance, north side of Pennsylvania R. R. station, on northwest corner of iron sill of lunch-room door; chiseled square (C. \& G. S. b. m . Lunchroom)

Alliance, 1.5 miles east of, on Pennsylvania R. R. right of way, northwest corner of east abutment of bridge 65 ; chiseled square, marked "U. S." (C. \& G. S. b. m. Bridge 65, 1906)

1, 055.009
Alliance, 1.7 miles east of, on Pennsylvania R. R. right of way; northeast corner of the east back wall of bridge 64 ; chiseled square (C. \& G. S. b. m. Bridge 64, 1906)
Sebring, Mahoning County, about 0.5 mile west of, on Pennsylvania R. R. right of way, northwest corner of east abutment of open culvert; large square in outline, marked "B. M." (C. \& G. S. b. m. West Culvert) 1, 109. 031
Sebring, 0.5 mile west of, on Pennsylvania R. R. right of way, northwest corner of east abutment of box culvert; chiseled square marked "B. M." (C. \& G. S. b. m. East Culvert)
Snodes, 1 mile south of, on Pennsylvania R. R. right of way at milepost 22, in middle of east coping of concrete culvert; chiseled square, marked " U. S." (C. \& G. S. b. m. S \({ }_{6}\) )
\(1,090.454\)
Primary leveling by R. C. Seitz in 1907.
From Alliance northwest along railroad 1.4 miles, thence west and north along highway to New Baltimore.
Alliance, Keplinger Hotel, north face of base stone at northwest
corner of building; aluminum tablet stamped " 1106 "............1, 105.001
Crossing, Pennsylvania and Lake Erie, Alliance \& Wheeling railroads; top of rail
Crossing, Lake Erie, Alliance \& Wheeling R. R. and Cleveland \& Pittsburgh division, Pennsylvania R. R.; top of rail \(1,074.9\)
Marlboro, 3.15 miles east by 0.25 mile south of; about 200 feet west of \(T\) road south, east abutment, south bridge seat of small iron bridge, aluminum tablet stamped " 1041 "- \(\qquad\)
Marlboro, stone building in southwest corner of crossroads; in northeast corner of foundation; aluminum tablet stamped " 1175 "

From Alliance northeast along railroad and north along highway to Deerfeld.
Deerfield, 3.5 miles south of, near northeast corner of sec. 8, T. 18 N., R. 5 W., 1,260 feet north of Lake Erie, Alliance \& Wheeling
- R. R., west wing wall of north abutment of small iron bridge; aluminum tablet stamped " 1063 "

1,062. 728
From Alliance south along Cleveland and Pittsburgh division of the Pennsylvania R. R. to point 1.42 miles south of Moultrie, thence east along highway to New Alexander.

Alliance, 1.81 miles south of, along railroad right of way, 500 feet south of highway crossing, east wing wall of south abutment of culvert, in coping stone; aluminum tablet stamped " 1115 "
Homeworth, in front of station; top of rail_...................................154. 15
Homeworth, 450 feet south of station; Cleveland \& Pittsburgh bridge 22 , on north end of east coping; aluminum tablet stamped " 1155 "

1, 155. 214
Homeworth, 1.61 miles south of, 75 feet north of highway crossing, south abutment of Cleveland and Pittsburgh bridge 23, east end, in coping stone; aluminum tablet stamped " 1112 "

1, 111. 753
Moultrie, in front of station ; top of rail 1,099.8
Moultrie, 1.42 miles south of, 1.90 miles north of Bayard Junction, north bridge seat of west abutment of small iron highway bridge 360 feet east of Cleveland \& Pittsburgh line; aluminum tablet stamped "1086" \(1,085.734\)
New Chambersburg, Union Church, in north face of northeast corner of foundation; aluminum tablet stamped " 1256 "
\(1,255.338\)

ALVORDTON QUADRANGLE,
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(\left.84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}.\right]\)
Primary leveling by H. Clark, P. Flitman, C. W. Howell, and C. E. Mills in 1911. From Stryker east along highways to point 2 miles east of Archbold.

Stryker, 1 mile east of, at road crossing on east side of sec. 4, Springfield township; spike in base of telephone pole
716. 29

Stryker, 2 miles east of, at T road, sec. 3, Springfield township; spike in base of telephone pole
721.87

Stryker, 2.5 miles east of, at road crossing, center of sec. 2, Springfield township; spike in base of fence post
719. 44

Stryker, 3 miles east of, northwest corner at T road north; iron post stamped " 722 Ohio"
722. 168

Stryker, 4 miles east of, at road crossing, east side of sec. 1 , Springfield township; spike in base of telephone pole
725. 18

Archbold, 0.5 mile south by 1 mile west of, at road crossing; spike in base of telephone pole
726.33

Archbold, 0.5 mile south of, at T road; spike in base of telephone pole_ \(\quad 724.98\)
Archbold, south end of town, at head of \(T\) road east; iron post stamped " 736 Ohio"
736. 145

Archbold, 1 mile east of, at southeast corner of sec. 33, German
township, at T road; spike in base of telephone pole. 725.16
Archbold, 2 miles east of, at road crossing ; spike in base of telephone pole
734. 38

From point 2.5 miles southeast of Archbold north to point about 2 miles northwest of Eckley.

Archbold, 0.5 mile south by 2 miles east of, southeast corner of crossroads; spike in base of fence post, marked " 734.3 "
734. 380

Archbold, 2 miles northeast of, at Lake Shore \& Michigan Southern
Ry. crossing; top of south rail, marked " 738.9 "----- 738.96

Feet.
131. 642
195. 721
203.1
149. 780
190.7
103. 435
210.908
16. 29
21. 87
19. 44
22. 168
25. 18
26. 33
24. 98
36. 145
25. 16
4.38
4. 380
8. 96

Archbold, 0.5 mile north by 2 miles east of, northwest corner of crossroads, at southeast corner of schoolhouse (subdistrict 10); iron post stamped " 740 "
Archbold, 1.5 miles north by 2 miles east of, at northwest corner of crossroads; painted square on drain pipe, marked " 733.3 "
Eckley, 0.25 mile south by 1 mile west of, northwest corner of crossroads, on stone at foot of large willow tree; chiseled square, marked " 743.8 " \(\qquad\)
Fekley, 1 mile northwest of, at road crossing; top of south rail, marked " 743.2 "

\section*{From point 1 mile west of Thelma west along public road to point 2 miles south of Alvordton.}

Feet.
740.052
733. 39
743.91
743. 39
742. 291

Thelma, 1 mile west of, 300 feet west of road corner; top of concrete step
731.14

Thelma, 2.1 miles west of, at T road east; spike in fence post
Fayette, 2 miles east by 2.5 miles south of, at southwest corner of crossroads; spike in telephone pole, marked " 720.6 "
721. 28
721. 08

Zone, 1 mile north by 1 mile east of, at northwest corner of cross-
roads; spike in telephone pole, marked " 730.1 "---------- 730.58
Zone, 1 mile north of, at northeast corner of crossroads; iron post stamped " 748 "
748. 735

Zone, 1 mile north by 2 miles west of, at southwest corner of \(\mathbf{T}\) road; spike in fence post, marked " 785.0 "
785. 48

Alvordton, 3 miles east by 1.5 miles south of, at northeast corner of T road; iron post stamped " 801 Ohio"
801. 422

Alvordton, 2 miles south by 2 miles east of, at southwest corner of crossroads; spike in fence post, marked " 816.9 "
817. 45

Hamer, southeast corner of store, on north corner of crossroads;
foundation stone, marked " 818.0 "
Alvordton, 2 miles south of, at northwest corner of crossroads; iron
post stamped " 826 Ohio"
From point 0.5 mile south of Ritters west along public road to point 2 miles
north of Alvordton.
Fayette, 1.5 miles north by 2 miles east of, at northeast corner of crossroads; spike in telephone pole, marked " 776.8 "
776. 89

Fayette, 1.5 miles north by 1 mile east of, at northeast corner of
crossroads; spike in fence post, marked " 794.5 "
Fayette, 1.5 miles north of, at southwest corner of crossroads; spike in telephone pole, marked " 814.9 "
814.98

Fayette, 1.5 miles north by 1.8 miles west of, at northwest corner of crossroads; spike in telephone pole
836.36

Fayette, 1.5 miles north by 2.8 miles west of, at northwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 23, 1905, 845 "
844.852

Fayette, 1.5 miles north by 3 miles west of, at east end of northeast wing on bridge; top of masonry, marked " 838.0 "
838. 07
\(\begin{array}{ll}\text { Primrose, } 2 \text { miles east by } 1.2 \text { miles north of, near lane; spike in fence } & \\ \text { post } & 845.43\end{array}\)
\[
45281^{\circ}-\text { Bull. } 651-17-2
\]


From Stryker northwest along highways to point 4.5 miles northeast of Pulaski. ,
Stryker, northeast corner of schoolhouse; iron post stamped " 719 Ohio"
719. 403

Stryker, at Main Street railroad crossing, 3 feet from curb line on west side of street; top of north rail of Lake Shore \& Michigan Southern Ry., painted "T. B. M. 717.9 "
Stryker, 0.8 mile northwest of, on east abutment of southeast corner of bridge over Tiffin River; chiseled circle inclosing cross, painted " 705.9 " \(\qquad\)
Stryker, 1 mile north by 1 mile west of, at \(\mathbf{T}\) road west ; spike in telephone pole, marked " 711.6 " \(\qquad\)
Stryker, 1 mile north by 2 miles west of, at southwest corner of crossroads; spike in telephone pole, painted "T. B. M. 723.5 " \(\qquad\)
Stryker, 1 mile north by 2.25 miles west of, at southeast corner of crossroads; iron post stamped " 740 Ohio" \(\qquad\)
Pulaski, 0.25 mile north by 4.5 miles east of, southwest corner of crossroads; spike in telephone pole, painted "T. B. M. 749.1" \(\qquad\)

From Stryker north along highways via West Unity and Alvordton to point 5 miles west of Alvordton.

Stryker, 0.7 mile west by 2 miles north of, 75 feet south of southeast corner of crossroads; copper nail in top of stump, painted "T. B. M. 713.6 "

Stryker, 0.7 mile west by 2.5 miles north of, at T road west, on southeast abutment of bridge over branch of Tiffin River; chiseled square, painted "T. B. M. 710.7 "
West Unity, 2.5 miles south of, 300 feet south of southeast corner of crossroads ; copper nail in top of stump, painted "T. B. M. 729.392 "
West Unity, 2.5 miles south of, at crossroads, northeast corner; iron post stamped " 737 Ohio"
West Unity, 1 mile south of, at crossroads, on southwest wing of concrete culvert at north side of crossroads; chiseled circle, painted "T. B. M. 771.806 " \(\qquad\)
West Unity, at northwest corner of station; copper nail in porch, painted "T. B. M. 792.164 "
West Unity, 100 feet west of station, in southwest corner of park; iron post stamped " 792 Ohio"

West Unity, on west end of stone step of town hall ; chiseled square, painted " 796.703 "
West Unity, 1 mile north of, at northeast corner of crossroads; spike in post, painted "T. B. M. 814.0 "
West Unity, 2.7 miles north of, at T road west, on east side of road at head of \(\mathbf{T}\); spike in base of telephone pole, painted "T. B. M. 822.7"

Alvordton, 2.1 miles south of, at northwest corner of crossroads; chiseled square on concrete block around post, painted "T. B. M. 824.867 "
710.71
713.62
729.37
736. 491
771.77
792. 12
792. 089
796. 65
813.97
822. 70
824. 78

\section*{Alvordton, 2.1 miles south of, at northwest corner of crossroads; iron} post stamped " 826 Ohio"

Feet.
825. 468

Alvordton, 1 mile south of, at northwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 843.6 "
843. 55

Alvordton, southwest corner of stone culvert 120 feet south of crossing; chiseled square, painted "T. B. M. 838.724 "
838.66

Alvordton, south end of town, 100 feet south of crossing, on west side of road, on railroad right of way ; iron post stamped " 840 Ohio "-
Alvordton, 2 miles north of, at southeast corner of \(\mathbf{T}\) road west; spike in base of post, painted "T. B. M. 897.519 "
839.852
897. 49

Alvordton, 2 miles north of, at southeast corner of \(\mathbf{T}\) road west; iron post stamped " 897 Ohio"
897. 170

Alvordton, 2 miles north by 1 mile west of, at northeast corner of crossroads; copper nail in root of willow tree, painted "T. B. M. 905.2 "
905. 18
A.lvordton, 2 miles north by 1.6 miles west of, at lane south; copper nail in top of post, painted "T. B. M. 904.113"
904.09

Alvordton, 2 miles north by 3 miles west of, at \(T\) road south; iron post stamped "Prim. Trav. Sta. No. 17, 884 "
Alvordton, 2 miles north by 3.7 miles west of, at southeast corner of T road south; spike in base of post, marked "T. B. M. 878.215 "

From point 1 mile south of West Unity east along highways to point 2 miles east of Burlington, thence north along highways to point 0.5 mile south of Ritters.
West Unity, 1 mile south by 0.8 mile east of, at southeast corner of crossroads; spike in base of post, painted "T. B. M. 750.0 "
West Unity, 1 mile south by 1.8 miles east of, at northeast corner of T road north; spike in base of telephone pole, painted "T. B. M. 757.2 "
878. 21
750.04
757.16

West Unity, 1 mile south by 2.4 miles east of, at northwest corner of crossroads; chiseled square on concrete wall of bridge, painted "T. B. M. 733.3 "
733.33

West Unity, 1 mile south by 2.7 miles east of, at head of \(T\) road south, on line between Williams and Fulton counties ; iron post stamped " 726 Ohio"
725.962

Burlington, 2.2 miles west of, at northeast corner of T road north; spike in base of telephone pole, marked " 716.5 "
716.54

Burlington, 1.6 miles west of, on southwest corner of west abutment of iron bridge over Tiffin River; chiseled square, painted "т. В. М. 712.9 "
712.96

Burlington, 1 mile west of, at northwest corner of crossroads; iron post stamped " 716 Ohio"
716. 435

Burlington, on southwest corner of bridge at crossroads, on end of iron casting; square, painted "T. B. M. 717.2 "
717.25

Burlington, 1 mile east of, at southwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 724.8 "
724. 81

Burlington, 2 miles east by 1 mile north of, northwest corner of crossroads ; spike in base of fence post, painted "T. B. M. 731.9 "-
Burlington, 2 miles east by 2.2 miles north of, at northeast corner of crossroads; spike in base of telephone pole, painted " T . B . M. 722.1 " \(\qquad\)
Burlington, 2 miles east by 3.5 miles north of, at northeast corner of crossroads; iron post stamped " 722 Ohio"

Burlington, 2 miles east by 4.6 miles north of, at T road west, on
east side of road at head of \(\mathbf{T}\); spike in base of post, painted "T. M. B. 722.047 "

Feet.
722. 05

Burlington, 2 miles east by 4.8 miles west of, at southeast corner of T road east; spike in base of fence post, painted "T. B. M. \(721.268^{\prime \prime}\)
721. 28

Ritters, 3.5 miles south of, at southwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 725.6 "
725.71

Ritters, 2 miles south of, at northwest corner of crossroads; iron post stamped " 738 Ohio"
738.348

Ritters, 0.5 mile south of, at crossroads, at well on school lot; chiseled square on concrete base, painted "T. B. M. 773.931 " \(\qquad\) 774.03

\section*{ANDOVER QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).]
Primary leveling by R. C. Seitz in 1905.
From Lenox east along highway to Richmond Center, thence north to Pierpont.
Lenox, 3.6 miles east of, 450 feet east of township line, in northeast corner of abutment of small iron bridge over Mill Creek, set flush in top; aluminum tablet stamped " 985 Adj 1903 "
984.827

Dorset, south end of, in southwest corner of foundation of town hall; aluminum tablet stamped " 985 Adj 1903 "
985.069

Richmond Center, 950 feet west of crossroads, in top of southwest corner of west abutment of small iron bridge over creek; aluminum tablet stamped " 1031 Adj 1903 "

1,030. 899
Pierpont, 3.35 miles south of, in north end of east guard of stone culvert 0.8 mile south of township line; aluminum tablet stamped "1046 Adj 1903 "
\(1,045.633\)
From Richmond Center south along highway to point 1 mile south of Andover, thence west to South New Lyme.

Andover, Mosley Block, flush in base stone at southeast corner of building occupied in 1905 by the Bank of Andover; aluminum tablet stamped "1091 Adj 1903 "

1, 091. 012
Andover, 1.04 miles south by 3.91 miles west of, 435 feet east of crossroads, in top of west end of north guard stone culvert; aluminum tablet stamped "996 Adj 1903"
996. 138

Cherry Valley, 1.04 miles south by 2.72 miles west of, north side of road, 250 feet east of \(T\) road south, 0.35 mile west of township line, in southwest corner of foundation of house; aluminum tablet stamped " 1079 Adj 1903 "
\[
1,079.106
\]

From Colebrook east along highway 2 miles, thence south 2 miles, thence east and north to Andover.

Colebrook, 2.1 miles east by 1.52 miles south of, 0.95 mile north of county line, 550 feet south of \(T\) road west, in west guard of stone culvert; aluminum tablet stamped " 1024 Adj 1903 " \(\qquad\)
Wick, 1.83 miles south of, 270 feet south of T road east, in west foundation of house, 5 feet north of porch; aluminum tablet stamped "997 Adj 1903 "
Williamsfield, 0.65 mile north of, in east side of south abutment of bridge over McMichael Creek; aluminum tablet stamped " 1113 Adj 1903 "

\section*{ANTRIM QUADRANGLE.}

\author{
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).] \\ Primary leveling by E. C. Bibbee in 1908, B. J. Green in 1902, and F. H. West in 1908.
}

\section*{From point 1.5 miles south of Odell north to Bernice.}

Clio, 1.39 miles north of, 0.3 mile south of \(Y\) roads, in foundation of
west side of wagon shed owned by J. U. Marple; aluminum tablet stamped " 986 "

Feet.
986.002

Clio, 3.13 miles north of, on rock at southeast corner of \(T\) road; chiseled square painted " 1110.3 "
\(1,109.97\)
Odell, 0.43 mile south of, in stone doorstep at schoolhouse; aluminum tablet stamped " 982 "
981.674

Odell, in second stone step of store owned by E. B. Kenedy; chiseled square marked " 901.4 "
991. 04

Odell, 2.34 miles north of, at \(\mathbf{T}\) road east, in north end of west side of brick schoolhouse; aluminum tablet stamped" 1132 "

1, 131. 686
Odell, 4.57 miles north of, 3 feet from well owned by T. N. Moore, on rock on east side of road; chiseled square marked " 1038.7 " \(\qquad\) 1, 039. 37
Odell, 6 miles north of, 15 feet from center of public road, in south side of foundation to west end of spring house owned by Albert White ; aluminum tablet stamped " 1092 "

From Lore City north to Washington, thence east to Fairview.
Washington, 0.56 mile south of, in south edge of east wing wall of north abutment of steel-frame bridge over creek; aluminum tablet stamped " 926 "
Washington, at southwest corner of junction of crossroads, on top of sandstone stepping block projecting 2.5 feet from ground; chiseled square marked " 1009.7 "

\(1,009.52\)
908.25
square marked " 908.5 "
Middlebourne, 2.15 miles west of, 300 yards west of T road south, 250 yards northwest of house of F. G. Foraker, in springing stone for south retaining wall of crooked bridge (top stone to north of wall at west end) ; aluminum tablet stamped " 831 "
Middlebourne, east end of town, at southwest corner of T road south, in north face of square sandstone block at northwest corner of foundation to Middletown Methodist Episcopal Church; aluminum tablet stamped " 882 "
Middlebourne, 3.3 miles east of, at northeast corner of stone foundation of barn south of pike; aluminum tablet stamped " 1187 "--.--
Fairview, 0.85 mile west of, 30 yards east of \(Y\) road, on top center stone of north retaining wall of culvert over creek, 6 inches from north and east edges of stone ; chiseled square marked " 1028.5 "-

\section*{From Clio northeast to Londonderry.}

Brady, in north edge of stone support at northeast corner of porch to store, about 1 foot above ground; chiseled square marked " 799.4 "-

Brady, 1.68 miles east of, 0.25 mile east of crossroads, 25 yards east of T road, 60 yards west of T road north, in top of stone at north
end of east abutment of steel-frame bridge over creek; aluminum tablet stamped " 803 "

Feet.
802.687

Winterset, 1.8 miles west of, directly opposite \(T\) road south, on stone to north of road at edge of ditch ; chiseled square marked " 838.3 "-
Winterset, at northwest corner of crossroads, diagonally opposite general store, in building block 10 feet off east and north road, 10 yards off north and south road; aluminum tablet stamped " 825 "
Winterset, 1.07 miles east of, 20 yards west of T road north, east abutment of wooden bridge over creek, 3 and 8 inches, respectively, from sides of angle formed by south and east edges of top stone nearest bridge, on south wing wall; chiseled square marked " 828.96 "
828. 50

Antrim, west end of town, in north end of east (bottom) step to United Presbyterian Church; aluminum tablet stamped " 1001 "\(1,000.823\)
Antrim, 2.67 miles east of, 20 yards east of \(Y\) road to northeast, diagonally opposite house of J. H. Yarnell, on top stone of south wing wall of west abutment to bridge over creek; chiseled square marked " 999.1 "
998. 58

Londonderry, at northwest corner of Londonderry-Fairview and Lon-donderry-Freeport roads, on large flat slab; chiseled square marked " 1168.8 "
Londonderry, 2 miles south of, on Londonderry-Fairview road, in bridge across Skull Fork; aluminum tablet stamped " 895 " \(\qquad\) 895. 726

From Odell northeast to Freeport.
Odell, on stone step to store ; chiseled square marked " 991.3 "
991. 01

Milnersville, west end of town, midway between \(T\) roads north and south, at schoolhouse near blacksmith shop, in second stone at south end of east abutment of bridge over Clear Fork; aluminum tablet stamped " 831 "
830.696

Milnersville, 2.6 miles east of, between T roads north and south, 500 yards northwest of schoolhouse, in second stone at north end of east abutment of bridge over creek; aluminum tablet stamped " 1000 "
999. 342

Milnersville, 5.12 miles east of, at southeast corner of crossroads, on large flat slab over east end of drain; chiseled square marked " 1152 "
Milnersville, 6.15 miles east of, in stone lift for east door in north face of Pleasant Hill M. P. Church; aluminum tablet stamped " 1236 "-- 1, 235. 449
Freeport, 4 miles west of, at crossroads, on large stone at south end of wooden sluice ; chiseled square marked " 1002.9 "

1,002. 22
Freeport, 2 miles west of, at southwest corner of T road west, on large stone; chiseled square marked " 885.0 ".
884.32

Freeport, 1.5 miles west of, at \(\mathbf{T}\) road north, set horizontally in stone about 2 feet above creek, at north end of west abutment of bridge; aluminum tablet stamped " 889 "
888.125

From Piedmont northwest along Cleveland, Lorain \& Wheeling Ry. to Tennett tunnel.

Freeport, on south side of Main Street, on doorsill at entrance to Bank of Freeport; aluminum tablet stamped " 1004 Steubenville"- 1, 004. 436
Tennett tunnel, at north end of, on top stone at northwest corner of bridge 134 ; chiseled square

Feet. 876.51

\section*{From Freeport south-southeast to Fairview.}

Freeport, 7.9 miles south of, on the Londonderry-Fairview road, on east end of south wing wall of east abutment of iron bridge over Skull Fork; aluminum tablet stamped " 895 Steubenville"
895.726

\section*{ARLINGTON QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by H. W. Peabody in 1904.
From point 4 miles east of Ada along Pittsburgh, Fort Wayne \& Chicago Ry. to Forest.

Ada, 4.5 miles east of, at southeast corner of west abutment of culvert 116 ; chisel mark (railroad bench mark)
Ada, 5 miles east of, at railroad crossing, in top stone at northwest corner of east abutment of culvert, 114; chisel mark (railroad bench mark)
939.85

North Washington, sec. 15, T. 3 S., R. 10 E., in east face at northeast corner of Presbyterian Church; aluminum tablet stamped " 949 Adj 1903"
948. 240

Dunkirk, sec. 18, T. 3 S., R. 11 E., in west face at northwest corner of station; aluminum tablet stamped " 952 Adj 1903 "
951.593

Forest, 3 miles west of, sec. 10, T. 3 S., R. 11 E., at undergrade road crossing, in northwest corner of west abutment; aluminum tablet stamped " 924 Adj 1903 " \(\qquad\)
Forest, 2 miles west of, on northwest corner of east back wall of bridge 96 over Blanchard River; chisel mark (railroad bench mark)
923.029
901.14

Forest, sec. 8, T. 3 S., R. 12 E., in north face at northeast corner of city building; aluminum tablet stamped "934 Adj 1903"
933.032

From Dunkirk along North Ohio Central Ry, to Arlington, thence west along Northern Ohio Ry, to Jenera.

Williamstown, sec. 36, T. 2 S., R. 10 E., in north face at northeast corner of schoolhouse; aluminum tablet stamped "946 Adj 1903 "-
Arlington, sec. 12, T. 2 S., R. 10 E., in northeast face at northeast corner of Lutheran Church; aluminum tablet stamped " 870 Adj 1903 "
945. 420
869.584

Arlington, 1.25 miles west of, on southeast corner of coping stone at southeast corner of Northern Ohio Ry. iron bridge 452 over creek; chisel mark
854. 80

Jenera, sec. 5, T. 2 S., R. 10 E., in east face at northeast corner of M. E. Church; aluminum tablet stamped " 850 Adj 1903 "
849.894

From Arlington north along highway 3 miles, thence east and southeast via Houcktown and Mount Blanchard to Forest.

Arlington, 2.25 miles north of, sec. 25, T. 1 S., R. 10 E., in southwest corner of south abutment of small iron bridge; aluminum tablet stamped " 838 Ardj 1903 "
837. 452
833. 756

Mount Blanchard, 1 mile north of, sec. 26, T. 1 S., R. 11 E., in southeast corner of east abutment of iron bridge over Blanchard River ; aluminum tablet stamped " 822 Adj 1903 "

Mount Blanchard, sec. 12, T. 2 S., R. 11 E., in west face of water table at southwest corner of general store of W. S. \& C. S. Shoemaker; aluminum tablet stamped " 847 Adj 1903 " 821.708

Forest, 4 miles north of, at crossroads by Hope Church, in north face at northeast corner of schoolhouse; aluminum tablet stamped " 880 Adj \(1903 "\)

Primary leveling by E. C. Bibbee in 1913.
From point 4 miles east of Ada south along highways to point 5 miles north of Foraker.
Ada, 5 miles east of, near southeast corner of sec. 17, Washington township, at northwest corner of crossroads; highest point on north end of 3 -foot cast-iron drain
937. 05

Foraker, 6 miles north of, 300 feet east of Chas. Ludwig's residence, near southeast corner of sec. 20, Washington Township, at northwest corner of crossroads; nail in top of fence post
943. 49

\section*{ASHLAND QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by R. C. Seitz in 1906.
From point 4.3 miles south of Sullivan west and north along highway to point 4.7 miles south of Fitchville

Savannah, 3.47 miles east of, top of north coping of stone culvert, aluminum tablet stamped " 1136 "
\(1,136.463\)
Savannah, east side of Methodist Church, in water table; aluminum tablet stamped "1101"

1,101. 641
Savannah, 2.30 miles west of, top of north retaining wall, top of east abutment of small iron bridge ; aluminum tablet stamped " 1065 "- 1,065. 993
Adario, 3.30 miles northwest of, stone culvert 300 feet south of crossroads, north end of east coping; aluminum tablet stamped " 1164 "

1, 165. 190
From point 4.5 miles east of Savannah south to Ashland, thence west to Olivesburg, thence north-northwest to Adario.

Nankin (Orange township), 1.86 miles north of, in top of west coping of stone-arch culvert, 425 feet north of \(\mathbf{T}\) road east; aluminum tablet stamped " 1088 "
Nankin, 2.09 miles south of, 2.45 miles north of Ashland, north end of west abutment of concrete-arch culvert of Erie R. R.; aluminum tablet stamped " 988 " 989.367

Ashland, 3 miles west of, 3.15 miles east of Olivesburg, at crossroads, east bridge seat on north abutment of small iron-girder bridge; aluminum tablet stamped "1180"
\(1,180.763\)


From Ashland southeast to point near Hayesville, thence east to Jeromeville.


From point near Hayesville south to Hayesville, thence west along highway to Mansfield.

Hayesville, town hall at crossroads, northwest corner of foundation; bronze tablet stamped " Prim. Trav. Sta. 1244 " \(1,244.796\)
Mifflin, 1.49 miles east of, 850 feet east of crossroads, north wing wall of west abutment of iron girder bridge; aluminum tablet stamped " 1108 "
\(1,108.743\)
Mifflin, 0.8 mile west of, west abutment of iron girder bridge over
Black Fork Mohican River, fourth course of masonry from top
of south wing wall ; aluminum tablet stamped " 994 "--.-- 995.414
Mifflin, 4.2 miles west of, 3.5 miles east of Mansfield, at T road south, south bridge seat on west abutment of small wooden bridge; aluminum tablet stamped " 1222 " 1,222. 603

\section*{From Mansfield northeast along highway to Olivesburg.}

Windsor, 0.9 mile south of Pavonia, T road east, north bridge seat on west abutment of small wooden bridge; aluminum tablet stamped " 1035 "

1,036. 055
Pavonia, Erie R. R.; top of north rail
Olivesburg, 3.3 miles south of, 615 feet east of crossroads, south foundation wall at west end of schoolhouse; aluminum tablet stamped " 1048 "

\section*{Near Mansfield.}

Miffin, 4.2 miles west of, 3.5 miles east of Mansfield, at T road south,
in bridge seat on west abutment of small wooden bridge; aluminum
tablet stamped " 1222 "
Mansfield, 2.2 miles east of, on south side of road ; chiseled square on \(1,316.14\)
Mansfield, 1.3 miles east of, 1 foot from southwest corner of bridge, 100 feet east of intersection of Wooster and Lucas roads ; bolthead_ 1, 769.54
Mansfield, 0.6 mile east of, north side of wooden bridge; chiseled square on coping stone of east abutment

1, 147. 55
Mansfield, 100 feet north of crossing, at bridge 152 ; chiseled square
on retaining wall_-1, 151.15
Mansfield, 0.8 mile south of, at bridge 152 ; chiseled square on north-
east corner of east abutment (P., F. W. \& C. R. R. b. m.)
Primary leveling by E. C. Bibbee in 1911.

\section*{Near Hayesvile.}

Hayesville, 1.3 miles south of, at northeast corner of crossroads, on large granite rock on east end of culvert ; chiseled square

\section*{ASHTABULA QUADRANGLE.}
[Latitude \(41^{\circ} 45^{\prime}-42^{\circ}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by H. G. Lowe in 1903.
From North Madison east along North Ridge road via Geneva to Saybrook, thence east to Ashtabula, thence south and west along highways to Unionville.

Geneva, at public square, Ford \& Tibbets 3 -story brick building, in top of first stone window sill east of stairway ; aluminum tablet stamped " 675 Cleveland"
Geneva, 4 miles east of, Saybrook Township, 75 feet east of T road south, south side of east-west road, on top of top stone of culvert ; chiseled square \(\qquad\)
Saybrook, in brick foundation of town hall, on north side at northwest corner; bronze tablet stamped " 682 Cieveland"

Feet.
674.519
683. 48
681. 741

Ashtabula, at front entrance to city hall, northwest corner of top step; aluminum tablet stamped " 700 Cleveland"
Ashtabula, 6.75 miles south of, Jefferson Township, northeast corner of high iron-truss bridge, over Mill Creek, in top of abutment wall ; bronze tablet stamped " 854 Cleveland"
854.395

Austinburg, at northwest corner of crossroads, on south side of southeast corner of brick store, in face of water table; bronze tablet stamped " 817 Cleveland"
Harpersfield, on south side of southwest corner of town hall, in face of brick wall, 2 feet above ground; bronze tablet stamped " 859 Cleveland"

\section*{ATHALIA QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by R. S. Blinn in 1904.
From Gallipolis southwest along highway to Platform, thence southeast to Miller.

Angel, 300 yards north of store, in pedestal stone supporting truss bridge over Bullskin Creek; aluminum tablet stamped " 570 Adj 1903"
569. 752

Leaper, 100 feet south of store, in south abutment of bridge over Bullskin Creek; aluminum tablet stamped " 636 Adj 1903 "
635.588

Mercerville, at south side of store building, in stone foundation; aluminum tablet stamped " 768 Adj 1903 " \(\qquad\)
Yoho, 3 miles south of, on Platform road, 600 feet south of road forks, south pedestal stone of bridge over Indian Creek; aluminum tablet stamped " 653 Adj 1903 ". \(\qquad\)
Platform, 3.5 miles north of, in curious-shaped rock by roadside; aluminum tablet stamped " 639 Adj 1903 "
652. 755

Platform, 50 feet north of store and postoffice, in rock outcrop; aluminum tablet stamped " 617 Adj 1903 "
638. 757
616. 850

From Platform west along highway to Linville, thence north via Arabia to Gallia.

Scottown, 75 feet across road from post office and store, in outcropping ledge of rock; aluminum tablet stamped " 602 Adj 1903 " \(\qquad\) 601. 616

Linville (Willowwood post office), in rock outcrop on side hill near salt-water artesian or gas well; aluminum tablet stamped " 618 Adj 1903 "

Aid (Mariond, 2 miles south of, in rock; aluminum tablet stamped


Feet.
600.814

Aid, 2.5 feet from southeast corner of store of T. H. Neal, in sandstone bowlder; aluminum tablet stamped "584 Adj 1903 " \({ }^{1}\)
583. 582

Wilgus, 0.25 mile from post office, in bowlder at west side of forks of road; aluminum tablet stamped " 619 Adj 1903 "
618.694

Arabia, 100 feet east of store, south end of bridge seat on west bridge abutment; aluminum tablet stamped " 600 Adj 1903 "
599. 384

Waterloo, 100 feet east of covered bridge, south end of stone box culvert ; aluminum tablet stamped " 610 Adj 1903 "
609.285

\section*{ATHENS QUADRANGLE.}
[Latitude \(39^{\circ}\) 15 \(-39^{\circ} 30^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Stewart west along Baltimore \& Ohio Southwestern R. R. to Athens.
Stewart, Athens County, about 0.8 mile west of, on west abutment of railroad bridge over Little Hocking River; chiseled square marked "B M" (C. \& G. S. b. m. XLVII)
Stewart, 1.2 miles east of, on top of wall of west abutment of railroad bridge; chiseled square marked "B M" (C. \& G. S. b. m. XLVIII)
615.347

Canaanville, about 1.5 miles west of, on coping of a railroad culvert; chiseled square marked "B M" (C. \& G. S. b. m. XLIX)
630.325

Athens, on south abutment (east side, fourth step from top) of road bridge over railroad and Hocking River; chiseled square marked "B M" (C. \& G. S. b. m. L)
649. 169

Athens, on top of pier of the railroad bridge over the Hocking River ; chiseled square marked "B M" (C. \& G. S. b. m. P)
656.105

Primary leveling by William E. Earle and R. G. DeFrees in 1903.
From Athens south along Toledo \& Ohio Central Ry., thence to Hebbardsville, thence east along highway to Judson, thence north to Canaanville.

Athens, 1.25 miles west of, on southeast end of east abutment of bridge 157 over Hocking River; cross mark
652.33

Hebbardsville, in south stone of sandstone foundation of house of E. B. Armstrong; bronze tablet stamped " 730 Columbus"
730.005

Judson, in southeast corner of two-story frame schoolhouse; aluminum tablet stamped " 745 Columbus"
745.230

Judson, 3 miles north of, 300 feet north of Downing's house, 100 feet southeast of large tliff on west side of creek, on southeast side of top stone of abutment of old bridge over Willow Creek; cross mark
681. 34

From Binghams Gap near Judson north to Fulton triangulation station (checked flying levels).

Fulton triangulation station, on bare hogback ridge in Lodi Township, 7 miles southeast of Athens, on land owned by William Fulton, cemented in center of top of sandstone post 36 by 12 by 12 inches, dressed 8 inches square on top, set 34 inches in ground; bronze triangulation tablet stamped " 1024 Columbus"
\(1,024.1\)

\footnotetext{
\({ }^{1}\) At 0.035 foot greater elevation than a copper bolt in same stone, stamped " 581 I," placed there in 1897 from levels on the Ironton quadrangle.
}

From Athens northwest along Hocking Valley Ry, to Nelsonville, thence ngrth along highwiay to Oak Grove schoolhouse, thence east to Buchtel, thence north to Orbiston, thence up Goose Run and east to Glouster, thence south to Jacksonville.
Athens, in face of northwest corner stone foundation of county courthouse; aluminum tablet stamped " 722 Columbus"

Feet. 722.753

Athens, 1.2 miles northwest of, on southeast abutment of bridge over Hocking River ; square cut-
652. 61

Beaumont, northwest corner of platform curb; square cut
659. 48

Nelsonville, in Fort Street front of central school building; bronze tablet stamped " 693 Columbus"
693. 336

Orbiston, 1 mile northeast of, at Goose Run coal mine, south side of road, in ledge of rock; bronze tablet stamped " 723 Columbus "---
Derthick post office (Continental Co. mines No. 10), on doorsill of brick store building; chiseled square
723. 400
756.91

From Athens north along Toledo \& Ohio Central Ry. via Chauncey to Jacksonville, thence east along highway to Federal.
Armitage, 1.75 miles north of, at post marked " G. B. 143," on east coping of culvert ; cross mark
Armitage, 4.75 miles north of, at northeast corner of bridge over Hocking River south of Chauncey, on top stone; cross mark
Chauncey, in southwest corner of brick Christian Church; aluminum tablet stamped " 679 Columbus" 679. 637

Jacksonville, in northeast stone abutment of iron railroad bridge 324, over Sunday Creek; bronze tablet stamped " 682 Columbus"
681.880

From Athens west along Baltimore \& Ohio Southwestern R. R. to Marshfield.
Athens, northeast side of Baltimore \& Ohio station, in platform; chiseled square
646.57

Grosvenor, 2.1 miles west of, 0.5 mile east of Luhrig, on northwest abutment of railroad bridge over highway; chiseled square
683. 78

Marshfield, 200 feet west of station, in face of ledge of rock; bronze tablet stamped " 822 Columbus"
821. 770

\section*{BAINBRIDGE QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by Howard Clark in 1910.
From Duke via Poplar Grove to Mayhill.
Duke, 2.3 miles northwest of, north of highway opposite lane leading to W. V. Tompson's residence, on stone marking corner of Scioto and Pike counties; chiseled circle

1, 239.91
Duke, 3.3 miles northwest of, at road crossing, 30 feet west of store belonging to Thomas Grooms ; iron post stamped " 1227 "
\(1,227.178\)
Poplar Grove, 5.9 miles northwest of Duke, 40 feet north of store; iron post stamped " 1135 "
\(1,134.652\)
Louden, 2.7 miles east of, north side of pike at T road, about 500 feet west of Anders school building, spike in root of large oak tree_
Louden, about 20 feet from northwest corner of store on north side of pike near telephone pole; iron post stamped " 782 "
782. 310

Louden, 1.6 miles west of, on stone abutment at southeast corner of iron bridge over Flat Run; chiseled circle
729.61
Primary leveling by S. R. Archer, R. G. Clinite, and S. L. Parker in 1914.From point 1.7 miles west of New Petersburg southwest along highway toStringtown, thence east to Bainbridge and near Bainbridge.
New Petersburg, 2.5 miles southwest of, on north side of GreenfieldHillsboro Pike, in northeast angle of road forks, at north end of drain, in stone; bottom of chiseled square
Parrett schoolhouse (district 12), 0.5 mile south of, 390 feet west of T road north, on south side of Hillsboro-Greenfield Pike; iron post stamped " Prim. Trav. Sta. No. 62, 1909 Ohio 1053 "
Stringtown, in southeast angle of crossroads, 5 feet northeast of corner post, in top of peg; copper nail in washer
New Petersburg, 1 mile west by 1.5 miles south of, at center of crossroads, on road rocks; chiseled square
New Petersburg, 1.2 miles south of, on Petersburg-Rainsboro pike, in southeast angle of road forks, on stone at south end of culvert; chiseled square
Snake Corner schoolhouse, 0.5 mile west of, in northeast angle of crossroads, on east end of tile drain ; painted square
Snake Corner schoolhouse, 0.5 mile east of, in southeast corner of \(T\) road south; iron post stamped " Prim. Trav. Sta. No. 71, 1909-Ohio-900"
Paint, 0.7 mile north of, on west bank of Paint Creek, at Indian Ford, 40 feet south of center of bend in road, in top of 6 -inch elm stump; spike driven through copper washer
753.39
Paint, 0.2 mile east of, in northeast angle of road forks, 700 feet east of church; iron post stamped "Ohio 7761914 "
776.212
Paint, 1.5 miles east of, 100 feet east of H. R. Ogle's mail box, southwest wingwall of bridge over small creek, on top course; bottom of chiseled square
739.34
Bainbridge, 1.5 miles west of, just west of private road south, in southeast corner of bridge floor; spike driven through copper washer
735. 50
Bainbridge, 0.9 mile west of, at southwest angle of road forks, at west end of drain, on top of large flat rock; painted square \(\qquad\)
Bainbridge, in southwest angle of intersection of Chillicothe and Greenfield roads, at center of town, next to E. L. Case's store, at corner on top of curbing; painted square \(\qquad\)
Bainbridge, in front of station of Detroit, Toledo \& Ironton R. R.; top of rail
Paint Creek, under highway bridge, water surface 5:15 p. m., May 20, 1914 \(\qquad\)
Bainbridge, 0.8 mile north of, 0.2 mile north of schoolhouse, 20 feet east of forks, just inside of field; iron post stamped " Prim. Trav. Sta. No. 70, Ohio 733, 1909 " \(\qquad\)
Bainbridge, 0.7 mile east of, on Chillicothe pike, in southwest angle of road forks, at road south, in base of corner post; rail spike_-_
Bainbridge, 2.5 miles northeast of, in front of schoolhouse Tongs Hollow, in center of road; square cut on stone
739. 63
735. 15
722.95
702. 78
732.410
716. 20
731.10
From point south of Bainbridge southwest along highways to Cynthiana, thence to point 0.5 mile east of Snake schoolhouse.
Bainbridge, 1.5 miles east by 3.14 miles south of, 150 feet south of S. Nicely's residence standing on east side of road crossing county line, in center of road, on top of Pike-Ross county line stone; chiseled square marked " 879.2 "

Bainbridge, 3 miles south of, at T road northeast, in center of road
forks, on east side of north and south road, on top of south end of plank drain ; copper nail, marked " 1235.3 "

Feet.
Rainbridge, 3.12 miles south of, at \(T\) road southeast, at northeast corner of road forks ; iron bench-mark post stamped " 1279 Ohio "-.- 1, 278. 827
Bainbridge, 3.35 miles south of, at fourth-class road to southwest leading down hill to fork of Brush Creek, at center of road forks, on top of stone ; chiseled square marked " 1298.1 "

1, 297.86
Cynthiana, 3.43 miles east by 0.75 mile northeast of, at road crossing creek in front of residence of D. L. Maxwell, on south edge of road, 15 feet east of branch, in top of rock; chiseled square marked " 992.5 "
992. 26

Cynthiana, 3.43 miles east of, at second class road to northeast, in center of roads, in top of sandstone rock; chiseled square marked " 951.6 "
951.37

Cynthiana, 2.5 miles east of, at \(\mathbf{T}\) road south, at southeast corner of road forks at fence line; iron bench mark post stamped " 952 Ohio"
951.831

Cynthiana, 2.08 miles east of, at \(\mathbf{T}\) road north at schoolhouse, 90 feet west of forks of road, on south side of road west, in root on south side of sycamore tree 2 feet in diameter; copper nail, marked " 960.0 "
Cynthiana, 1.19 miles east of, in southeast corner of wooden bridge over Muddy Fork, in root on northwest side of elm tree 14 inches in diameter ; copper nail marked " 906.0 " \(\qquad\) 905.96

Cynthiana, on south edge of town, at northwest corner of crossroads ; iron bench-mark post stamped " 969 Ohio"
Cynthiana, in center of town, in front of K. of P. and I. O. O. F. Hall, outside of walk at corner, at \(T\) road northwest, at southwest corner of road forks, in top of locust stump at foot of locust tree; copper nail, marked " 971.26 " \(\qquad\)
Cynthiana, 0.75 mile northwest of, 80 feet north of T road west, on east side of north road, in root on south side of walnut tree 15 inches in diameter ; copper nail, marked " 986.9 " \(\qquad\)
Cynthiana, 1.51 miles northwest of, on road passing through gap, at private road west, on east side of road, 30 feet north of fence corner, 50 feet north of private road west, on south side of gap, at edge of timber, inside of fence line, in root 7 feet west of oak tree 3.5 feet in diameter ; copper nail, marked " 1033.6 " \(\qquad\) \(1,033.53\)
Barretts Mills, 0.96 mile southeast of, about 0.14 mile west of foot of hill and residence of Thomas Perry, on top of north wing wall of west stone abutment of highway bridge over creek; chiseled square marked "899.1" \(\qquad\)
Barretts Mills, at northwest corner of crossroads, 90 feet east of highway bridge over Rocky Fork, at north fence line, at west end of gate to house ; iron bench-mark post stamped " 812 "
Barretts Mills, 0.78 mile north of, at T road north, at northwest corner of road forks, in root on north side of walnut tree 1 foct in diameter ; copper nail, marked " 935.3 " \(\qquad\)
Barretts Mills, 1.4 miles northeast of, on north stone abutment of steel highway bridge over Rocky Fork, on top of west end of west wing wall; chiseled square marked " 789.0 "
899.02
812.363
935.24
789.00

Rainsboro, 2 miles east of, at northwest corner of crossroads, on top of west end of iron drain pipe under north road; painted square marked " 888.3 "

Feet.
888. 26

Kainsboro, 2 miles east by 0.88 mile north of, in northwest corner of wooden highway bridge over Plum Run, in floor ; copper nail, marked " 826.5 "
826. 44

Snake Corner schoolhouse, 0.5 mile east of, in southeast corner of T road south; iron post stamped "Prim. Trav. Sta. No. 71 1909 Ohio 900 "

From Beechwood school east and north along highways to Springtown.
Dallas Boston, about 1.5 miles east of, on Hillsboro and Chillicothe pike, on north side of road, at crossroads, on top of bowlder 1 foot in diameter protruding above ground 4 inches; chiseled square marked " 1002.6 "

From Cynthiana southwest along highways to Marshall and point 1 mile west of Marshall.
Cynthiana, 0.75 mile northwest by 0.97 mile west of, at \(T\) road south, on north side of road at forks, in base of corner fence post; copper nail, marked " 969.65 "
Cynthiana, 0.75 mile northwest by 1.98 miles west of, on west abutment of highway bridge over Heads Branch, on top of north end of north wing wall; chiseled square marked " 863.8 "
Carmel, 140 feet north of crossroads, 50 feet west of north road, on south line of schoolhouse yard; iron bench-mark post stamped " 964 Ohio"
Carmel, 0.95 mile west of, at northeast corner of T road north, 60 feet east of fence corner, on north side of east road, inside of fence, in root on southwest side of beech tree 2.5 feet in diameter; copper nail, marked " 971.6 "
Carmel, 1.41 miles west of, on highway bridge over Franklins (Keetchs) Branch, on east abutment, south side of bridge, on top of bridge seat; chiseled square marked " 906.0 "
Marshall, 1.86 miles east of, 200 feet east of T road north, 250 feet west of T road south, 40 feet south of fence line, in field, in root on north side of cherry tree 2 feet in diameter; copper nail, marked " 970.7 "
Marshall, 1.06 miles east of, on highway bridge over Dead Run, on east abutment, in top of south wing wall; chiseled square marked " 936.3 "
936. 24

Marshall, 0.45 mile east of, at northwest corner of \(T\) road to north, 8 feet north of corner fence post; iron bench-mark post stamped " 1013 Ohio"
\[
1,012.653
\]

Marshall, at center of town, in southeast corner of crossroads, on top of east end of concrete culvert ; chiseled square marked " 1038.3 "-- 1, 038. 28
Marshall, 0.5 mile southwest of, at southwest corner of highway bridge over creek, in bridge seat; chiseled square marked " 952.4 "-

From point 3 miles south of Bainbridge south along highway 2 miles.
Bainbridge, 3.12 miles southeast of, at T road southeast, at northeast corner of road forks; iron bench-mark post stamped "1279 Ohio"- 1, 278.827
Bainbridge, 3.12 miles south by 1.01 miles southeast of, at private road to west leading downhill to forks of creek, on west side of road, at south end of gate, in root on south side of chestnut tree 1 foot in diameter ; copper nail, marked " 1297.3 "

\section*{From point 1.6 miles west of Louden northwest along highways to point \(\approx\) miles east of Belfast.}

Louden, 1.6 miles west of, on stone abutment at southeast corner of iron bridge over Flat Run ; chiseled circle marked " 729.6 "

Feet.
729.61
854.52

\section*{From Latham south along highway to Groome's store.}

Latham, \(\mathbf{1 . 3 1}\) miles south of, 280 feet south of private road to east, 500 feet south of A. A. Beekman's residence, on southwest corner of wooden bridge over right-hand fork of Grassy Fork, on top of 2-inch plank; copper nail, marked " 654.5 "
Latham, 2.1 miles south of, at second-class road to east, on west side of road, in front of Oscar Beekman's residence, on top of south end of lower stone step leading to house; chiseled square marked " 690.9 " \(\qquad\)
Latham, 2.66 miles south of, at T road south, 175 feet northeast of Grassy Fork schoolhouse, 30 feet south of southeast corner of Taylor's barn, on south side of road, in root on road side of north tree of three apple trees; copper nail, marked " 730.9 " \(\qquad\)
Latham, 2.66 miles southwest by 1.10 miles southeast of, at crossroads, at White Oak Church, on top of ridge between Grassy Fork and Chenoweth Fork of Sunfish Creek, in northeast corner of roads, in root on west side of walnut tree 6 inches in diameter ; copper nail, marked " 1225.95 "


Poplar Grove, 2.5 miles southeast and 0.7 mile northeast of, on hill leading northeast down to Chenoweth Fork of Sunfish Creek, in front of first house northeast of crossroads, northeast of Groome's store belonging to Alex. Campbell and standing on west side of road, on east side of road opposite house, on top of rock; chiseled square marked " 1004.05 "
\(-1,004.11\)
From point 2.4 miles northwest of Morgantown southwest along highways to Sinking Springs, thence south 3 miles.

Morgantown, 2.4 miles northwest by 1.32 miles southwest of, at crossroads at Benner schoolhouse, at top of ridge, on township line between Benton and Mifflin townships, at northwest corner of crossroads, 50 feet northwest of center of roads, in roct on north side of hickory tree 14 inches in diameter; copper nail, marked "1142.03" \(\qquad\)
Latham, 1 mile west by 2.03 miles north of, at foot of west side of hill between Laperell Creek and Morgans Fork of Sunfish Creek, 80 feet west of point where road crosses creek, in front of J. F. Elliott's residence, on north side of road, in root on west side of apple tree 6 inches in diameter; copper bench-mark tack marked " 736.9 "
Latham, 1 mile west by 1.69 miles north of, at road forks, on west side of road, on north bank of Laperell Creek, in root on road side of sycamore tree 2 feet in diameter; copper nail, marked " \(695.8^{\prime}\)

Latham, 1 mile west by 1.18 miles north of, 100 feet north of old road forks, on west side of road, in front of house standing on west side of road, at small drain crossing, at fence line, in root on east side of walnut tree 14 inches in diameter; copper nail, marked "691.2"

Feet. 691.18

Latham, 1 mile west of, at \(\mathbf{T}\) road north, in top of north wing wall of east stone abutment of steel highway bridge over Kincaid Fork; chiseled square marked " 634.0 "
634.02
633.45

Byington, 1.17 miles west of, at road forks at C. V. Johnson's store, 1 foot lower than floor; copper nail, marked " 673.1 "
Byington, \(\mathbf{1 . 1 7}\) miles west of, at road forks at C. V. Johnson's store, 110 feet west of store, opposite residence, on south side of west road, at fence line, 8 feet west of telephone pole; iron bench-mark post stamped " 714 Ohio".
714.344

Byington, 2.25 miles southwest of, at stream crossing, 500 feet west of Spencer Copling's farm house, 500 feet east of Peter Cartwright's farm house, on southeast corner of bridge, on top of stone abutment; chiseled square marked "732.4"
Sinking Springs, \(\mathbf{1 . 9 5}\) miles east of, in low gap between Sunfish Creek and Straight Creek of Bakers Fork, on west side of road, at fence line, 10 feet north of fence line running west, on south side of telephone pole, in top of corner stone; chiseled square marked " 842.3 "-
Sinking Springs, 1.64 miles southeast of, at T road south, 80 feet east of forks of road, 115 feet west of Crissman's store, on south end of stone culvert under road; chiseled square marked " 822.3 " \(\qquad\)
Sinking Springs, 1.10 miles east of, at road forks at foot of east side of hill, at northwest corner of forks, in top of north end of tile drain under west road; painted square marked " 846.9 "
Sinking Springs, 0.42 mile east of, at road forks at top of hill, on east end of plank drain under road to southeast, on south side of pike; copper nail, marked " 949.5 " \(\qquad\)
Sinking Springs, at southwest corner of crossroads in center of town, at corner of concrete walk in front of I. O. O. F. Hall; chiseled square marked " 867.3 "
867.27

Sinking Springs, 0.75 mile south of, at T road southeast, on south side of pike, at forks, at foot of telephone pole; point on ground marked " 749.3 " (side shot) \(\qquad\)
Sinking Springs, 0.98 mile south of, on steel highway bridge over Straight Creek of Bakers Fork, on top of east wing wall of south stone abutment; chiseled square marked " 721.55 " \(\qquad\)
Sinking Springs, 1.2 miles south of, at T road west, 50 feet west of road forks, on steel highway bridge over Straight Creek of Bakers Fork, on top of south wing wall of east stone abutment; chiseled square marked " 716.95 "
749.3
721. 53
716. 92
740.16 Shoemaker standing on east side of road, on east end of concrete culvert under pike; chiseled square marked " 740.2 "

Sinking Springs, 2.53 miles south of, at fourth-class road to southwest, on top of north end of concrete culvert under pike; chiseled square marked " 754.86 "

Feet. 754.81

Sinking Springs, 3 miles south of, 80 feet east of center of \(T\) road east, on south side of east road at fence corner ; iron bench-mark post stamped " 782 Ohio" (A new post 1914. Original post at this point was destroyed when new pike was built)
781.863

Sinking Springs, 3.13 miles south of, at T road west; point on ground marked " 804 " \(\qquad\)
Sinking Springs, 3.13 miles south and 0.5 mile west of, at crossroads, in center of roads, in base on north side of hickory tree 1.5 feet in diameter; 40-penny spike painted " 819.648 "

\section*{From Sinking Springs north along highways to Cynthiana.}

Sinking Springs, at southwest corner of crossroads in center of town, at corner of concrete walk in front of I. O. O. F. Hall; chiseled square marked " 867.3 "
867.27

Sinking Springs, 0.4 mile north of, at \(\mathbf{T}\) road west, 20 feet north of road forks, on west side of north road, at fence line; iron bench marked post stamped " 856 Ohio"
Sinking Springs, 0.97 mile north of, at crossroads, at northeast corner of road forks, at road to east, in root on west side of sycamore tree 2.5 feet in diameter ; copper nail, marked " 845.0 " \(\qquad\)
Sinking Springs, 1.84 miles north of, at second-class road to east, at northeast corner of road forks, at fence corner, in root on west side of sycamore tree 1 foot in diameter ; copper nail, marked " 859.6 "-
Sinking Springs, 3 miles north of, 0.16 mile south of Fort Hill post office, at northwest corner of small bridge over creek, on top of stone abutment; chiseled square marked " 804.4 "
Fort Hill, 0.8 mile north of, at T road west, at southwest corner of road forks, inside of fence corner ; iron post stamped "Prim. Trav. Sta. No. 84, 1909, Ohio, 906 " \(\qquad\)
Fort Hill, 1.42 miles north of, at southeast corner of crossroads, in root on northeast side of maple tree 2.5 feet in diameter; copper nail, marked " 883.6 "
Fort Hill, 2.28 miles north of, at T road northwest, at residence of John Waddell, at northwest corner of road forks, 7 feet south and 12 feet west of corner fence post, on north edge of west road, on top of stone; chiseled square marked " 922.1 " \(\qquad\)
Cynthiana, 2.4 miles southwest of, on drain 200 feet east of S. C. Penn's residence standing on north side of road, at south end of plank drain, on west bank of drain, in root on south side of oak tree 2.5 feet in diameter; copper nail, marked " 903.6 " \(\qquad\)
Cynthiana, 1.5 miles south of, on wooden bridge over drain, 220 feet east of T road southeast leading to Dry Bone Creek, on north end of east stone abutment; chiseled square marked " 902.7 " \(\qquad\)
Cynthiana, 0.86 mile southeast of, at southeast corner of \(\mathbf{T}\) road east, inside of fence corner, in root on southeast side of walnut tree 16 inches in diameter; copper nail, marked " 987.2 " \(\qquad\)
Cynthiana, on south edge of town, at northwest corner of crossroads, on north side of west road; iron bench mark post stamped "969 Ohio"
968.677

From Sinking Springs west along highways to point 1 mile north by 1.9 miles west of North Union.

Sinking Springs, 0.4 mile north by 0.6 mile west of, on steel highway bridge over Bakers Fork of Brush Creek, on top of north wing wall of west stone abutment; chiseled square marked " 757.7."

Feet. 757.71

Sinking Springs, 0.4 mile north by 1.35 miles west of, at northwest corner of \(\mathbf{T}\) road north, on top of limestone rock at edge of wheel track; chiseled square marked " 858.9 " \(\qquad\)
Sinking Springs, 0.4 mile north by 2 miles west of, at northwest corner of crossroads, on top of stone at north end of plank drain; chiseled square marked " 924.0 "
Sinking Springs, 0.4 mile north by 2.62 miles west of, at T road north, at Olive Branch Church and Cemetery, at northwest corner of road forks, in root on south side of walnut tree 1 foot in diameter; copper nail, marked " 906.9 "
906. 83

Sinking Springs, 0.4 mile north by 3.7 miles west of, near top of hill on east side of middle fork of Brush Creek, 280 feet northwest of residence of Charlie Patton standing on south side of road, at bend in road to northwest, on north side of road, at fence line, in root on road side of hickory tree 5 inches in diameter; copper nail, marked " 912.8 " \(\qquad\)
Sinking Springs, 0.4 mile north by 4.05 miles west of steel highway bridge over middle fork of Brush Creek, on east stone abutment, on top of north end of bridge seat; chiseled square marked " 777.7 "
Sinking Springs, 0.4 mile north by 4.2 miles west of, 0.15 mile west of highway bridge over middle fork of Brush Creek, at T road south, at southwest corner of road forks; iron bench-mark post stamped " 799 Ohio"
North Uniontown, 1 mile north by 0.87 mile east of, about 0.25 mile east of township line between Marshall and Brush Creek townships, at bend in road to southeast, 200 feet east of house standing on south side of road, on north side of road at fence line, in root on southeast side of oak tree 14 inches in diameter; copper nail, marked " 951.8 "
912.74
799.112
951.77

North Uniontown, 1 mile north of, at crossroads, on west side of pike and east side of south road, 30 feet north of north fence line of road to east, near top of bank between roads, in root on east side of locust tree (three forked) 2 feet in diameter; copper nail, marked " 978.0 " \(\qquad\)
North Uniontown, 1 mile north by 1 mile west of, at road crossing Elk Run of west fork of Brush Creek, on west bank of creek, on south side of road, in root on south side of sycamore tree (crooked trunk) 10 inches in diameter; copper nail, marked " 848 к" batavia quadrangle.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(84^{\circ}-84\)
Precise leveling by the Coast and Geodetic Survey.
East of Loveland.
Loveland, about 3.25 miles east of, on west abutment of railroad bridge ; chiseled square marked "B M" (C. \& G. S. b. m. LXI) _-
Primary leveling by C. E. Mills in 1911.
Near Locust Ridge.
Locust Ridge, 1.5 miles north of, north side of road at \(T\) road south, Feet.914.06
Primary leveling by J. M. Perkins in 1914.From Mount Carmel southeast along highway to Olive Branch, thence south andeast to point near Locust Ridge (portions of line).

Olive Branch, 0.9 mile west of, 600 feet northeast of Cincinnati, Georgetown \& Portsmouth R. R., 3 feet inside fence corner west of road intersection, at T road south; iron post stamped "Ohio 826 "
Olive Branch, on lower step of Olive Branch School, chiseled square
792.00

Alamo crossing, top of rail
814.2

Bridge, at fork in road; root of tree
809.81

Brazier station, 30 feet east of, south side of road, top of stone on culvert; chiseled square
859.53

Amelia, near crossing of two interurban tracks, in northeast corner of Charles Pommert's front yard; iron post stamped "Ohio 877 "877 "
T road north, southwest corner of well curb
Amelia, at east corporation line, at \(\mathbf{T}\) road south, at street corner in front of Terrill Tea House; nail in root of maple tree \(\qquad\)
Hamlet, 0.5 mile east of post office, 50 feet east of road corner, at T road north, on north side of road, on concrete culvert; chiseled square
T road south, top of rail
Mount Holly, at post office, on concrete platform, 6 feet west of doorway and 6 inches from building ; chiseled square \(\qquad\)
Mount Holly, 0.6 mile southeast of, on railroad track, 200 feet west of high trestle, on west abutment of small bridge over creek, on top of stone ; chiseled square
Bantam, 0.5 mile west of, south side of Bethel-Cincinnati pike, in front of residence of Frederick Rapp; iron post stamped " Prim. Trav. Sta. No. 94, 1909, Ohio, 802 " \(\qquad\)
T road south, on culvert top
Bantam, 1.9 miles east of, at crossroads, Anti Bantam School (dis-- trict 3), on lower concrete step; chiseled square

Concord, 1.2 miles south of, at crossroads, on front doorstone of the Ed. Cowgill house ; chiseled square
From Olive Branch east along highway and Norfolk \& Western Ry, to Eastwood.
Olive Branch, 0.7 mile east of, 50 feet east of highway and intersection of railway crossing, on north end of east abutment of cattle underpass, on top of stone; chiseled square
Batavia, 1.3 miles northwest of, 60 feet north of Sycamore crossing, on northeast abutment of bridge over creek, on top of corner stone; chiseled square
Batavia, at Norfolk \& Western Ry. station, on north from window ledge of ticket office ; chiseled square
Batavia, at south corner of courthouse, 2 feet from corner ; iron post stamped "Ohio 595 "
Batavia, 1.3 miles east of, at Tate's corner, 80 feet west of road corner, south edge of road, in root of maple tree; copper nail
879.29
829. 70
859.18
862.51
867.20
766.65
584. 29
595. 69
595.918
877.041
877.041
876.7

87K 87
886.4
875.99
.
835.12
- Batavia, 2.2 miles east of, 150 feet west of T road south, in front of Summit No. 6 School, in root of maple tree; copper nail \(\qquad\) Afton, 0.9 mile west of, 50 feet north of track, east side of highway, at crossing; iron post stamped "Ohio 863 "
Afton, 20 feet east of Norfolk \& Western Ry. station, on sandstone curbing; chiseled square \(\qquad\)
Williamsburg, 0.7 mile west of, 20 feet north of track and 10 feet west of highway, at crossing, in base of corner fence post; spike
Williamsburg, 50 feet east of Norfolk \& Western Ry. station, in northeast corner of Charles McAdam's lot; iron post stamped "Ohio 820 "
Williamsburg, 1.5 miles east of, at Hagerman's crossing, 40 feet east of highway, north of track, on top of west end of stone of culvert; chiseled square

From Olive Branch along highways north and northeast to Marathon and half a mile south of Marathon.
Olive Branch, 1.3 miles northeast of, at road corner near top of hill, in base of large oak tree; copper nail \(\qquad\) Gernon station, 60 feet south of, in base of telephone pole; spike ---Stonelick, at road corner west of brick schoolhouse, 6 feet west of little bridge, on boulder; chiseled square
Owensville, \(\mathbf{1 . 1}\) miles west of, at crossroads, 10 feet south of traction railway, on bell end of 12 -inch vitrified drain pipe; chiseled square
Boston, in western part of town, 20 feet south by 15 feet east of center of T pike north; iron post stamped " Prim. Trav. Sta. No. 98, 1909, Ohio \(881^{"}\)

Owensville, 0.8 mile east of, at \(T\) road north, south side of road, in base of telephone pole; spike
Owensville, 1.3 miles east of, on concrete bridge over dry creek, in south abutment, 2 feet west of east end; chiseled square
Monterey, 1.3 miles west of, at T road north, east of highway crossing of interurban track; top of north rail
Monterey, on lower front step of Christian Church ; chiseled square_-
Monterey, 0.6 mile east of, at crossroads, in front yard of J. B. Turner, in root of maple tree ; copper nail
Monterey, 1.3 miles east of, at T road south, in yard of B. H. Maxwell, on concrete well curb; chiseled square
Marathon, 1 mile southwest of, 800 feet northeast of T road south, on top of south side of concrete culvert; chiseled square
Marathon, in post-office building on southeast corner stone of foundation; chiseled square
Marathon, 0.5 mile south of, 20 feet due east to west end of covered bridge; iron post stamped " Prim. Trav. Sta. No. 90, 1909, Ohio, 878"

From point 1.3 miles east of Monterey south along highway to point near Williamsburg.
Blowville, 1.8 miles north of, at crossroads, on southwest corner of front lawn of J. B. Glancy ; iron post stamped "Ohio 896 " \(\qquad\) Blowville, 1 mile north of, at T road east, northeast of road crossing; on top stone of culvert; chiseled square
Blowville, at crossroads, 50 feet southeast of road intersection; on concrete culvert curb; chiseled square
818. 89
573. 26
546. 70
850.85
880.980
865.61
837.11
887.0
905.16
911. 50
910.96
905. 89
917.93
877.726
896.417

Feet.
876.27
863.271
893.06
879.74
819.580
897.74
899.25
898.90
Blowville, 1.2 miles south of, at T road west, on lower step of AlpineDistrict No. 9 School ; chiseled square
Feet. 903. 54
Williamsburg, 0.8 mile west of, at crossroads, 50 feet south of corner, in root of oak tree; copper nail

\section*{From Blowville east along highway 2 miles.}
Blowville, 1 mile east of, at T road west, northwest of road corner; iron spike in base of telephone pole \(\qquad\)
T road west, on stone culvert; painted square
881.76
r road north, on stone gutter; painted square
853.90
Crossroads, in base of telephone pole; spike
From Stonelick along highways to Mulberry, thence east to point 1.2 miles east of Lerado, thence south and southwest to Marathon.
Stonelick, at road corner west of brick schoolhouse, 6 feet west of little iron bridge; on bowlder; chiseled square \(\qquad\)
Perintown, 0.7 mile east of, at \(\mathbf{T}\) road north, 50 feet east of iron bridge over creek, 2 feet from fence north side of road; iron post stamped "Ohio 531 "
\(\qquad\)
 Perintown, on concrete top step of post office; chiseled square
531.065
536. 60
Perintown, at third subdistrict school, northwest corner; on top step; chiseled square \(\qquad\)
Perintown, 2.1 miles north of, 450 feet north of T road west; in root of large oak tree ; copper nail
533.35
546.70
850.67
Mulberry, 1.2 miles south of, at crossroads, near northwest corner of subdistrict school No. 2; on well curb; chiseled square
878.15
Mulberry, 0.3 mile southeast of, at highway and interurban railway crossing, 15 feet north of track, at west edge of road; iron post stamped "Ohio 843 " \(\qquad\) 843.244

Mount Repose crossing, 80 feet south of interurban track, on east side of highway; in root of locust tree; copper nail
879.33

Deerfield road crossing, 100 feet northwest of highway and interurban crossing, in root of maple tree; copper nail \(\qquad\) 887.60
foshen, at station, east edge of highway, 35 feet north of interurban track, at crossing; iron post stamped " Ohio 897 "
896.980

Belfast, east of station; in base of trolley pole, spike
891. 43

Modest crossing, 15 feet north of track, on west side of road; on top of stone culvert ; chiseled square
881. 39

Newtonville, 0.5 mile west of, at Emery's crossing, 15 feet west of highway, in trolley pole; spike
897.20

Newtonville, at southeast corner of Newtonville Methodist Church; iron post stamped "Ohio 907 "
906. 455

Newtonville, 1.7 miles east of, at crossroads, 60 feet north of road corner, on southeast corner of bridge ; chiseled square
912.81

Newtonville, 2.5 miles east of, at crossroads, on top stone northeast abutment of small bridge; chiseled square
922.73
L.erado, at crossroads, in front of residence of Maggie Bresline, 30 feet east of road corner ; iron post stamped " Ohio 941 "
940.551

Lerado, 1.2 miles east of, at crossroads, northeast of corner, in root of oak tree ; copper nail
939. 67

Quinns crossing, top of rail
938.7

Marathon, on southeast corner of foundation of post-office building, on stone; chiseled square

\section*{From Newtonville northeast along railroad to West Woodville.}

Woodland Park, opposite entrance gate, in root of walnut tree; Feet. copper nail
Edenton, 1.2 miles south of, 30 feet north of highway, at highway and interurban railway crossing, in base of trolley pole; spike
903. 76

Edenton, 100 feet south of station, 20 feet north of track, 10 feet south of road; iron post stamped " Ohio 902 "
901.675

Costa, opposite station, ir base of south post of milk platform ; spike_
West Woodville, 0.8 mile south of, at Hogan's crossing, in yard of D. Hogan, in base of north cedar tree ; copper nail

\section*{Near Lindale.}

Lindale, 1.07 miles north of, in the northeast corner of district 5 (Pierce Township) schoolhouse yard, in root of locust tree; copper nail and washer, " 878 " painted on tree

\section*{Near Marathon.}

Marathon, 0.5 mile south of, 20 feet due east to west end of covered bridge; iron post stamped "Prim. Trav. Sta. No. 90, 1909 Ohio 878 "
877.726

\section*{From Blowville to Crosstown.}

Blowville, 2.2 miles east of, at \(\mathbf{T}\) road south, on culvert stone; painted square
911.06

Blowville, 2.7 miles east of, at three roads, on wooden culvert; painted square
904.34

Crosstown, opposite T road north, 60 feet east of store, at fence corner, in root of tree ; copper bench-mark nail
912.81

\section*{BELLEFONTAINE QUADRANGLE. \\ [Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(83^{\circ} 45-84^{\circ}\).] Primary leveling by E. C. Bibbee in 1911.}

From point near Quincy north to point east of Jackson Center.
Quincy, 3 miles south of, at northeast corner of M. E. Church, 150 feet south of \(T\) road east, near southwest corner of sec. 27 ; iron post stamped " 1091 Ohio"
Quincy, 2 miles south of, highest point on large square witness stone, marked on north "Logan County," on south " Champaign County," on west "Section corner 20 feet west 20 feet south," and on east side " County line 20 feet south"
Quincy, 1 mile south of, on large granite rock, at southwest corner of T road west; chiseled square
Quincy, in southwest corner of schoolhouse yard; iron post stamped " 1057 Ohio"
Quincy, 2.9 miles north of, 30 feet east by 20 feet north of center of crossroads, 200 feet east of J. B. Black's residence, 0.3 mile north of southwest corner of sec. 10, Logan County ; iron post stamped "1063 Ohio"

1,063. 259
Maplewood, 4.5 miles southeast of, in center at east side of coping stone of bridge; chiseled square
Maplewood, 2.25 miles east of, under wagon road, 15 feet east by 15 feet south of northwest corner of sec. 24, T. 2, R. 8 E.; top of south end of cast-iron culvert
Maplewood, 3 miles east of, at southeast corner of crossroads, quarter corner on north side of sec. 34, T. 2, R. 8 E.; iron post stamped "Prim. Trav. Sta. No. 33, 1909, 1004"

Maplewood, 3.5 miles northeast of, 100 feet west of Rum Run M. E. Church, south side of bridge over Rum Run; chiseled square on east abutment \(\qquad\) Feet.

Jackson Center, 5.8 miles southwest of, 0.3 mile east of quarter corner on west side of sec. 21, T. 7 S., R. 8 E.; copper nail in top of fence post
\(1,014.46\)
Jackson Center, 4 miles southeast of, 25 feet east by 20 feet north of quarter corner on west side of sec. 19, T. 7 S., R. 8 E., Logan County ; iron post stamped " 1011 Ohio"
Jackson Center, 2.5 miles east of, at intersection of crossroads, at southeast corner sec. 12, T. 7 S., R. 8 E.; top of corner stone_
\(1,019.27\)
Jackson Center, 3.5 miles northeast of, in center of \(T\) road west, at southeast corner of sec. 1, T. 7 S., R. 8 E., Logan County; highest point on corner stone.

1, 013. 46
Primary leveling by C. E. Mills and S. L. Parker in 1913.
From point 2.9 miles east of Huntsville along highways south to Bellefontaine.
Huntsville, 2.9 miles east of, northwest corner of crossroads, in root of 3 -inch white-oak tree ; copper nail \(1,223.16\)
Bellefontaine, 6.4 miles north of, northwest corner of crossroads, 6 feet west of milepost, in base of corner fence post; copper nail___ 1, 249. 15
Bellefontaine, 5.8 miles north of, northeast corner of T road north, in base of corner fence post ; copper nail

1, 273.37
Bellefontaine, 2 miles north of, 300 feet north of residence of C. A. Stevenson, on northwest abutment of small iron bridge ; chiseled square
Bellefontaine, 1.1 miles north of, southeast corner of T road east, 125
feet west of W. A. Dowell's residence ; mark not described_-_-_1,320. 46

From point 2.5 miles west of Bloom Center east and north along highways to a point 1.7 miles northwest of Lewistown.
Bloom Center, 2.5 miles west of, northeast corner of crossroads; iron post stamped " 1011 "

1,011. 435
Bloom Center, 2 miles west of, north side of road at \(T\) road south, in northeast corner of concrete step to brick schoolhouse (District No. 5) ; chiseled square 1, 018. 22
Bloom Center, 1.5 miles west of, northwest corner of crossroads, west end of iron drain pipe ; chiseled square

1,011. 87
Bloom Center, 1 mile west of, on south side of road at southeast corner of \(T\) road north, on stone box culvert; chiseled square_----

1, 007. 84
Bloom Center, 0.8 mile west of, southwest corner of \(T\) road north, southwest corner of stone box culvert ; chiseled square
Bloom Center, in southwest corner of crossroads, southwest corner of concrete step to east entrance of Methodist Church; chiseled square
Bloom Center, 1.1 miles east of, at \(\mathbf{T}\) road south, on west abutment north wing wall of steel bridge over Muchinippi Creek; chiseled square
Lewistown, 0.5 mile south by 1 mile west of, road forks on west bank of Miami River, west abutment, steel frame of south wing wall; chiseled square
Lewistown, 0.5 mile southwest by 1 mile west of, southeast corner of road forks; iron post stamped "1014"
Lewistown, 0.5 mile southwest by 0.8 mile west of, southwest corner of \(T\) road north, on south side of road, on stone box culvert; chiseled square
Feet. 995.28
\begin{tabular}{l} 
Lewistown, 1.25 miles northwest \(c f\), on west side of road at T road \\
southeast to Lewistown, in base of fence post ; copper nail_---- \\
\hline 92.42
\end{tabular} Lewistown, 1.25 miles northwest by 0.5 mile north of, southwest corner of crossroads, north end of stone arch culvert; chiseled square
989.875

From point near Lewistown south along highway to point 2.5 miles east by 3.6 miles south of Quincy.
Hazelton, 3.25 miles west by 0.4 mile north of, on west side of road
at \(T\) road east, in base of fence post ; copper nail
Hazelton, 3.25 miles west by 0.3 mile north of, northwest corner of \(T\) road west, in base of fence post ; copper nail

1, 033. 61
Hazelton, 3.25 miles west of, on west side of road at \(T\) road east, on concrete base of fence post ; chiseled square

1, 019. 797

Hazelton, 3.25 miles west by 1 mile south of, on west side of road at \(T\) road east; on iron drain pipe; chiseled square

1, 015.97
Degraff, 4.7 miles north of, southeast corner of T road south; iron post stamped " 1026 " ..... 1, 025. 774
Degraff, 3.7 miles north of, north abutment west wing wall of small wooden bridge across creek; chiseled square ..... 1, 014.94
Degraff, 2.9 miles north of, 1 mile northeast of Logansville, southwest corner of crossroads, on stone doorsill of brick schoolhouse (sub- district 1) ; chiseled square ..... 1, 076. 79
Degraff, 2.1 miles north of, northeast corner of lane east to Delmar Longfellow's residence, on top of concrete fence post; chiseled square ..... 1, 059.21
Degraff, 1.2 miles north of, southeast corner of crossroads, in base of fence post ; copper nail ..... 1, 022.15
Degraff, east side of town, southeast corner of road forks, on concrete crossing; chiseled square ..... \(1,004.48\)
Degraff, northwest corner of public-school grounds ; iron post stamped " 1009 " ..... 1,008. 713
Degraff, 200 feet west of station, at Big Four R. R. crossing; top of south rail ..... 994.4Degraff, 0.4 mile south of Big Four R. R. tracks, southeast corner ofroad forks, on concrete steps in front of residence; chiseled square_ 1,030.06Degraff, 0.4 mile south by 0.4 mile southwest of road forks, in top ofwooden drain; nail996.88
Degraff, 0.4 mile south by 0.8 mile southwest of, 2.5 miles east of Quincy, northwest corner of \(T\) road west, in base of mail-box post; copper nail ..... 974.08
Quincy, 2.5 miles east by 0.5 mile south of, 200 feet south of T roadwest, on south abutment east end of steel bridge; chiseled square_999.73
Quincy, 2.5 miles east by 1.5 miles south of, southwest corner of crossroads, on large red granite bowlder ; chiseled square ..... 1,081. 64
Quincy, 2.5 miles east by 2.6 miles south of, west side of road at \(T\) road west; iron post stamped " 1101 " ..... \(1,100.664\)
Quincy, 2.5 miles east by 3.1 miles south of, on east side of road at T road west; on large granite bowlder ; chiseled square ..... \(1,125.17\)

From point 3 miles south of New Hampshire south along highway to point near Lewistown, thence east and north to point near Belle Center.

New Hampshire, 3 miles south of, on north end of steel drain at northeast corner of T road east; highest point

Feet. \(1,015.10\)
Lakeview, 1.9 miles north of, 150 feet southeast of residence of G. W. Morris, on second step of southwest abutment of small wooden bridge; chiseled square
999.13

Lakeview, 0.8 mile north of, on west end of 15 -inch steel drain under pike; highest point
994. 49

Lakeview, surface of water in Indian Lake, July 3, 1913, 7 a. m 995.5

Lakeview, southwest corner of concrete cistern top at northeast corner of crossroads, 200 feet west of post office ; chiseled square_994. 28

Lakeview, 0.5 mile south of, northwest corner of crossroads; iron post stamped " 993 "
993.516

Lakeview, 1.6 miles south of, southeast corner of concrete porch at entrance to subdistrict 6 schoolhouse (Stokes Township) ; chiseled square
989.21

Lakeview, 2.6 miles south of, northeast corner of bridge over Miami River, on limestone rock; highest point
991.317

Miami River, surface of water under above bridge, July 5, 1913, 11 a. m

978
Lakeview, 3.5 miles south of, on north side of stone arch culvert, 25 feet south of southwest corner of crossroads, on west abutment; chiseled square
989. 87

Huntsville, 4.2 miles west of, 550 feet east of Toledo \& Ohio Central R. R. crossing, 475 feet west of residence of S. A. Parner, on end of steel rail at southwest corner of small iron bridge; highest point_994. 89

Huntsville, 3 miles west of, 950 feet west of residence of F . W. Howard, at T road north; iron post stamped " 1036 "
\(1,036.165\)
Huntsville, 2.5 miles west of, northwest corner of crossroads, 450 feet northwest of residence of J. C. McKees, on west end of steel drain pipe; highest point

1, 037.62
Huntsville, 1.5 miles west of, northwest corner of iron bridge over Cherokee Creek, 400 feet west of Wm. B. Brackney's residence, in northwest corner of concrete abutment; chiseled square
Huntsville, 0.6 mile northwest of, at Ohio Electric R. R. crossing; top of east rail
Huntsville, 0.4 mile west of, 250 feet west of T road west, on north end of 4 -foot steel drain under pike; highest point 1, 059.92
Huntsville, 1 mile south of, northwest corner of crossroads, 300 feet east of Ohio Electric R. R., 200 feet north of residence of Andy Harlan; iron post stamped " 1080 "

1, 080.329
Huntsville, 0.8 mile east of, southeast corner of crossroads, 100 feet northeast of residence of J. A. Horner, on southeast corner of stone culvert under pike; chiseled square
\(1,130.49\)
Huntsville, 1.8 miles east of, northwest corner of T road west, in base of corner fence post ; copper nail
\(1,144.87\)
Huntsville, 3 miles east of, northwest corner of crossroads, in root of 3 -foot white-oak tree; copper nail
\(1,223.16\)
Huntsville, 3.7 miles northeast of, 50 feet north of northwest corner of Johnston cemetery, at crossroads ; iron post stamped " 1066 "--
Belle Center, 2.2 miles southwest of, at Cleveland, Cincinnati, Chicago \& St. Louis Ry. crossing, on northeast abutment of small wooden bridge ; chiseled square

1,036. 84
Belle Center, 1.8 miles southwest of, at Big Four Route crossing; ..... Feet. top of north rail ..... 1, 047.7
Belle Center, 0.9 mile west of, in top of fence post at southwest corner of \(T\) road south; nail head ..... 1, 047.17
From point west of Hazelton east along highway to Hazelton, thence south andeast to Bellefontaine.
Hazelton, 2 miles west of, northeast corner of T road north, in base of fence post ; spike ..... 1, 029.44
Hazleton, 1.25 miles west of, northwest corner of crossroads at Pleas- ant Valley Church; iron post stamped "Prim. Trav. Sta. No. 90, 1910, 1046" ..... \(1,045.940\)
Hazelton, road crossing, Toledo \& Ohio Central R. R. ; top of west rail ..... \(1,075.159\)
Hazelton, southwest corner of crossroads, in base of telephone pole; spike ..... \(1,068.59\)
Hazelton, 1 mile south of, bend in road at lane to J. W. Swank's resi- dence on west side of road, in base of telephone pole; spike ..... \(1,064.46\)
Bellefontaine, 5 miles west of, on Sidney pike, southwest corner of crossroads at Miller schoolhouse, in base of fence post ; copper nail_ ..... \(1,060.42\)
Bellefontaine, 4.5 miles west of, T road south and private road north, northeast corner of, in base of fence post; spike ..... \(1,089.39\)
Bellefontaine, 4.2 miles west of, on Sidney pike; northwest cornerof \(T\) road north, west of center of crossroads; iron post stamped"1101"1, 101. 126
Bellefontaine, 2.8 miles west of, northeast corner of private road north, in base of fence post; spike ..... 1, 133. 20
Bellefontaine, 1.8 miles west of, southeast corner of crossroads, on stone doorsill of small brick township house ; chiseled square ..... \(1,163.21\)
Bellefontaine, 0.8 mile west of, on Columbus Street, southwest corner of \(T\) road south, in base of telephone pole; spike ..... \(1,194.74\)
Rellefontaine, crossing of West Columbus Street and Toledo \& Ohio Central R. R. ; top of east rail ..... \(1,216.9\)
Bellefontaine, 0.33 mile west of courthouse, crossing of West Colum- bus Street and Cleveland, Cincinnati, Chicago \& St. Louis Ry.; top of east rail ..... \(1,217.2\)
Rellefontaine, 0.25 mile west of courthouse, crossing of West Colum- bus Street and Cleveland, Cincinnati, Chicago \& St. Louis Ry.; top of west rail ..... 1,222. 2
Bellefontaine, crossing of Main and Columbus streets, Ohio Electric R. R., in center of cross streets ; top of east rail ..... \(1,244.9\)
Bellefontaine, 20 feet west of north entrance to courthouse; iron post stamped " 1251 " ..... \(1,250.880\)
From Bellefontaine south along highway 4 miles, thence west to Degraff.
Bellefontaine, 1 mile south of courthouse, northeast corner of cross-roads, on red granite bowlder near telephone pole; chiseled square_ 1, 224.50
Bellefontaine, 1.2 miles south of, at road crossing Toledo \& OhioCentral R. R.; top of south rail1,228. 2
Bellefontaine, 2 miles south of, on east side of road at T road west, inbase of fence post; spike\(1,214.64\)
Bellefontaine, 3 miles south of, at small steel bridge over McKeesCreek, northeast corner of T road west, on north abutment; chis-eled square1, 192.87
Bellefontaine, 3.2 miles south of, southeast corner of \(T\) road east, on Feet. end of iron drain pipe; painted square ..... 1, 198. 39
Bellefontaine, 4 miles south of, southwest corner of crossroads; iron post stamped " 1216 " ..... \(1,215.843\)
Bellefontaine, 4 miles south of, road crossing on Ohio Electric R. R. at Jewells Hills station; top of west rail ..... \(1,169.5\)
Bellefontaine, 4 miles south of, at road crossing on Cleveland, Cincin- nati, Chicago \& St. Louis Ry. ; top of west rail ..... \(1,168.4\)
Bellefontaine, 4 miles south by 1 mile west of, in southwest corner of T road south, on niggerhead bowlder; chiseled square ..... 1, 151. 19
Bellefontaine, 3.5 miles south by 1.8 miles west of, southwest corner of \(T\) road west, on red granite bowlder ; chiseled square ..... 1, 175. 86
Bellefontaine, 1 mile south by 3 miles southwest of, southeast corner of crossroads, on end of iron drain pipe; chiseled square ..... 1, 132.38
Degraff, 5.7 miles east of, 0.2 mile southwest of Lake Branch M. E.Church, southwest corner of road forks ; iron post stamped " 1108 "- 1, 108. 488
Degraff, 4.6 miles east of, northwest corner of \(T\) road north, on con-crete base of fence post; chiseled square1, 071.51
Degraff, 4.3 miles east of, on north side of road at T road south, in base of fence post ; copper nail ..... 1, 063. 62
Degraff, 3.3 miles east of, southwest corner of small steel bridge in center of crossroads, on west abutment north wing wall; chiseled square ..... 1,011. 10
Degraff, 2.5 miles east of, center of crossroads, on section stone; chiseled square ..... 1,008. 61
Degraff, 1.9 miles east of, in northwest corner of bridge floor over Stony Creek; top of bolt ..... 989.66
Degraff, 1 mile east of, southwest corner of T road south, on large bowlder near fence post ..... 1, 032.71
Degraff, 0.8 mile east of, on south side of road at T road north, in base of telephone pole; copper nail ..... 1, 008. 24
Degraff, on east side of town, at road crossing; top of east rail of Cleveland, Cincinnati, Chicago \& St. Louis Ry ..... 997.1
Degraff, northwest corner of public school grounds; iron post stamped " 1009 " ..... 1, 008. 713
From point 4 miles south of Bellefontaine south to West Liberty.
Bellefontaine, 4 miles south of, southwest corner of crossroads; iron post stamped " 1216 " ..... \(1,215.843\)
West Liberty, 3 miles north of, 40 feet northwest of center of cross- roads, on large granite bowlder; chiseled square ..... \(1,195.10\)
West Liberty, 2 miles north of, northwest corner of crossroads, in root of large oak tree; copper nail ..... \(1,164.48\)
West Liberty, 1.5 miles north of, on east side of road at road forks, in base of telephone pole; copper nail ..... \(1,163.54\)
West Liberty, north end of Detroit Street, in center of road forks, in base of telephone pole; copper nail ..... \(1,097.23\)
West Liberty, 10 feet east of south entrance to public school build- ing; iron post stamped " 1111 " ..... \(1,110.752\)

\section*{BELLEVUE QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Primary leveling by D. C. Witherspoon and A. C. Freundburg in 1901.
From Clyde northeast along railroad and highway to Sand Hill (double-rodded line).
Townsend, NE. \(\frac{1}{4}\) sec. 34 , T. 5 N., R. 17 E., on north ridge road; at northeast corner of foundation of schoolhouse; aluminum tablet stamped " 678 Toledo"

Feet.
678. 704

Meyers, southwest of, north side of sec. 2, T. 5 N., R. 24 W., in face of abutment wall at southwest corner of bridge over creek; aluminum tablet stamped " 694 Toledo"
694. 874

Sand Hill, 0.5 mile west of, sec. 2, T. 5 N., R. 23 W., at northwest corner of white plastered brick church, in face of water table; aluminum tablet stamped " 734 Toledo"
735. 098

From point 5 miles northeast of Clyde, north to point near Vickery and return.
Vickery, 1 mile west of, north side of sec. 24, T. 5 N., R. 16 E. (Riley Township), in southeast abutment of bridge over Pickerel Creek; bronze tablet stamped " 588 Toledo"
589. 190

Primary leveling by Philip Flitman in 1911.
From Bellevue south 1.5 miles.
Bellevue, at south corner of Burdette Hotel, in wall; aluminum tablet stamped " 751 Toledo"
751. 289

Bellevue, at southwest corner of crossing of Lake Shore \& Michigan Southern Ry. and Pennsylvania R. R. ; northeast corner of concrete foundation of semaphore, marked " 754.104 "
754.48

\section*{Leveling in 1916 by S. R. Archer. \\ At Clyde.}

Clyde, Ohio National Guard Armory, at corner of North Main Street and Washington Avenue, in water table on east side of building, 8 feet north of entrance; aluminum tablet stamped " 688 Ohio"
687.923

\section*{BEREA QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Primary leveling by George Bailey in 1901.
From Parma via Bennetts Corners and Hardscrabble to crossroads 3 miles east of Grafton.
Bennetts Corners, on southwest corner of crossroads, in top of end of drain; bronze tablet stamped " 1058 Cleveland 1901 " \(\qquad\)
Hardscrabble, bridge over west branch of Rocky River, northeast sill ; bronze tablet stamped " 794 Cleveland 1901 "
794. 657

Hardscrabble, 2 miles west of, bridge over stream to north, on northeast corner of northwest abutment ; mark
852.02

From West Cleveland via Rocky River, Trinity, and Berea to Parma.
Rocky River, 200 feet east of station; small New York, Chicago \& St. Louis R. R. bridge over private road, southwest abutment, in sill between girder and capstone, about 2 feet below rail; aluminum tablet stamped " 655 Cleveland 1901 " \(\qquad\) 654.865

Trinity, brick schoolhouse north of former post office, front or west face of window sill south of doorway; aluminum tablet stamped " 696 Cleveland 1901 "
696.636

Berea, bridge over East Branch (of Rocky River), southeast wing wall, about 2 feet above highway; aluminum tablet stamped " 769 Cleveland 1901" (reported destroyed)

Carma, 1.25 miles southwest of, in sill at northeast end of bridge
on the Cleveland-Medina pike, southeast side of road; aluminum tablet stamped " 846 Cleveland 1901 "

Feet. 846.094
888.12
898. 24
895.111
867.18
869.52
867.00
854.827
884.08

Skeels Crossroads, 1 mile west by 1.7 miles north of, southeast corner of \(T\) road east; painted square on south end of iron drain pipe, marked " 869.7 "
Chattanooga, 1 mile west by 2 miles south of, on State line road, at southeast corner of T road east; iron post stamped "Prim. Trav. Sta. No. 25, 1909, 865 " \(\qquad\)
Chattanooga, 1 mile west by 1.2 miles south of, southwest corner of T road east, on southwest corner of west abutment of small bridge; chiseled square, marked " 844.9 "
Chattanooga, 1 mile west of, on State line road, northeast corner of C. W. Heffener's yard, 30 feet southeast of center of T road east; iron post stamped " 841 " \(\qquad\)
Chattanooga, 1 mile west by 1 mile north of, southeast corner of \(T\) road east, on stone under east end of iron brace to telephone pole; chiseled square marked " 832.3 "
Chattanooga, 2.5 miles north by 0.5 mile west of, southeast corner of \(T\) road east, 25 feet southeast of center of roads; iron post stamped " 818 " \(\qquad\)
Chattanooga, 3.5 miles north by 0.5 mile west of, southwest corner of crossroads; spike in base of fence post, marked " 815.1 " \(\qquad\)
Chattanooga, 4.25 miles north by 0.5 mile west of, southwest corner of \(T\) road south; spike in base of fence post, marked " 817.4 "-
Willshire, 2.5 miles south by 0.8 mile west of, on State line road, 1 mile south of Mercer-Van Wert County line, southeast corner of T road east; iron post stamped " 816 "
869.74
864.803
844.90
840.570
832.41
817. 976
815.14
817. 45
816.192

Willshire, 2.5 miles south of, on south slu at Black Creek Township school (district telephone pole, marked " 808.9 "
Willshire, 2.5 miles south by 1.2 miles east of, on south side of road at T road south; chiseled square on corner stone, marked " 820.8 "

\section*{From Willshire south 2 miles.}

Willshire, surface of water in St. Marys River, June 27, 1911
Willshire, southeast corner of, State and Simpson streets, on west edge of concrete walk, 15 feet north of northwest corner of Willshire Hotel ; chiseled square, marked " 800.2 " \(\qquad\)
Willshire, 1 mile southwest of, on State line road, east side of road at T road west; spike in base of telephone pole, marked " 807.9 " \(\qquad\)
Willshire, 1.8 miles southwest of, at southeast corner of T road east; spike in base of fence post, marked " 811.8 "
road at \(T\) road south, . 3) ; spike in base of

Feet. 809.09
820.88
800.04
807. 79
811.71

BIDWELL QUADRANGLE.
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by E. L. McNair in 1898, George L. Gordon in 1905, and R. S. Blinn in 1904.

At Vinton.
Vinton, corner of Front and College streets, in stone sill of building; aluminum tablet stamped " 612 Adj 1903 "
612. 328

\section*{From Oak Hill via Centerville, Rio Grande, and Rodney to Gallipolis.}

Centerville, in stone foundation of schoolhouse, on side facing southwest; bronze tablet stamped " 696 A "
Rio Grande, north entrance to main building of Rio Grande College, in sandstone wall at right angle of steps; bronze tablet stamped " 682 A"
680.887

Rodney, 2 miles east of, at front door of brick house belonging to R. B. Waddell on north side of road, in sandstone doorsill; bronze tablet stamped " 671 A "
670.023

From point 4 miles west of Kyger southwest to Pinegrove, thence south to Kerr.
Pinegrove, 1.9 miles northeast of, iron bridge over Campaign Creek, southeast end of northeast abutment, on bridge seat; aluminum tablet stamped " 601 Adj 1903 "
600.770

Pinegrove, 1.1 miles south of, west side of culvert over small stream; aluminum tablet stamped " \(740 \mathrm{Adj} 1903 "\)
740.071

Evergreen, 1.1 miles south of, iron bridge over small run, east end of south abutment; aluminum tablet stamped " 603 Adj 1903 " \(\qquad\) -

\section*{BLANCHESTER QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(83^{\circ} 45^{\circ}-84^{\circ}\).]
From Martinsville west along Baltimore \& Ohio Southwestern R. R. to Clinton Valley.
Precise leveling by Coast and Geodetic Survey.
Martinsville, on east abutment of railroad bridge; chiseled square marked "B M" (C. \& G. S. b. m. LIX) \({ }^{1}\)

1,056. 609

Clinton Valley station, about 0.3 mile east of, on east abutment of railroad bridge; chiseled square marked "B M" (C. \& G. s. b. m. LX) \({ }^{1}\)

Fect.
990.047

The leveling in Blanchester quadrangle was done in 1905 by C. G.
Ogle and R, P. Thompson. The Coast and Geodetic Survey precise line in this vicinity could not be recovered.

From Clarksville east along Cincinnati \& Muskingum Valley R. R. to Clinton.
Clarksville, northeast corner of J. E. Linn \& Co.'s store; aluminum tablet stamped " 817 Adj 1903 ",
816.817

Clarksville, 2.5 miles east of, on northeast corner of east abutment of railroad culvert ; chiseled square
Ogden, 1 mile east of, on southwest corner of west abutment of railroad bridge over Lyttle Creek; chiseled square
932. 69

Ogden, 2.5 miles east of, on southeast corner of east abutment of railroad bridge; chiseled square
964.83

Wilmington, in stone foundation of east side steps to court-house; aluminum tablet stamped "1026 Adj 1903 "
Wilmington, 2.75 miles east of, on north end of east abutment of box culvert ; chiseled square

1, 045.74
From Wilmington northeast along pike to Clinton.
Wilmington, 4.4 miles northeast of, in stone step of door to brick schoolhouse (Dutch school) ; aluminum tablet stamped " 1046 Adj 1903 "

1, 046.026
From Wilmington northwest along Harveysburg pike to Jonah Run Church, thence south to Clarksville.
Wilmington, 2.5 miles northwest of courthouse, on doorsill of schoolhouse of Union Township; chisel mark
Oakland, in southwest corner of foundation wall of schoolhouse; aluminum tablet stamped " 1008 Adj 1903 "

1,008. 207
Harveysburg, 1.5 miles east of, in southeast corner of foundation of Jonah Run Church (Baptist) ; aluminum tablet stamped " 943 Adj 1903"
Clarksville, 3 miles north of, at Vandervorts Corners, in east end of 10 -foot arch culvert under highway; aluminum tablet stamped " 951 Adj 1903 "

From Wilmington southeast along highway to point near New Antioch, thence southwest to Morrisville, thence west to Cuba, thence north along Baltimore \& Ohio Southwestern R. R. to Wilmington.
Wilmington, 5.1 miles southeast of, 0.75 mile west of New Antioch, in top of east abutment of north wing of highway bridge; aluminum tablet stamped " 1049 Adj 1903 "
Cuba, 250 feet west of station, in bridge seat at east end of west abutment Baltimore \& Ohio R. R. crossing of highway ; aluminum tablet stamped " 1034 Adj 1903." (To be moved in 1917)
Cuba, 2.5 miles northeast of, at road crossing, on east side of Baltimore \& Ohio R. R. track and 8 feet southwest of old wall, on north end of highway culvert ; chiseled square
From Martinsville south along highway 7 miles, thence west to Blanchester, thence north to Clarksville.
Martinsville, in stone step at east door of Ódd Fellows Hall ; aluminum tablet stamped " 1086 Adj 1903 "

Martinsville, 4 miles south of, in northwest corner of Glady brick schoolhouse (subdistrict 4, Clark Township), in stone water table; aluminum tablet stamped " 1023 Adj 1903 "

Feet.
Westboro, 3.2 miles east of, south end of east abutment of highway bridge; chiseled square 1, 023.464

Westboro, 600 feet west of station, Baltimore \& Ohio R. R. bridge crossing West Fork of East Fork, in top of south concrete wing wall of east abutment; aluminum tablet stamped " 980 Adj 1903 "-
980.890

Blanchester, on northwest corner of Main Street and Broadway, in stone at southeast corner of 2 -story brick building belonging to F. N. Carnaham; aluminum tablet stamped " 971 Adj 1903 "
971. 304

Blanchester, 4.35 miles north of, in northeast corner of brick schoolhouse: aluminum tablet stamped " 976 Adj 1903 "
976.983

Primary leveling by C. G. Ogle and R. P. Thompson in 1904 and F. L. Whaley in 1914.

From Carksville east along Cincinnati \& Muskingum Valley R. R. to Clinton.
Clarksville, in northeast corner of J. E. Linn \& Co.'s store; aluminum tablet stamped " 817 Adj 1903 "
816.817

Clarksville, 600 feet northeast of station, 4.5 feet south of west end of sidewalk curbing; chiseled square
801.62

Clarksville, 0.5 mile east of, on southeast corner of east abutment of railroad bridge; chiseled square
807.20

Clarksville, 1 mile east of, on southwest corner of south abutment of iron highway bridge, 125 feet north of railroad; chiseled square_-
Clarksville, 1.25 miles east of, on northwest corner of parapet wall of west abutment of iron bridge (railroad), 100 feet east of highway; chiseled square_
812.90

Clarksville, 2.5 miles east of, on northeast corner of east abutment of railroad culvert; chiseled square
816.58

Clarksville, 3.1 miles east of ; floor of bridge
856.50

Clarksville, 4 miles east of, on south end of east abutment of railroad bridge; chiseled square
869.60

Ogden, 500 feet east of station, on northwest corner of highway bridge, on top of iron parapet ; point
903.22

Ogden, 1 mile east of, on southwest corner of west abutment of railroad bridge crossing Ly , tle Creek; chiseled square
932. 69

Ogden, 2 miles east of, on southwest corner of west abutment of railroad bridge crossing Lyttle Creek; point
957. 79

Ogden, 2.5 miles east of, on southeast corner of east abutment of railroad bridge; chiseled square
964. 83

Wilmington, 1.75 miles west of, on north corner of north abutment of highway bridge crossing Lyttle Creek; chiseled square
979.29

Wilmington, 1.25 miles west of, on southeast corner of east abutment of railroad bridge crossing Lyttle Creek; chiseled square
982.82

Wilmington, on corner of curbing on east side of South Street, north of railroad, 140 feet west of station; point

1,008. 72
Wilmington, in stone foundation of east side steps to courthouse; aluminum tablet stamped " 1026 Adj 1903 "

1, 026. 073
 \(45281^{\circ}\) - Bull. 651-17-4
Clinton, in northeast corner of road crossing, in fence post; large Feet. spike ..... 1, 046. 29
From Wilmington along Starbuck pike northeast to Dutch schoolhouse, thence south to Clinton.
Wilmington, 2 miles northeast of, on north side of road at angle, in- side of fence, in root 2 feet outside of large elm tree; nail ..... \(1,053.880\)
Wilmington, 2.3 miles northeast of, on doorsill of district 1 school- house (Union Township) ; chiseled square ..... 1, 043. 639
Wilmington, 3.1 miles northeast of, at crossroads at Starbuck, in southwest corner, in telephone pole; nail ..... 1, 030.28
Wilmington, 3.4 miles northeast of, on south wing of west abutment of highway bridge; chiseled mark ..... 1, 023.12
Wilmington, 4.4 miles northeast of, in stone step of door of brick " Dutch schoolhouse"; aluminium tablet stamped "1046 Adj 1903" ..... 1, 046.026
From Wilmington along Waynesville pike northwest to Jonah Run Church near Harveysburg, thence south to Clarksville.
Wilmington, 1.2 miles west of, on south end of culvert at intersection of Locust Street and Waynesville pike; chiseled mark ..... \(1,014.67\)
Wilmington, 2.5 miles northwest of, on doorsill of schoolhouse of Union Township; chiseled mark ..... 1, 019. 39
Wilmington, 4.3 miles northwest of, on top of fence post, at north- west corner of road crossing ; point ..... 989.62
Oakland, 5.5 miles northwest of Wilmington, in southwest corner of foundation wall of schoolhouse; aluminum tablet stamped " 1008 Adj 1903" ..... \(1,008.907\)
Oakland, 0.45 mile northwest of, on north end of road culvert at northeast end of road intersection of road leading north; point ..... 996. 82
Oakland, 1.2 miles west of, on north end of highway culvert; chiseled mark ..... 1, 005. 40
Oakland, 2.2 miles west of, on east end of culvert at T road; chiseled mark ..... 994.60
Harveysburg, 1.5 miles east of, in southeast corner of foundation of Jonah Run Baptist Church; aluminum tablet stamped " 943 Adj1903"942.888
Jonah Run, on east end of south abutment of highway bridge over, 1,400 feet south of pike; chiseled square ..... 923. 80
Jonah Run Church, 0.8 mile south of, on south end of road culvert; chiseled square ..... 962.20
Jonah Run, 2 miles south of, on east end of abutment of road cul- vert; chiseled square ..... 978.51
Jonah Run, 3.2 miles south of, at intersection of \(T\) road, in top of fence; nail ..... 966. 75
Jonah Run, 3.8 miles south of, at road leading west, in top of fence post ; nail ..... 965.28
Clarksville, 3.5 miles north of, at Vandervorts Corners, in east endof 10 -foot arch culvert, under highway; aluminum tablet stamped"951. Adj \(1903 "\)950.636
Clarksville, 2.2 miles north of, at turn in road and intersection of farm road leading east, on corner of plank crossing ditch; point_-_

\footnotetext{
From Wilmington southeast along highway to point near New Antioch, thence southwest to Morrisville, thence west to Cuba, thence north along Baltimore \& Ohio Southwestern R. R. to Wilmington.
}

Wilmington, 1.5 miles east of, on top of south end of culvert; Feet. chiseled square

1, 047.42
Wilmington, 2.5 miles southeast of, in fence post at intersection of
\(T\) road; nail
Wilmington, 3.1 miles southeast of, 15 feet north of southwest corner of road crossing, on bowlder in highway ; chiseled square
\(1,066.34\)
Wilmington, 3.9 miles east of, on south side of road intersection, in telephone pole; nail
\(1,066.43\)
New Antioch, 0.75 mile west of, in top of east abutment, on north wing
of highway bridge; aluminum tablet stamped " 1049 Adj 1903 "---- 1,049. 232
New Antioch, 1.75 miles west of, on south side of road, at intersection of road running north, in fence post; nail

1,064. 56
Wilmington, 6.4 miles south of, 3 miles southwest of New Antioch, on north wing of west end of stone culvert; chiseled square

1, 086. 26
Wilmington, 8.5 miles southeast of, on top of south end of stone \(\quad\) culvert; chiseled square. 76
Morrisville, 25 feet north of northeast corner of road intersection, in top of locust stump; nail

1, 066. 82
Morrisville, 0.7 mile west of, on north side of road at \(T\) road running south, in telephone pole; nail
\(1,047.68\)
Morrisville, 1.5 miles west of, on north end of highway culvert;
chiseled square
Cuba, 1 mile east of, on southwest corner of west wing of south abutment of highway bridge; chiseled mark

1, 045.86
Cuba, 250 feet west of station, on east end of east abutment of Baltimore \& Ohio R. R. bridge crossing highway, in bridge seat; bronze tablet stamped " 1034 "

1, 034.355
Cuba, 1 mile northeast of, in warning signpost at road crossing; nail_ 1, 034. 64
Cuba, 1.5 miles northeast of, on east end of east abutment of Baltimore \& Ohio R. R. bridge crossing Cowans Creek; chiseled square
Cuba, 2.5 miles northeast of, at road crossing, on east side of Baltimore \& Ohio R. R. track and 8 feet southwest of old wall, on north end of highway culvert ; chiseled square
Cuba, 3.75 miles northeast of, on end of west abutment of cattle guard on Baltimore \& Ohio R. R.; chiseled square
\(1,064.15\)
Cuba, 5.1 miles northeast of, in top of fence post 8 feet west of track and 10 feet north of road; nail
\(1,037.48\)
From Morrisville along highway south 7 miles, thence west to Blanchester, thence north to Clarksville.
Martinsville, in stone step at east door of Odd Fellows' Hall ; aluminum tablet stamped " 1086 Adj 1903 "
Martinsville, 0.8 mile south of, on east end of culvert at intersection of road running south; chiseled square
\(1,075.12\)
Martinsville, 1.3 miles south of, on west end of 5 -foot arch culvert; chiseled square


Martinsville, 4 miles south of, in northwest corner of subdistrict 4 (Clark Township, Clinton County), brick schoolhouse, in stone water table; aluminum tablet stamped " 1023 Adj 1903 "

Feet. 1, 023.464
Martinsville, 5 miles south of, on west end of culvert at \(Y\) of road running north; chiseled square

1,018. 56
Westboro, 4 miles east of, on south end of road culvert at crossroads; point \(1,015.18\)
Westboro, 3.2 miles east of, on suuth end of east abutment of highway bridge; chiseled square
999. 23

Westboro, 2.5 miles east of, at "Daugherty's Corner" intersection, in fence post; nail
998.64

Westboro, 2 miles east of, on north end of culvert at Y road leading north; chiseled square
991. 60

Westboro, 0.9 mile east of, on south end of culvert ; chiseled square__ \(\quad 981.58\)
Westboro, 600 feet west of station, on Baltimore \& Ohioo R. R. bridge crossing West Fork of East Fork of Todds Fork of Little Miami River, on south wing wall of east abutment, in top of concrete; aluminum tablet stamped " 980 Adj 1903 "
980.890

Westboro, 1.2 miles west of station, on north end of east abutment of
Baltimore \& Ohio R. R. bridge; chiseled square 990.10

Westboro, 2 miles west of, 35 feet south of railroad at road crossing, in top of fence post; nail

1, 005. 55
Westboro, 3 miles west of, 30 feet south of railroad, in top of fence post; nail
991.12

Blanchester, in southeast corner of two-story brick building belonging to F. N. Carnaham, on the northwest corner of Main Street and Broadway, in stone; aluminum tablet stamped "971 Adj 1903 "--
Blanchester, 0.5 mile north of, at \(Y\) roads, on top of fire plug; point_ 971.304

Blanchester, \(\mathbf{1 . 7 5}\) miles north of, at \(T\) road leading west, in northwest corner, on top of fence post; nail
Blanchester, 3 miles north of, at east end of culvert under pike at crossroads; chiseled square
972.88

Blanchester, 3.9 miles north of, on east end of culvert at private road leading south; point
986.66

Blanchester, 5.15 miles north of, at intersection of road, in yard of
O. L. Fordyer, in cut bench at base of large elm tree; nail
972.48 . house; aluminum tablet stamped " 976 Adj 1903 "

\section*{From point near Oakland to Oakland.}

Oakland, 1.5 miles west of, 1 mile south of South Kingman, north end of stone culvert; chiseled square painted "1005.1 T. B. M."

\author{
\(1,005.50\)
}

From Farmers west to Martinsville. (Mean of two lines establishing a new elevation for a tablet at Martinsville described in Bulletin 411.

Farmers station, southwest corner of concrete porch in front of E. J. Preston's store; chiseled square marked " 1063.7 "
Martinsville, 1.8 miles east of, 250 feet east of telegraph pole No. \(61 / 35\), at turning point, in center of Baltimore \& Ohio Southwestern R. R. track, in tie; copper nail marked " 1074.9 "
Martinsville, 0.8 mile east of Baltimore \& Ohio Southwestern R. R. depot, at turning point in center of track, in railway tie; copper nail marked " 1096.5 "

\section*{[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).] \\ Primary leveling by H. W. Peabody in 1904.}

BLUFFTON QUADRANGLE.

From Erie bench mark east of Lima northeast to Lafayette, thence east along Pittsburgh, Fort Wayne \& Chicago Ry, to point 4 miles east of Ada.

Lafayette, 1.75 miles west of, at northwest corner of north coping of culvert 151 ; chiseled square (railroad bench mark) -

Feet.
919.63

Lafayette, 0.25 mile west of, on bridge 148 , at northwest corner of east bridge seat; chisel mark (railroad bench mark)
925.42

Lafayette, in south face under corner stone by entrance recess to town hall; aduminum tablet stamped "927 Adj 1904" \(\qquad\)
Lafayette, 2.7 miles east of, southeast corner of south coping of bridge 135 ; chisel mark (railroad bench mark)
927. 484

Lafayette, 2.75 miles east of, in next to top coping stone at northeast corner of bridge 135 ; aluminum tablet stamped " 950 Adj 1904 "-
Ada, at northeast corner of Union school building, in east face of water table, 5.5 feet above ground; aluminum tablet stamped "964 Adj 1904"
951. 84
950.116
963. 860

\section*{From Lafayette north along highway via Beaverdam to Bluffton.}

Beverdam, sec. 32, T. 2 S., R. 8 E., in northeast corner of town hall; aluminum tablet stamped " 868 Adj 1904 "
868.067

Bluffton, sec. 1, T. 2 S., R. 8 E., in west face of stone at northwest corner of town hall; aluminum tablet stamped " 840 Adj 1904 ".-.

From Bluffton northwest along highway to Pandora, thence east to Mount Cory.
Pandora, sec. 20, T. 1 S., R. 8 E., at southeast corner of Methodist Church; aluminum tablet stamped " 780 Adj 1904 " \(\qquad\)
Pandora, 4.75 miles east of, at southwest corner of sec. 18, T. 1 S., R. 9 E., 4 miles west of Mount Cory, at southwest corner of United Brethren Church; aluminum tablet stamped " 803 Adj 1904"
803. 208

Mount Cory, sec. 21, T. 1 S.p R. 9 E., on water table at southeast corner of Evangelical Church; aluminum tablet stamped " 821 Adj 1904 "
820.903

From Ada north along highway to Mount Cory.
Orange Township, northeast corner of sec. 21, T. 2 S., R. 9 E., in north face at northeast corner of schoolhouse; aluminum tablet stamped " 884 Adj 1904"
883. 824

From Jenera west along Northern Ohio Ry. toward Bluffton.
Cordelia, at road crossing 100 feet south of railroad, on northeast corner of north abutment of iron bridge; chisel mark
846.25

\section*{From Mount Cory northeast along highway to Findlay.}

Rawson, sec. 13, T. 1 S., R. 9 E., about 50 feet east of northeast end of station platform, in northwest face of bay window of L. M. Osborn's block; aluminum tablet stamped " 819 Adj 1904 "

Rawson, 1.75 miles northeast of, sec. 7, T. 1 S., R. 10 E., 600 feet southwest of road crossing, at southwest corner of arched sandstone culvert, in next to top coping stone; aluminum tablet stamped " 804 Adj 1904 "
818. 496
804.234

\title{
BOBO QUADRANGLE.
}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by C. E. Mills in 1911.
From point 3 miles northwest of Convoy northwest along highway to State line, thence south along State line to point 1 mile south of Mercer-Van Wert County line.

Convoy, 3 miles northwest of, at Mount Pleasant Church, 110 feet
west of crossroads, on south side of road, at west end of gate to field; iron post stamped " 776 "

Feet.
776.371

Convoy, 4.8 miles northwest of, in southwest corner of crossroads; spike in base of telephone pole, marked " 776.28 "
776. 27

Convoy, 5.6 miles northwest of northeast corner of. crossroads; iron post stamped " 779 "
779.035

Convoy, 6.9 miles northwest of, 1 mile east of State line, southeast corner of crossroads, on Paulding-Van Wert County line; spike in base of fence post, marked " 773.0 " \(\qquad\)
Dixon, 2.5 miles north of, southeast corner of \(T\) road east ; iron post stamped " 777 " \(\qquad\)
Dixon, 1.5 miles north of, northeast corner of \(T\) road east ; spike in base of telephone pole marked " 784.6 " \(\qquad\)
Dixon, 0.5 mile north of, northeast corner of \(T\) road east; spike in base of telephone pole, marked " 789.3 " \(\qquad\)
Dixon, at road crossing of Pennsylvania R. R.; top of north rail, marked " 794.9 " \(\qquad\)
Dixon, near northwest corner of post-office building, at north edge of concrete walk, 10 feet west of building; painted square, marked " 791.2 "
791.09

Dixon, 0.5 mile south of, on west side of road at \(T\) road east, southeast corner of schoolhouse yard; iron post stamped " 795 "
794. 767

Dixon, 1.5 miles south of, southeast corner of \(T\) road east; spike in base of fence post, marked " 800.8 "
800.75

Dixon, 2.5 miles south of, southeast corner of T road east; spike in base of fence post, marked " 806.8 "
806. 74

Dixon, 3.5 miles south of, on west side of road at T road east; spike in base of telephone pole, marked " 812.8 "
812.72

Dixon, 4.5 miles south of, southeast corner of \(T\) road east; iron post stamped " Prim. Trav. Sta. No. 20, 1909 Ohio 817 "
816. 529

Dixon, 5.5 miles south of, on west side of road at \(T\) road east; spike in base of telephone pole, marked " 820.9 "
820.78

Dixon, 6.5 miles south of, southeast corner of T road east ; iron post stamped " 834 " \(\qquad\)
Watt, 0.25 mile south of, southeast corner of T road east; spike in base of fence post, marked " 846.9 " \(\qquad\)
Watt, 1.25 miles south of, southeast corner of T road east; spike in base of fence post, marked " 845.4 "
845.30

Wren, 1.5 miles west by 1 mile north of, at T road east, 10 feet south of gate to field on west side of road; iron post stamped " 840 "
840.394

Wren, 1.5 miles west of, at road crossing; top of north rail of Erie R. R. track, marked " 832.6 "
832.49

Wren, 0.8 mile south by 1.5 miles west of, on west side of road at T road east; spike in base of telephone pole, marked " 828.1 "
828.01

Willshire, 1.9 miles northwest of, on State line road, 50 feet northeast of center of T road east; iron post stamped " Prim. Trav. Sta. No. 21, 1909, Ohio 819 "
Willshire, 1.1 miles northwest of, northwest corner of road forks; spike in base of telephone pole, marked " 796.6 "

\section*{BOWLING.GREEN QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Precise leveling by the Coast and Geedetic Survey.
From Hull Prairie southwest along Cincinnati, Hamilton \& Dayton Ry, to Tontogany.
Hull Prairie, Wood County, on Cincinnati, Hamilton \& Dayton Ry., about 200 feet south of station, in southeast quarter of stone culvert on first step below bridge seat, 5 inches east of east end of bridge seat course; chiseled square 4.5 inches south of north face (C. \& G. S. b. m. A1)
Haskins, 820 feet west of Cincinnati, Hamilton \& Dayton Ry. track on Sugar Street, south face of public-school building, in water table 4 feet 10 inches above ground, 1 foot 9 inches east of east side of entrance; brass bolt marked with a horizontal line (C. \& G. S. b. m. B1)

Tentogany, southeast corner of Main and Broad streets, at west side of entrance to Waltz's store, " 1894 " in northwest corner of iron plate under column; top of a surface seven-eighths inch square marked by a cut of a cold chisel (C. \& G. S. b. m. C1)

Precise leveling by C. H. Semper in 1906.
From Tontogany northeast along Cincinnati, Hamilton \&ayton Ry. to Haskins.
Tontogany, in front of station; top of rail
Tontogany, 0.34 mile north of, 50 feet north of road crossing, east side of track, top of stone culvert; aluminum tablet stamped " 669 "-
Haskins, 250 meters west of Cincinnati, Hamilton \& Dayton Ry., on Sugar Street, water table in south face of pubiic-school building, 4 feet 10 inches above ground, 1 foot 9 inches east of east side of entrance; brass bolt lettered "U. S. C. \& G. S."

\section*{Primary leveling by D. C. Witherspoon, A. C. Freundburg, J. A. Belford, and Duncan Hannegan in 1901. \\ From Tontogany southeast along railroad and highway to New Rochester (double-rodded line).}

Tontogany, at southeast corner of Main and Broad streets, west side of entrance to Waltz's store (1894) ; northwest corner of iron plate under column, being top of a surface 78 inches square. (Coast and Geodetic Survey bench mark " \(\mathrm{C}_{2}\) ")
Bowling Green, in southwest corner of courthouse, on top of limestone post; bronze meridian tablet stamped " 695 Toledo"
,-------
Bowling Green, 3 miles east of, northeast abutment of iron bridge over North Branch of Portage River ; chiseled square \(\qquad\)
New Rochester, 0.2 mile east of, northeast corner of stone abutment of bridge over Middle Branch of Portage River; chiseled cross_

\section*{From Bowling Green north along electric line to Roachton,}

Sugar Ridge, 2 miles northwest of, northeast corner of sec. 36, T. 6 N., R. 10 E ., east side of railway, at southwest corner of west abutment of iron bridge over ditch; aluminum tablet stamped " 666 Toledo" \(\qquad\)
Bend station, at north end of switch; top of east rail.
667. 702
670.1
668. 803
667. 702
669.510

Feet.
818.515
796.48
669.510
695.519

666, 16
661.10
666.640
665.7

\section*{At Hull Prairle (set from Coast Survey bench mark on same bridge).}

Hull Prairie, about 200 feet east of station, in southeast quarter of
stone culvert on first step below bridge seat; aluminum tablet stamped " 660 Toledo" \({ }^{2}\)

Feet.
660.571

From Tontogany south 2 miles (single-spur line).
Tontogany, 2 miles south of, south side of sec. 17, T. 5 N., R. 10 E., in north end of west stone abutment of small iron bridge over ditch; aluminum tablet stamped " 674 Toledo"
674.734

From Bowling Green south along electric line to Ducat, thence west to Wingston.
Wingston, 0.7 mile northeast of, east side of sec. 28 , T. 3 N., R. 10 E., in corner of stone abutment at southwest corner of bridge over Middle Branch of Portage River; aluminum tablet stamped " 689 Toledo " \({ }^{2}\)
689.679

From Ducat southeast to Mungen, thence east and north to New Rochester.
Mungen, in front of station; top of rail
Mungen, 0.5 mile southeast of, north side of sec. 31, T. 4 N., R. 11 E., in west stone abutment at southwest corner of bridge over Middle Branch of Portage River; aluminum tablet stamped " 689 Toledo" \(\qquad\)
West Millgrove, 3 miles northwest of, south side of sec. 30, T. 4 N., R. 12 E., at southeast corner of wooden bridge over South Branch of Portage River, in stone abutment; aluminum tablet stamped " 682 Toledo"
687.9
689.588

From New Rochester north 6.5 miles, thence east to Luckey.
Luckey, 1 mile west by 0.5 mile north of, east side of sec. 19, T. 6 N., R. 12 E. , in north end of west abutment at northwest corner of iron bridge over ditch; aluminum tablet stamped " 649 Toledo"
649. 262

\section*{BRINKHAVEN QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\circ}-40^{\circ} 30^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by S. R. Areher in 1909 and F. C. Bibbee in 1910.
From point 2 miles southwest of Glenmont southwest and southeast along railroad to Warsaw.
Baddow Pass, 0.9 mile west of, on Cleveland, Akron \& Columbus Ry., 400 feet south of \(T\) road west, at bridge 64 over wagon road, 20 feet north of road; iron post stamped " 1050 " \(\qquad\) 1,049. 861
Brinkhaven, 1.8 miles east of, 35 feet west of railroad crossing, on north end of stone culvert under railroad; chiseled square \(\qquad\) 962.12

Brinkhaven, 25 feet north of main track, on northeast corner of station platform, Cleveland, Akron \& Columbus Ry.; chiseled square-
Brinkhaven, in northeast corner of schoolhouse yard; iron post stamped " 896 "
974.25

Brinkhaven, 1.2 miles south of, on south abutment, east side of overhead bridge 21 ; Pennsylvania R. R. bench mark \(\qquad\)
Brinkhaven, 2.4 mites south of, on Pennsylvania R. R., on concrete on south end, west side-of abutment; chiseled square \(\qquad\)
Wintergreen (Cavallo station), 25 feet west of post office, 75 feet east of railroad, in northwest corner of C. H. Summon's front yard;

\(\$ 67.71\)
878.190

\footnotetext{
1 Reported in 1906 to have been destroyed by reconstruction of culvert.
\({ }^{2}\) stone with tablet replaced by another stone.
}

Wintergreen, 1.8 miles south of, on large, flat, sandstone rock on west side of railroad at private crossing; chiseled square

Feet.
859.15

Wintergreen, 2.5 miles south of, on south abutment, east side of iron railroad bridge 18 over Walhonding River ; chiseled square
Wintergreen, 3.8 miles south of, 25 feet north of railroad crossing at T road south, on west end of small stone culvert under railroad; chiseled square
848.14

Walhonding, \(\mathbf{1 . 1}\) miles northwest of, in northeast corner of \(\mathbf{T}\) road north, on old towpath of canal, 1,000 feet southeast of bridge 17 on Pennsylvania R. R. over Walhonding River; iron post stamped " 843 " \(\qquad\)
Walhonding, 1.6 miles east of, 25 feet north of railroad, 25 feet south of public road at railroad crossing ; iron post stamped " 833 "-
Nellie (Mohawk station), 3 feet east of front entrauce on south side of schoolhouse ; iron post stamped " 817 "

From Warsaw northwest along highway to Glenmont.
Warsaw, 2 miles northwest of, on coping stone on south end of east abutment of bridge over Beaver River; chiseled square \(\qquad\)
Warsaw, 3.4 miles northwest of, 200 feet north of residence of Edward Frederick; on north end of abutment of small bridge; chiseled square \(\qquad\)
Warsaw, 4.2 miles northwest of, 150 feet southeast of T road south, in center of north end of concrete bridge; chiseled square \(\qquad\)
New Princeton, 300 feet south of crossroads, 250 feet south of store, on stone abutment on west side of small bridge; chiseled square _
New Princeton, 1.2 miles northwest of, at southwest corner of crossroads, 500 feet southeast of residence of L. B. Blake; iron post stamped " 900 "
899.887

Stilwell, 690 feet east of store, on south side of road, at southeast corner of T road south; iron post stamped " 889 "
889.031

Stilwell, \(\mathbf{1 . 4}\) miles north of, 15 feet west of public road, 65 feet north of \(\mathbf{T}\) road east, on large sandstone rock; chiseled square
\(1,035.71\)
From Warsaw south along Cleveland, Akron \& Columbus Ry. to Cooperdale.
Warsaw Junction, at railroad crossing; top of rail
Warsaw Junction, 10 feet north of center of crossing of Pennsylvania R. R: and Cleveland, Akron \& Columbus Ry., in top of concrete interlocking signal tower foundation; chiseled square \(\qquad\)
Warsaw Junction, 2.2 miles south of, road crossing, 0.2 mile west of crossroads, east of railroad right of way line, south side of road; iron post stamped " 824 "
Tunnel Hill, 0.5 mile north of, 45 feet east of crossing, southeast corner of road forks, in corner of fence line and east line of railroad right of way line; iron post stamped " 860 "
Tunnel Hill, 0.6 mile south of, 50 feet east of road crossing, in top of south wing of west abutment of steel bridge; chiseled square
823. 627
859.572
800.7
799.36
813.12

Primary leveling by E. C. Bibbee and Philip Flitman in 1911.
From point near Bladensburg east along highway via New Guilford to Tunnel Hill.
Bladensburg, 3 miles northeast of, on south retaining wall at east end; chiseled square
Bladensburg, 3.6 miles northeast of, on retaining wall of small iron bridge at east end and south side; chiseled square

Bladensburg, 4.2 miles northeast of, 3 miles west of New Guilford, Feet. near center of crossroads ; iron post stamped " 1043 "
New Guilford, 1.9 miles west of, at northeast corner of T road north, near line between Knox and Coshocton counties, on sandstone rock; chiseled square
New Guilford, 1.2 miles west of, southeast corner of crossroads; chiseled square on sandstone ledge
New Guilford, northwest corner of town-hall yard ; iron post stamped " 1150 Ohio"
New Guilford, 0.5 mile north of, at T road north, on east abutment, north side of stone-arch bridge; chiseled square
984.52

New Guilford, 1.4 miles east of, 100 , feet west of large barn, on east abutment on north side of small bridge; chiseled square
New Guilford, 2.7 miles west of, 45 feet southwest of old blacksmith shop, 60 feet west of T road north, 450 feet east of Neldon schoolhouse, on saudstone rock at south side of road; chiseled square 884.39

West Bedford, 2.1 miles north of, 2.5 miles south of Mohawk, 200 feet south of cider press; iron post stamped " 842 Ohio"
842.222

West Bedford, 0.9 mile north of, on west end of stone culvert at Y road; chiseled square
876.57

West Bedford, 90 feet north of Walker's store, on granite curb rock at southeast corner of crossroads; chiseled square

1, 076.78
Tunnel Hill, 0.5 mile north of, 45 feet east of crossing, southeast corner of road forks, in corner of fence line and east line of railroad right of way ; iron post.
859.572

\section*{From New Guilford north along highway to New Castle.}

New Guilford, 0.5 mile north of, at T road north, on east abutment, north side of stone-arch bridge; chiseled square
984.52

New Guilford, 1.4 miles north of, opposite center of \(\mathbf{T}\) road east; chiseled square on limestone ledge
New Guilford, 2.2 miles north of, southeast corner of T road east; highest point on south end of cast-iron drain pipe
\(1,197.58\)
Newcastle, 330 feet west of Soldier's monument, on north side of road; nail in top of telephone pole sawed off level with ground._
Newcastle, 0.8 mile north of, north end of stone culvert; chiseled square on large sandstone rock
\(1,209.52\)
926. 88

Walhonding, about 1 mile west of, on south abutment of east side of iron bridge over Walhonding River; chiseled square
837.49

Walhonding, 1.1 miles northwest of, on northeast corner of \(T\) road north, on old towpath of canal, 1,000 feet southeast of bridge 17 over Walhonding River; iron post-

BRISTOLVILLE QUADRANGLE.
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by R. C. Seitz in 1905.
From Kenilworth west along highway to Mesopotamia, thence north to Windsor.
Greene, 1.25 miles west of, 610 feet east of crossroads, north side of road, in culvert stone; aluminum tablet stamped "918 Adj 1903"--
North Bloomfield, 1,035 feet west of Lockwood station, in south end of west abutment of wooden bridge; aluminum tablet stamped "899 Adj 1903"
918. 320
899.248
North Bloomfield, 1.75 miles west of, north end of east abutment of Grand River bridge ; aluminum tablet stamped " 810 Adj 1903"----
Mesopotamia, in west foundation of town hall; aluminum tablet stamped " 857 Adj 1903"
From Mesopotamia south along highway to West Farmington, thence east to
 Mecca.

West Farmington, in foundation of town hall; aluminum tablet stamped "881 Adj 1903"
Bristolville, Hotel Brockett, in support of porch, west end; aluminum tablet stamped "902 Adj 1903"
West Mecca, 1.2 miles west of, in south wing of east abutment of small wooden bridge; aluminum tablet stamped " 927 Adj 1903"-

\section*{From Cortland southwest along highway to Champion station, thence west to} Southington, thence south to Braceville.
Champion, 0.5 mile east of station, at \(T\) road south, in south wing of west abutment of small iron bridge; aluminum tablet stamped "925 Adj 1903"
State road, 0.3 mile north of, in culvert stone east of road; aluminum tablet stamped "928 Adj 1903"
Southington, at northwest corner of town hall; aluminum tablet stamped "892 Adj 1903"
Phalanx (center), 0.2 mile north of, in east wing, south abutment of bridge over Eagle Creek; aluminum tablet stamped "910 Adj 1903"-

\section*{BROOKVILLE QUADRANGLE.}
\[
\begin{gathered}
\text { [Latitude } 39^{\circ} 45^{\prime}-40^{\circ} \text {; longitude } 84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime} . \text { ] } \\
\text { Primary leveling by H. W. Peabody in } 1905 . \\
\text { From Cowlesville west along Big Four Route to Pitsburg. }
\end{gathered}
\]

Kessler, in south face of water table at southeast corner of schoolhouse; aluminum tablet stamped " 926 Adj 1905"
Ludlow, 50 feet northeast of Big Four station, south of Ludlow Creek, 3.5 feet from west edge of pier of Dayton, Covington \& Piqua Electric R. R. overhead bridge, in south face; aluminum tablet stamped "893 Adj 1905"
Laura, west line of sec. 11, T. 7 N., R. 4 E. , in south face of southwest corner of foundation of grain elevator on north side of railroad track and east of Main Street; aluminum tablet stamped "971 Adj 1905"
Pitsburg, northwest corner sec. 7, T. 7 N., R. 4 E., in top of projecting stone in center of north foundation of elevator; aluminum tablet stamped "1029 Adj 1905"

From South Arlington southeast along Dayton \& Union R. R. to Bachman, thence east along highway via Englewood to point near Vandalia.
West Baltimore (South Arlington post office), northeast corner sec. 12, T. 7 N., R. 3 E., in north face, 10 feet from northwest corner of Landis tobacco warehouse; aluminum tablet stamped " 1027 Adj 1905 "

1, 026.781
Arlington (South Arlington post office), west of center of sec. 22, T. 6 N., R. 4 E., in south face, at southwest corner of foundation of Dunkard Church; aluminum tablet stamped " 1048 Adj 1905 "
\(1,048.256\)
881.666
902. 704
927.476
925. 305
927.963
892.391
892.609

1, 028.746

\subsection*{810.514}
856.951
909.931

Swanktown, sec. 24, T. 6 N., R. 4 E., 1 mile northwest of Salem, in bridge-seat stone at northwest corner of small iron bridge over stream east of crossroads; aluminum tablet stamped " 988 Adj 1905"
Englewood, quarter corner at south line of sec. 5, T. 5 N., R. 5_E., at northwest corner of the National road and the Dayton, Covington \& Piqua Electric line, in stone at south side near southeast corner of Joseph Kingsey's building; aluminum tablet stamped " 922 Adj 1905"
921.895

From Bachman south along highway to point 3.5 miles south of Pyrmont, thence east to Dayton.
Bachman, 1.5 miles south of, southwest corner sec. 29, T. 6 N., R. 4 E ., in west face of water table at southwest corner of Boomershine brick schoolhouse, in northeast corner of crossroads; aluminum tablet stamped " 1059 Adj 1905 "
Pyrmont, center west side NW. \(\frac{1}{4}\) sec. 8 , T. 5 N., R. 4 E., in west face at northwest corner of Calvary Chapel (U. B. Church), 2 feet above ground; aluminum tablet stamped " 1053 Adj 1905"
Pyrmont, 3.5 miles south of, northeast corner sec. 31, T. 5 N., R. 4 E., at southwest corner of crossroads, set in stone casing over ventilator window in north side, 9 feet from northeast corner of May schoolhouse; aluminum tablet stamped " 993 Adj 1903 "

992929
New Lebanon, 0.5 mile west by 1 mile north of, northwest. corner NE. \(\frac{1}{1}\) sec. 35, T. 5 N., R. 4 E., at southeast corner of crossroads, 200 feet east of corners, in stone window casing on north side at northwest corner of German Baptist Church; aluminum tablet stamped "947 Adj 1905." (Probably destroyed)
946. 521

Stillwater Junction, 3.5 miles southwest of, near southwest corner sec. 28, T. 4 N., R. 5 E., 1 mile north of Dayton pike, 10 feet from southeast corner, in south face of bank barn belonging to Henry Moore; aluminum tablet stamped " 924 Adj 1905 "
923.887

Stillwater Junction, 1.5 miles southeast of, near southeast corner sec. 25, T. 4 N., R. 5 E., 3 miles west of Dayton, 1 mile north of Eaton pike, 500 feet west of crossroads by Buckeye schoolhouse, in north face of northeast corner of concrete bridge over stream; aluminum tablet stamped " 796 Adj 1905 "
795.551

\section*{BRYAN QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Primary leveling by A. D. Duck, C. R. French, C. W. Howell, and C. E. Mills in 1911.

From point 1.5 miles northwest of Sherwood north along highways to Bryan,
Sherwood, 0.7 mile north by 1 mile west of, at crossroads, on northeast wing wall of small bridge over Sulphur Creek; chiseled. square, painted "T. B. M. 712.8 "
Sherwood, 1.7 miles north by 1 mile west of, at northwest corner of crossroads; spike in telephone pole, painted "T. B. M. 722.3 "
Sherwood, 2.7 miles north by 1 mile west of, at southeast corner of crossroads; spike in telephone pole, painted "T. B. M. 719.0 "
713.07
722.59

Sherwood, 3.4 miles north by 1 mile west of, 50 feet north of \(T\) road east, 80 feet southeast of residence of Earl Cranford; iron post stamped " 717 Ohio"
719. 29
717.596

Sherwood, 3.7 miles north by 1 mile west of, at northeast corner of crossroads, in floor of porch of church; copper nail, painted "T. B. M. 723.5 "

Feet.
723. 78

Sherwood, 4.7 miles north by 1 mile west of, at northeast corner of crossroads; spike in telephone pole, painted "T. B. M. 719.5 "
719. 80

Ney, 2.7 miles west by 0.9 mile south of, at southeast corner of crossroads; spike in telephone pole, painted "T. B. M. \(\mathbf{7 2 7 . 0}\) "
727.28

Ney, 2.7 miles west of, at southeast corner of crossroads ; iron post stamped " 722 Ohio"
721. 854

Ney, 2.7 miles west by 1 mile north of, at southwest corner of crossroads; spike in base of fence post, painted " 727.9 "
728.10

Ney, 2.7 miles west by 2 miles north of, 100 feet south of crossroads, on top of southeast corner of west wall of concrete culvert; square, painted " 731.6 "
731.81

Williams Center, 2 miles east of, at southwest corner of crossroads ; iron post stamped " 745 Ohio"
745. 701

Williams Center, 2 miles east by 1 mile north of, at southwest corner of crossroads; spike in fence post, painted " 758.2 "
758. 40

Bryan, 1.5 miles southwest of, 200 feet southeast of Dunkard church at southeast angle of \(Y\) intersection; spike in telephone pole, painted "T. B. M. 767.3 "
767.57

Bryan, 1.2 miles north of, at southeast corner of crossroads ; spike in corner fence post, painted "T. B. M. 792.2 "
792.46

Bryan, southwest corner of courthouse public square; iron post stamped " 772 Ohio"
772. 106

\section*{From point 2.3 miles south of Sherwood north via Ney to Bryan.}

Sherwood, 2.3 miles south of, in northeast corner of crossroads; spike in base of telephone pole, marked " 710.0 "
710.17

Sherwood, 1.5 miles south of, in southwest corner of crossroads; spike in base of telephone pole, marked " 708.7 "
708. 93

Sherwood, 0.7 mile south of, on west side of road at T road east; spike in base of telephone pole, marked " 713.5 "
713.68

Sherwood, southwest corner of Christian Church, 10 feet east of entrance; iron post stamped " 709 "
708. 830

Sherwood, 0.7 mile north of, southeast corner of crossroads; spike in base of fence post, marked "717.476"
717. 69

Sherwood, 0.7 mile north by 1 mile east of northwest corner of crossroads; on top of west end of sewer-pipe drain; painted square, marked " 712.4 "
712.57

Sherwood, 1.7 miles north by 1 mile east of, at southeast corner of crossroads; iron post stamped " 718 "
718. 289

Sherwood, 2.7 miles north by 1 mile east of, northeast corner of crossroads; spike in base of telephone pole, marked " 718.7 "
718.91

Sherwood, 2.7 miles north by 2 miles east of, northwest corner of crossroads; spike in base of fence post, marked " 715.5 "
Sherwood, 3.7 miles north by 2 miles east of, northwest corner of \(T\) road west, on bank about 3 feet higher than road; iron post stamped " 713 "
713. 583

Ney, 0.3 mile east by 1.8 miles south of, northwest corner of \(T\) road west, 30 feet west of center of road; spike in base of telephone pole, marked " 717.7 "
Ney, 1.8 miles south of, at railroad crossing ; top of east rail, marked Feet. " 723.4 "
723.64
Ney, 1.4 miles south of, northwest corner of road crossing; spike in base of warning post, marked " 721.6 " ..... 721.88
Ney, 0.4 mile south of station, southeast corner of road crossing, innorthwest corner of field; iron post stamped "Prim. Trav. Sta.14, 1905 "
Ney, southeast corner of Main and Water streets, on concrete cross- ing; chiseled square, marked " 714.7 " ..... 714.97
Ney, northeast corner of \(T\) road east at schoolhouse; spike in base of telephone pole, marked " 717.7 " ..... 717. 94
Ney, 0.4 mile east by 1 mile north of, northwest corner of crossroads; spike in base of telephone pole, marked " 718.1 " ..... 718.29
Ney, 0.4 mile east by 2 miles north of, at crossroads, on east side of road, in south end of wooden culvert; painted spikehead marked " 718.8 " ..... 719.04
Ney, 0.4 mile east by 3 miles north of, at southwest corner of cross- roads, northeast corner of field, on Williams-Defiance county line; iron post stamped " 721 " ..... 721. 741
Bryan, 2.3 miles southeast by 1.2 miles sonth of, at northwest corner of crossroads; spike in base of mail-box post, marked " 724.2 "---- ..... 724. 44
Bryan, 2.3 miles southeast of, 60 feet south of road forks, on east sideof road; spike in base of telephone pole, marked " 729.3 "729.58
Bryan, 1 mile southeast of, 150 feet east of crossroads, southwest cor- ner of small iron bridge over creek; bolthead painted white, marked " 731.6 " ..... 731.92
Bryan, at road crossing about 500 feet south of station; top of west rail, marked " 744.5 " ..... 744. 80
From Bryan northwest along highways 3 miles, thence south along highways to point 3 miles south of Mark Center.
Bryan, 2 miles northwest of, northwest corner of crossroads; spike in base of telephone pole, marked " 805.323 " ..... 805.56
Bryan, 3 miles northwest of, southwest corner of crossroads; iron post stamped " 819 " ..... 818. 804
Bryan, 4.2 miles northwest of, northwest corner of crossroads; spike in base of fence post, marked " 854.7 " ..... 854.96
Melbern, 1.5 miles north of, northeast corner of crossroads; spike in base of fence post, marked " 874.3 " ..... 874.58
Melbern, 0.5 mile north of, northwest corner of crossroads; spike in base of fence post, marked " 848.2 " ..... 848.42
Melbern, at railroad crossing; top of south rail of westbound pas- senger track, marked " 846.6 R. R." ..... 846.89
Melbern, 0.5 mile south of, southwest corner of crossroads; iron post stamped " 826 " ..... 826. 306Melbern, 1.5 miles south of, northeast corner of crossroads ; spike inbase of fence post, marked " 841.6 "841. 89
Melbern, 2.5 miles south of, southwest corner of crossroads on Wil-liams-Defiance county line, southeast corner of wooden drain; spikehead painted white, marked " 823.2 "823. 43
Farmer, 1 mile west by 2 miles north of, northeast corner of cross- roads; iron post stamped " 818 " ..... 818.122Farmer, 1 mile west by 1 mile north of, west side of crossroads, onsouth end of east abutment of small iron bridge; chiseled square,marked " 780.9"781.10

Farmer, 1 mile west of, northeast corner of crossroads; spike in base of fence post, marked " 767.3 "

Feet.
767.57

Farmer, 1 mile west by 1 mile south of, southwest corner of \(T\) road west ; iron post stamped " 747 "
747. 024

Farmer, 1 mile west by 2 miles south of, southwest corner of crossroads; spike in base of telephone pole, marked " 744.9 "
745. 16

Farmer, 1 mile west by 3 miles south of, at crossroads on Lost Creek, on south wing wall of west abutment of steel bridge over Lost Creek; chiseled square, marked " 741.6 " \(\qquad\)
Mark Center, 2.5 miles north by 1 mile west of, southeast corner of crossroads; iron post stamped " 732 "
741. 88
731. 909

Mark Center, 1 mile west by 1.5 miles north of, southwest corner of T road west; painted square on south end of drain pipe, marked " 722.8 "
723. 08

Mark Center, 1 mile west by 0.5 mile north of, southeast corner of crossroads; spike in base of fence post, marked " 726.0 "
726. 27

Mark Center, 0.5 mile north of, southwest corner of crossroads; spike in base of fence post, marked " 723.5 "
723. 71

Mark Center, 180 feet north of railroad, southeast corner of cross streets, opposite post office; iron post stamped " 721 "
721. 471

Mark Center, 0.5 mile south of, southeast corner of crossroads; spike in base of telephone pole, marked " 720.4 "
720. 67

Mark Center, 1.5 miles south of, southwest corner of crossroads; spike in base of telephone pole, marked " 720.8 "
721. 05

Mark Center, 2.5 miles south of, crossroads on Defiance-Paulding county line, on north wing wall of west abutment of small iron bridge over Gordon Creek; chiseled square, marked " 712.4 "
712.61

\section*{From point 1.5 miles south of Melbern west along highways to point 1.5 miles east of Edgerton.}

Edgerton, 4 miles southeast of, northeast corner of schoolhouse (district 10), northeast corner of crossroads; spike in base of fence post, marked " 853.8 "
854.02

Ldgerton, 3 miles east of, southwest corner of crossroads; spike in base of telephone pole, marked " 873.5 "
873.59

From point 0.5 mile north of Mark Center east along highway to point 1.5 miles northwest of Sherwood.

Mark Center, 0.5 mile north by 1 mile east of, northeast corner of crossroads; spike in base of fence post, marked " 725.4 "
725. 58

Mark Center, 0.5 mile north by 2 miles east of, northwest corner of crossroads; spike in base of telephone pole, marked " 721.7" \(\qquad\) 721. 78

From point 1.5 miles south of Pulaski southwest along highways to Bryan.
Pulaski, 1 mile south of, at northeast corner of crossroads; spike in telephone pole
755. 00

Pulaski, 1.5 miles south of, on northwest corner of bridge over Beaver Creek, in fourth plank of bridge; copper nail painted "T. B. M. \(729.0 "\)
729.08

From point 4.5 miles southeast of Hicksville north along highway to point 2.5 miles southwest of Blakeslee.

Hicksville, 4.5 miles south of, at northwest corner of crossroads on Paulding-Defiance county line; iron post stamped " 730 Ohio"--.-

Hicksville, 3.5 miles southeast of, at north side of east-west road, opposite \(T\) road south, schoolhouse on southeast corner of road; spike in base of fence post, marked " 729.9 "

Feet.
730.03

Five Points, 2.5 miles southeast of Hicksville, in southwest corner of fence ; spike in base of fence post, marked " 731.6 "
731. 74

Hicksville, 2 miles southeast of, corner of secs. 22, 23, 26, and 27, northeast corner of crossroads; iron post stamped " 731 Ohio"
731. 260

Hicksville, 2 miles east of, at center of highway at railroad crossing; top of north rail, marked " 750.3 "
750.40

Hicksville, 2 miles east of, at northeast corner of crossroads on Brunersburg road; nail on top of stump of telephone pole, marked " 743.7 "
743. 84
T. 4 N., R. 1 E., corner of secs. 10, 11, 14, and 15, southwest corner of crossroads; chiseled square in base of concrete fence post, marked " 751.7 "
751. S2

Hicksville, 2 miles northeast of, southwest corner of crossroads on Bryan road; spike in base of telephone pole, marked " 754.3 "-
T. 4 N., R. 1 E., corner of secs. 2, 3, 10, and 11, southwest corner of crossroads; iron post stamped " 764 Ohio"
754.44
763.713
T. 5 N., R. 1 E., corner of secs. 26, 27, 34, and 35, northeast corner of crossroads; spike in base of fence post, marked " 808.6 "
808. 73
T. 5 N., R. 1 E., corner of secs. 22, 23, 26, and 27, southeast corner of crossroads; iron post stamped " 841 Ohio"
840.782
T. 5 N., R. 1 E., corner of secs. \(23,24,25\), and 26 , northwest corner of crossroads; spike in base of telephone pole, marked " 806.9 "
807.03
T. 5 N., R. 1 E., northwest corner of sec. 24, southeast corner of crossroads, 400 feet southeast of Chapman School ; spike in base of telephone pole, marked " 838.7 "
838. 88
T. 5 N., R. 1 E., northwest corner of sec. 13, southeast corner of crossroads; 15 feet north by 30 feet east to center of bridge; iron post stamped " 832 Ohio"
832.594
T. 5 N., R. 1 E., sec. 11, east side of north-south road, 50 feet north of center of \(\mathbf{T}\) road west; spike in base of telephone pole marked " 850.5 " \(\qquad\)
T. 5 N., R. 1 E., southwest corner of sec. 1, northeast corner of T road east; spike in base of telephone pole, marked " 842.2 "
Edgerton, 1.5 miles east by 1.5 miles south of, on Defiance-Williams county line, southeast corner of crossroads; spike in base of telephone pole, marked " 869.7 "
869.84

Edgerton, 2 miles east by 0.5 mile south of, southeast corner of \(\boldsymbol{T}\) road east ; iron post stamped " 849 Ohio"
849.058

Edgerton, 2 miles east of, 0.4 mile south of Mina, southeast corner of crossroads; spike in base of telephone pole, marked " 850.231 "
850.40

Edgerton, 1.5 miles east of, southeast corner of T road south ; painted square on east end of cast-iron drain pipe, marked " 847.3 "
847.47

Edgerton, 1 mile east of, inside west-bound track at railroad crossing; top of north rail at center of highway, marked " 850.1 "
850.23

Edgerton, east side of railroad crossing; iron post stamped " 838 Ohio"
837.982

Edgerton, 1 mile east by 1.25 miles north of, northeast corner of \(T\) road east; spike in base of 18 -inch fence post, marked " 828.1 "--.-

Blakeslee, \(\mathbf{2 . 5}\) miles south of, at southwest corner of crossroads, 240 feet northwest to center of Denmark Bridge; spike in base of fence post, marked " 830.6 "

Feet. 830.69

Blakeslee, 2.3 miles south by 0.5 mile west of, northeast corner of crossroads; spike in base of telephone pole, marked " 836.4 "-
836.52

Edgerton, 3 miles north of, northeast corner of crossroads, 100 feet northeast to schoolhouse (district 2); iron post stamped "Prim. Trav. Sta. 21, 1905852 "
852.597

BUCYRUS QUADRANGLE.
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Primary leveling by C. E. Mills and J. J. McNulta in 1911.
From Bucyrus south along Toledo \& Ohio Central Ry. about 4 miles.
Bucyrus, 1.5 miles west of, 0.2 mile west of center of sec. 2, T. 3 S ., R. 16 E., south end of stone culvert bridge 28, at southwest corner of coping; bronze tablet stamped "991"
991.508

Bucyrus, in northeast corner of doorsill of men's waiting room at station; chiseled square

1,000. 44
Bucyrus, on west side of courthouse lawn, about 150 feet north of
Mansfield Street; iron post stamped " 996 "-.......................... 996.370

Bucyrus, crossing of Middletown Street and Toledo \& Ohio Central Ry., southwest corner of crossing; chiseled square on stone curbing, marked " 1005.7 "
Bucyrus, crossing of Toledo \& Ohio Central and Cleveland, Southwestern \& Columbus railways (electric) ; top of rail marked " 1009.6 "1,009. 50
Bucyrus, 3.9 miles south of, southeast corner of road crossing; iron post stamped " 1028 ".

1, 028.368
From point 2.4 miles south of Bucyrus southeast along Bucyrus-Galion pike to point about 3 miles northwest of Galion.
Bucyrus, 2.5 miles southeast of, on Galion pike, southwest corner of T road west; spike in base of fence post, marked "1041.9" \(\qquad\) \(1,041.84\)
Bucyrus, 3 miles southeast of, at Kelly station, southeast corner of road forks; spike in base of post, marked " 1037.6 " 1, 037. 50
Bucyrus, 4.5 miles southeast of, southeast corner of crossroads, at Whetstone Township hall; iron post stamped " 1051 " 1, 050.870
Bucyrus, 5.4 miles southeast of, 325 feet north of entrance to Olentangy ball park, south abutment, on top of north end of west wing wall of small bridge over creek; chiseled square, marked "1042.7"
\(1,042.55\)
Bucyrus, 6.2 miles southeast of, at northwest corner of crossroads, at stop No. 167 on Southwestern Ry. (electric); spike in base of trolley pole, marked "1060.1"
\(1,059.95\)
Galion, 4 miles northwest of, at stop No. 164 on Southwestern Ry. (electric) ; spike in base of trolley pole, marked " 1061.9 "

1,061. 76
From point near Galion north along highways through Leesville and West Liberty to point about 3 miles northeast of West Liberty.
Galion, 1 mile north of station, southeast corner of road crossing; spike in base of telephone pole, marked " 1172.5 " 1, 172.39
\[
45281^{\circ}-\text { Bull. } 651-17-5
\]
Galion, southwest corner of crossroads ; spike in base of fence post, Feet.marked " 1155.1 "\(1,154.93\)
Middletown, 0.4 mile south of, on west abutment at south end of stone drain; chiseled square, marked "1125.1" ..... \(1,124.96\)
Middletown, southwest corner of crossroads; iron post stamped"1134"\(1,133.576\)
Leesville, 0.6 mile south of, northwest corner of crossroads; spike in base of fence post, marked " 1152.9 " ..... \(1,152.72\)
Leesville, 325 feet south of crossroads in center of town, south end ofeast abutment of stone culvert over Sandusky River, on southwestcorner of stone in first course below top course; chiseled square,marked "1107.276"\(1,107.12\)
Leesville, 0.8 mile north of, northwest corner of crossroads, on top ofstone drain; chiseled square, marked " 1124.4 "\(1,124.24\)
Leesville, 1.8 miles north of, northeast corner of crossroads; iron post stamped " 1110 " ..... \(1,109.477\)
Leesville, 2.4 miles north of, southeast corner of crossroads, northwestcorner of churchyard at St. Pauls German Church, on stone base offence post; chiseled square, marked " 1120.7 "\(1,120.50\)
Leesville, 3.4 miles north of, 200 feet south of T road east, on top ofnorth abutment west wing wall of small iron bridge over creek;chiseled square, marked " 1108.8 "\(1,108.62\)
West Liberty, 0.8 mile south of, northeast corner of crossroads; chiseled square on large stone, marked " 1114.1 " ..... 1, 113. 89
West Liberty, southeast corner of \(T\) road east ; iron post stamper" 1106 '\(1,106.016\)
West Liberty, 0.7 mile north of, on east side of road at road forks; spike in base of telephone pole, marked "1134.5" ..... \(1,134.18\)
West Liberty, 1.9 miles northeast of, northeast corner of crossroads ;chiseled square on top of large bowlder, marked " 1159.7 "\(1,159.36\)
Tiro, 1.5 miles southeast of, at milepost C 79, northeast corner of over- head crossing ; iron post stamped " 1137 " ..... 1,136. 722Dekalb, 2.8 miles northeast of, northeast corner of \(T\) road west andprivate road east; chiseled square on top of large bowlder,marked "1116.5"\(1,116.19\)
From Bucyrus north along highways through Chatficld to Carrothers.Bucyrus, northeast corner of North Sandusky and Plymouth streets,2 feet north of catch basin, chiseled square on stone curbing,marked " 983.360 "983. 29Bucyrus, crossing of Columbus-Sandusky pike and Toledo \& OhioCentral Ry.; top of south rail, marked " 1007.7 "1,007. 62
Bucyrus, 1.8 miles north of, east side of road at \(T\) road west ; spike in base of telephone pole, marked " 1011.0 " ..... \(1,010.87\)
Bucyrus, 2.9 miles north of, southeast corner of T road east ; spike in base of telephone pole 8848, marked " 1008.0 " ..... 1, 007. 92
Bucyrus, 3.5 miles north of, on Columbus-Sandusky pike, southwest corner of crossroads; iron post stamped " 1009 " ..... \(1,008.895\)
Bucyrus, 4 miles north of, southwest corner of crossroads, south end of iron drain pipe; painted square, marked " 1008.5 " ..... \(1,008.34\)
Bucyrus, 5 miles north of, on east side of road at \(T\) road west; spike in base of telephone pole, marked "1012.1" ..... 1, 011.98

Ridgeton, 0.5 mile west by 0.5 mile south of, in southeast corner of German M. E. Church yard, on stone curb of well at northeast corFeet. ner of crossroads; chiseled square, marked " 1001.6 " 1,001
Ridgeton, 0.5 mile west of, west side of road at T road east ; iron post stamped " 983 "
982. 628

Ridgeton, 0.5 mile west by 0.5 mile north of, southwest corner of crossroads; chiseled square on large stone, marked " 1000.8 " 1, 000.59
Chatfield, 2 miles south of, northwest corner of lower stone step to entrance of German Pietisten Church at crossroads; chiseled square, marked " 1007.7 "
Chatfield, 1 mile south of, northeast corner of crossroads; spike in base of fence post, marked " 990.2 "
Chatfield, northeast corner of crossroads; iron post stamped " 984 "-983.528

Chatfield, 1 mile north of, northwest corner of crossroads; spike in base of telephone pole, marked " 984.3 "
984.01

Carrothers, 1.4 miles south of, northeast corner of crossroads at schoolhouse and church; spike in base of telephone pole, marked " 981.2 "
980.97

Carrothers, 0.4 mile south of, northwest corner of crossroads; chiseled square on top of drain pipe, marked " 971.0 "
970.69

Carrothers, northwest corner of crossing of Columbus-Sandusky pike and Pennsylvania R. R., 15 feet north of railroad, 40 feet west of pike; iron post stamped " 971 "
970.476

From Bucyrus northeast along Plymouth road through Suiphur Springs to point 2 miles northeast of Tiro.

Bucyrus, 1.1 miles northeast of, on Plymouth road, 275 feet northeast of Columbus \& Southern Ry., on south abutment at east end of stone culvert; chiseled square, marked " 999.9 "
999. 84

Bucyrus, 2.2 miles northeast of, northeast corner of crossroads; spike in base of telephone pole, marked " 1007.6 "
\(1,007.48\)
Bucyrus, 2.8 miles northeast of, northwest corner of crossroads; chiseled square on large stone, marked " 1035.8 "
\(1,035.69\)
Bucyrus, 3.2 miles northeast of, on west side of road at \(T\) road east; iron post stamped " 1030 "
\(1,030.198\)
Bucyrus, 3.9 miles northeast of, southwest corner of \(T\) road north, on stone at base of fence post ; chiseled square, marked " 1040.0 "--1, 039. 92
Sulphur Springs, 1.6 miles southwest of, on doorsill at entrance to Evangelical Church at crossroads; chiseled square, marked "1051.3"
Sulphur Springs, southeast corner of crossroads, in lawn in front of J. W. Bittikofer's residence; iron post stamped " 1025 "

1,025. 650
Sulphur Springs, 1.5 miles northeast of, 350 feet southwest of crossroads at church, on south abutment east wing wall of small iron bridge; chiseled square, marked " 999.5 "
Sulphur Springs, 4.1 miles northeast of, northwest corner of T road south; spike in base of fence post, marked " 1028.7 "
Sulphur Springs, 4.1 miles northeast of, northwest corner of \(T\) road north; spike in base of fence post, marked " 1010.6 "
Tiro, 0.5 mile northwest by 1.1 miles southwest of, northeast corner of crossroads; iron post stamped " 1029 "
\(1,029.806\)
Tiro, 0.5 mile northwest of, 50 feet north of railroad, west side of road at road forks; spike in base of telephone pole, marked " 1030.6 " - - 1, 030.55

Tiro, 0.5 mile north and 0.5 mile northeast of, 180 feet west of T road
south, southeast corner of east abutment of small iron bridge; chiseled square, marked " 1030.3 "

Feet. 1,030. 20
Tiro, 0.5 mile north and 1.7 miles northeast of, northeast corner of crossroads, southeast corner of stone drain; chiseled square, marked " 1045.3 " \(1,045.22\)

From point near North Auburn north along highway 3 miles.
North Auburn, 1.4 miles southwest of, northwest corner of road crossing; spike in base of telephone pole, marked " 977.243 "
North Auburn, 0.5 mile north by 1.5 miles west of. northwest corner of crossroads, on stone step at entrance of Cranberry Chapel; chiseled square, marked " 967.6 "
967.04

North Auburn, 1.5 miles north by 1.5 miles west of, on north side of road at \(T\) road south; spike in base of telephone pole, marked " 952.9 "
952.36

New Pittsburg, 3 miles west by 0.8 mile north of, Seneca-Huron county line road, on north abutment west wing wall of small iron bridge over creek; chiseled square, marked " 936.1 "
935.51

From Sulphur Springs north to point 2 miles northwest of New Washington.
Sulphur Springs, southeast corner of crossroads, in lawn in front of J. W. Bittihofer's residence ; iron post stamped " 1025 "

Sulphur Springs, 1.1 miles north of, southwest corner of T road west; spike in base of telephone pole, marked " 985.4 "
Sulphur Springs, 1.3 miles north by 0.5 mile west of, northeast corner of \(T\) road north; chiseled square on large stone, marked " 1028.6 "
Sulphur Springs, 2.2 miles north by 0.5 mile west of, west side of road at T road east; spike in base of fence post, marked " 1003.1 "- 1, 002. 94
Sulphur Springs, 3.2 miles north by 0.5 mile west of, on west side of road at T road east; iron post stamped "1006" \(\qquad\) \(1,005.593\)
New Washington, 1.5 miles south by 1.5 miles west of, southeast corner of crossroads; spike in base of telephone pole, marked " 1002.8 "
New Washington, 0.5 mile south by 1.5 miles west of, southwest corner of crossroads; chiseled square on top of stone, marked "1005.4"
New Washington, 1.5 miles northwest of, southwest corner of cross-
roads; spike in base of telephone pole, marked " 987.6 "
New Washington, 1.9 miles northwest of, southeast corner of road crossing, spike in base of telephone pole, marked " 963.886 " \(\qquad\) 963. 38

> From point 3.4 miles northeast of North Auburn southwest along Northern Ohio Ry, to New Washington, thence northwest along Pennsylvania R. R. to Carrothers.

North Auburn, 2.6 miles northeast of, 400 feet north of crossroads at Basswood Church and schoolhouse, southeast corner of road crossing; spike in base of telephone pole, marked " 956.8 " \(\qquad\) 9576. 28

North Auburn, 1.5 miles northeast of, northeast corner of road crossing; spike in base of telephone pole, marked " 945.2 "
944. 64

North Auburn, 0.6 mile northeast of, south side of track; spike in base of west post of gate to field, marked " 950.3 "
949.75
North Auburn, 25 feet south of railroad and 30 feet west of public highway, at Northern Ohio Ry. station, at road crossing; iron post stamped " 958 "
Feet. 957.288
North Auburn, 1.4 miles southwest of, northwest corner of road crossing; spike in base of telephone pole, marked " 977.243 "
976. 703
New Washington, 1 mile east of, northeast corner of road crossing, 30 feet north of railroad; spike in base of fence post, marked " 992.2 "-
991. 62
New Washington, northwest corner of Kibler Street crossing of Northern Ohio Ry.; iron post stamped " 993 "
992. 221
New Washington, at west end of station, southwest corner of road crossing; spike in base of telephone pole, marked " 983.5 "
982.93
New Washington, 1.9 miles northwest of, southeast corner of road crossing; spike in base of telephone pole marked " 963.886 "
Carrothers, 2.1 miles southeast of, southwest corner of road crossing; spike in base of telephone pole, marked " 962.4 "
961.92
Carrothers, 1.3 miles southeast of, 20 feet north of railroad, southwest corner of road crossing, on top of concrete culvert, east abutment; chiseled square marked " 964.6 "
964.15
\begin{tabular}{ll} 
Carrothers, 0.5 mile southeast of, northwest corner of road crossing; \\
spike in base of telephone pole, marked " 970.8 " & \\
\hline ------------ & 970.26
\end{tabular}
Carrothers, crossing of Columbus-Sandusky and Mansfield-Toledo lines of the Pennsylvania R. R. ; top of rail
971. 82
Carrothers, northwest corner of crossing of Columbus-Sandusky pike and Pennsylvania R. R., 15 feet north of railroad, 40 feet west of pike; iron post stamped " 971 "

\section*{From Bucyrus east to Leesville.}

Bucyrus, 1.4 miles east of, northwest corner of road forks; spike in base of telephone pole, marked " 1028.8 "

1, 028.75
Bucyrus, 2.6 miles east of, 350 feet east of cemetery, north end of stone drain; chiseled square, marked " 1021.8 "
Bucyrus, 3.8 miles east of, northeast corner of crossroads ; iron post stamped " 1041 "

1,040. 889
Bucyrus, 5.1 miles east of, on south side of road at \(T\) road north; spike in base of telephone pole, marked " 1043.5 "

1, 043.39
North Robinson, 1.5 miles north of, southeast corner of crossroads; spike in base of telephone pole, marked " 1051.2 "

1, 050.99
North Robinson, 1.5 miles north by 1 mile east of, on Mansfield road, southwest corner of crossroads ; iron post stamped " 1060 " (moved) 1,060. 117
North Robinson, 1.5 miles north by 2 miles east of, 350 feet west of crossroads, on south abutment at west end of stone drain; chiseled square, marked "1078.5"

1, 078. 32
Leesville, 1.25 miles northwest of, southeast corner of road forks, on west abutment, south wing wall, of small steel bridge over Sandusky River ; chiseled square marked " 1045.7 "

1, 045.52

\section*{BUTLER QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by C. E. Mills and C. R. French in 1911.
From point 3.5 miles northwest of Antwerp north along State line via Hicksville to point 1 mile east of Edgerton.
Antwerp, 5 miles north by 3 miles west of, at southwest corner of Defiance County, at \(T\) road; spike in base of fence post
745. 83
Hicksville, 2.8 miles southwest of, at road crossing, on State line; iron post stamped " 764 "

Feet.
 764.061
767. 29
766.276
800.12
853.776
841.05
836. 60
835. 92
838.832
835. 53
819.96
819. 759
829.11
852. 44

From point 5 miles northwest of Edgerton south along State line to point 2 miles southwest of Edgerton.

Edgerton, 1.8 miles north by 3 miles west of, at northwest corner of \(T\) road west; chiseled square on concrete foundation of fence post, marked " 865.490 " \(\qquad\)
Edgerton, 1 mile north by 3 miles west of, at southeast corner of \(T\) road east, 100 feet northwest to 2 -foot elm tree; iron post stamped " 851 Ohio" \(\qquad\)
Edgerton, 1 mile north by 1.5 miles west of, at southeast corner of crossroads; spike in base of fence post, marked " 844.5 "
Edgerton, 0.5 mile north by 1.5 miles west of, at southwest corner of crossroads; spike in base of fence post, marked " 851.6 "

CADIZ QUADRANGLE.
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by J. H. Wetzel in 1901 and B. J. Green in 1902.
From Reeds Mills west along Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. to Skelley.
Reeds Mills, 300 feet west of station, on northeast corner of coping stone of bridge 56 ; bronze tablet stamped " 844 Steubenville "-...Skelley, in northwest wing wall of iron highway bridge, on top stone; chiseled square
865.37
850.819
844.35
851. 44
843. 804
865.30
From Skelley west along railroad via Bloomfleld and Unionport to Cadiz Junction.
Skelley, 0.9 mile west of, bridge 58 over Cross Creek, on southwest Feet. coping stone; chiseled square ..... 888.25
Unionport, road crossing ; top of rail ..... 969.2
Unionport, 1,200 feet west of, stone bridge over Cross Creek, on north- east coping stone; aluminum tablet stamped " 976 Steubenville"-- ..... 975. 823
Miller, in front of station ; top of rail ..... 1, 026.5
Cadiz Junction (Means post office), road crossing; top of rail ..... 1, 096.5
Cadiz Junction, at intersection of Cadiz branch line and main line of Pittsburgh, Cincinnati, Chicago, \& St. Louis Railway, on top stone at north side of wall on turntable; bronze tablet stamped "1099 Steubenville" ..... 1, 098. 788
From Cadiz Junction southwest along railroad to Cadiz.
Folk, road crossing at station; top of rail ..... 1, 225.2
Limestone, in front of station; top of rail ..... 1,222. 6
Conway, in front of station; top of east rail ..... 1, 263.6
Crawford, in front of station; top of west rail ..... 1,263. 2
Cadiz, north entrance to courthouse, on west end of first landing of stone steps; aluminum tablet stamped " 1280 Steubenville" ..... 1, 279.710
From Dillonvalle north via Smithfield and Bloomfield to Skelley.
Smithfield, on northwest corner of water table of brick house; alu- minum tablet stamped " 1240 Steubenville" ..... \(1,240.042\)
Bloomfield (Bloomingdale post office), on northwest corner of water table of brick schoolhouse; aluminum tablet stamped " 1298 Steu- benville" ..... \(1,298.023\)
From Cadiz Junction via Unionvale to Cadiz.
Rexford, in front of station; top of rail ..... 1, 139.3
Greenough, in front of station; top of rail ..... 1, 092.7
Unionvale, 2,400 feet east of station, on northwest bridge seat of bridge 193a; bronze tablet stamped " 971 Steubenville" ..... 970.989
From Skelley north to Richmond, thence northwest via East Springfield to Amsterdam, thence southwest to Jewett, thence east to Cadiz Junction,
Richmond, south end of, on stone doorstep of brick schoolhouse; aluminum tablet stamped " 1286 Steubenville"1,285. 205
East Springfield, public-school building, on southeast corner of foundation stone; aluminum tablet stamped " 1331 Steubenville 1,330. 583
East Springfield, 4.5 miles northwest of, on southwest wing wall of iron bridge over Yellow Creek; bronze tablet stamped " 905 Steubenville" \(\qquad\)
Amsterdam, 3 miles south of, north side of schoolhouse, in top foundation stone; aluminum tablet stamped " 1276 Steubenville"
\(1,275.500\)

\section*{CALDWELL QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Primary leveling by H. G. Lowe in 1903 and E. C Bibbee in 1908.
From Dudlev northwest along Pennsylvania R, R. to Caldwell.
Dudley, 0.8 mile south of, at milepost 31 ; railroad bench mark

Dudley, dwelling house of Elmer Tilton, on north side at northwest corner, in face of foundation wall; bronze tablet stamped " 705 Columbus"

Feet.
704.390

Dudley, 0.12 mile north of, at milepost 32 ; railroad bench mark
706.91
707.04
720.53

Matron, 1.25 miles north of, at milepost 34 ; railroad bench mark_--
Caldwell, at northwest corner of Noble County courthouse, in north face of base stone 1 foot above ground; aluminum tablet stamped " 746 Columbus"
745.377

From Caldwell west to Renrock.
Caldwell, in top of base rock on south side of Mills Block, 5 feet east of entrance of post office; aluminum tablet stamped " 747 "
746.718

Caldwell, 1.15 miles south by 1.45 miles west of, 60 feet west of T road south, on large flat rock; chiseled square painted "1007.41"-
Sharon, in northeast corner at east side of foundation of residence of A. J. Lowe ; aluminum tablet stamped " 942 " \(\qquad\) 941.682

Sharon, 2.95 miles west of, in northeast corner at east side of foundation of residence of James Caldwell; aluminum tablet stamped " 1015 "
Renrock, 1.53 miles east of, on rock ledge on north side of road; chiseled square marked "1044.98"

1, 045.00
From South Olive west to Moscow Mills near Keith, thence south to Beverly.
South Olive, 1.43 miles west of, south of road, on sandstone ledge; chiseled square painted " 955 "
South Olive, 2.65 miles west of, in north abutment west side of new concrete and iron bridge on \(T\) road south; aluminum tablet
834.236

Keith, 1 mile east of, 500 feet north of bridge over Keith Fork Olive Green Creek, at junction of Lowell and Caldwell roads, in face of brownstone ledge on north side of T road west; aluminum tablet stamped " Prim. Trav. Sta. No. 9799 "
799. 364

Keith, on stone in front of store owned by P. C. Keith \& Son; chiseled square painted " 746.67 "
746. 75

Keith, 2.09 miles west of, in west side of south abutment of covered bridge over Little Olive Green Creek on 1 road; aluminum tablet stamped " 713 " \(\qquad\) 713. 323

Keith, 5.11 miles southwest of, 50 feet north of public road, in southwest corner of foundation of D. P. Oliphant's residence; aluminum tablet stamped " 724 "
723.939

Keith, 6.72 miles southwest of, south of public road, 100 feet west of T road east, 4 feet west of barn owned by J. Beebe, on large flat rock; chiseled square marked " 732.6 "
732. 81

Keith, 8.38 miles southwest of, on large rock at south side of public road; chiseled square marked " 804.3 " \(\qquad\)
Beverly, 3.66 miles north of, 0.31 mile north of Y road, 0.17 mile south of crossroads, in brownstone ledge on east side of road; aluminum tablet stamped " 842 "
842.180

Beverly, 2.61 miles north of, at T road south, on rock in front of residence of P. S. Taylor; chiseled square marked " 926.69 " 926.96

Beverly, in top of west wall at north end of Government canal lock at foot of Fifth Street; aluminum tablet stamped "Prim. Trav. Sta. No. 7, 631 "

\section*{From Beverly east along railroad to whipple.}

Waterford crossroads, at northeast corner of C. E. Vaughn's store;
Feet.
643.53

Equity, 1.47 miles south of Baltimore \& Ohio R. R. station, 8 feet east of south rail of railroad, in brownstone ledge; aluminum tablet stamped " 654 "
654.600

Clifton, in front of Baltimore \& Ohio R. R. station, top of rail; marked "637.7"

638
Clifton, 0.6 mile south of railroad station, on Riverview farm, in concrete culvert under railroad; aluminum tablet stamped " 627 " \(\qquad\) 626. 863

Lowell, government lock; chiseled square 616.62

Lowell, in top of east wall at north end of canal lock 3 ; aluminum tablet stamped "Prim. Trav. Sta. No. 3, 617 Columbus" \(\qquad\) 616.651

From Keith south along highway to Lowell,
Keith, 2.22 miles south of, on rock south of road; chiseled square painted " 869.3 "
869.40

Keith, 3.27 miles south of, 660 feet south of T road east, on property stone in center of public road; chiseled squarc painted "1050.4"-- 1, 050. 48
Keith, 5.5 miles south of, 40 feet west of public road, in southeast corner of foundation of barn owned by John Steigle; aluminum tablet stamped " 926 "
Lowell, 4 miles north of, 30 feet east of ford over big run at crossroads, in large flat rock on west side of road; aluminum tablet stamped " 641 "
640.994

Lowell, 2.5 miles north of (along river), at T road, on west side of north abutment of covered bridge; chiseled square painted " 615.8 "
615.93

\section*{From Waterford west along Baltimore \& Ohio R. R. to Roxbury.}

Waterford, 3 miles north of, 280 feet south of Hayward station, 200 feet east of railroad, in top step' to entrance of E. B. Vincent's residence; aluminum tablet stamped " 645 "
645.360

Beckett, in northwest corner of concrete retaining wall around station platform; aluminum tablet stamped " 647 "
646.881

Luke Chute, in southeast corner of top of government lock; aluminum tablet stamped " 642 "
642.629

Near Cloud post office.
Meigs, 3.29 miles northeast of, in west side of south end of foundation of J. Q. Little's residence; aluminum tablet stamped " 749 "--
Cloud post office, east of road opposite MacKlem \& Dunkle's store; nail head in root of buckeye tree, paint mark " 770.749 "
748.339
769.92

\section*{CAMBRIDGE QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From Cambridge north along Pennsylvania R. R. to point near Guernsey.
Cambridge, in top of south side stone steps to courthouse, 1 foot from building; aluminum tablet stamped " 886 "
885.833

Cambridge, in front of Baltimore \& Ohio R. R. station; top of rail_-
Feet.
Cambridge, in front of Cleveland \& Marietta Ry. station; top of rail_
Cambridge, 2.83 miles north of, in top of stone abutment at northwest corner of railroad bridge ; aluminum tablet stamped " 804 "--
Cambridge, 6.33 miles north of, 20 feet west of track, 10 feet north of highway; iron post stamped " 783 "
804.475
783. 742
Cambridge, 9.03 miles north of, 15 feet west of railroad; iron post stamped " 787 "
787. 161
Cambridge, \(\mathbf{1 0 . 9 9}\) miles north of, at Kimbolton, in stone at northwest
corner of S. W. Luscock's barn; aluminum tablet stamped " 787 "-- 787.164
Kimbolton, in front of station; top of rail
Kimbolton, 4.93 miles north of, 30 feet west of railroad, in top of southeast corner of stone abutment to highway bridge over creek; aluminum tablet stamped " 771 " \(\qquad\) 770. 786
Birds Run, in front of station; top of rail
774.3
Guernsey, in front of station; top of rail
783.8
Guernsey, in front of station, 30 feet west of track, 1 foot from railroad property line; iron post stamped " 780 "
780.594
Guernsey, 3.26 miles north of, 25 feet west of railroad, 10 feet from highway ; iron post stamped " 828 "
828.391
Primary leveling by E. C. Bibbee and H. B. Hoel in 1908.
From point 2 miles southeast of West Lafayette south to point 2 miles southwest of Plainfield.
West Lafayette, 2.44 miles southeast of, at \(Y\) road, 150 feet southeast of brick schoolhouse, on large flat stone; chiseled square painted " 813.3 "
West Lafayette, 3.43 miles south of, in east side of north abutment of iron bridge; aluminum tablet stamped " 815 "
813. 33
815.079
Plainfield, 0.87 mile north of, on west side of south abutment of iron bridge; chiseled square painted " 765.3 "
765.34
Plainfield, 0.5 mile southwest of, at southeast corner of T road, on large rock; chiseled square painted " 801.1 "
801. 16
Plainfield, 1.93 miles southwest of, in east side of north abutment of iron bridge; aluminum tablet stamped " 751 "
751. 332

\section*{From Birds Run west to Otsego.}
Birds Run, 2.52 miles west of, on large rock 100 feet west of T road south; chiseled square painted " 798.13 "
797. 89
Linton Mills, in north end of east abutment of iron bridge over Wills Creek; aluminum tablet stamped " 764 " \(\qquad\) 764.175
Linton Mills, 3.78 miles west of, in east side of south abutment of wooden bridge over Coal Run; aluminum tablet stamped " 759 "--
758. 475
Linton Mills, 5.08 miles west of, at T road south, on stone step at Buker schoolhouse; chiseled square painted " 803.31 "
803.01

\section*{From Bloomfield south to New Concord.}
Bloomfield, 0.98 mile north of, on east side of south abutment of small iron bridge at foot of large hill; chiseled square marked " 845.8 " \(\qquad\)
Bloomfield, at \(T\) road east, in southwest corner of foundation of Geyer \& Sandles's store; aluminum tablet stamped "1117"
Bloomfield, 0.79 mile south of, on east side of north abutment of small wooden bridge at foot of hill; chiseled square marked " 952.4 "

Bloomfield, 2.2 miles south of, 1,000 feet east of schoolhouse, in north side of east abutment of small bridge; aluminum tablet stamped " 885 "

Feet.
884.733

New Concord, 60 feet north of station; iron post stamped " 843 ".---
843.243

From Cambridge via Craig, Clio, and East Salem to Kimbolton.
Cambridge, in top step at front entrance of courthouse, about 1 foot from building; aluminum tablet stamped " 886 "
885.833

Cambridge, 2.32 miles east of, 100 feet west of \(T\) road south, on stone culvert north of road; chiseled square marked " 801.6 "
801.43

Cambridge, 3.04 miles east of, in milepost at northeast corner of crossroads, marked "Cumberland 177, Wheeling 47 "; aluminum tablet stamped " 799 " \(\qquad\) 798.812

Craig, 0.3 mile west of, on large flat rock in middle of National pike at T road north; chiseled square marked " 974.8 "
974.60

Craig, 2.2 miles north by about 0.3 mile west of, in stone step of Independence schoolhouse; aluminum tablet stamped " 1145 " \(\qquad\) \(1,144.592\)
Midway triangulation station, about 6 miles northeast of Cambridge and 1.5 miles southeast of village of Midway, 200 feet west of north-south road, 300 feet northwest of schoolhouse, on a prominent bald hill; bronze tablet stamped " 1172 "
Clio, 3 feet from store, at southwest corner of crossroads, on stone; chiseled square marked " 803.9 "
803. 60

Kimbolton, 3.17 miles east of, north of road at \(Y\) road south, 500 feet west of residence of Howard Millegan, in brownstone ledge; aluminum tablet stamped " 866 "
865. 380

East Salem, 500 feet east of, 18 inches from fence, on rock south of public road; chiseled square marked " 1056.56 "
Kimbolton, 60 feet north of station, in property stone at corner of barn; aluminum tablet stamped " 787 "
787.164

\section*{Near Bernice.}

Bernice, 1.5 miles southeast of, in west side of south abutment of iron bridge over Dunlap Creek; aluminum tablet stamped " 824 "--

\section*{From Cambridge east 5 miles.}

Cambridge, 1.04 miles east of, in coping stone on south side of east abutment of bridge over Leatherwood Creek; chiseled square, painted " 804.4 " \(\qquad\)
Guernsey, in front of station; top of rail, marked " 804.7 "
804.31

Guernsey station, 0.89 mile east of, on north side of east abutment of bridge over Leatherwood Creek; chiseled square, painted " 803.8 "-

\section*{CANAL DOVER QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Precise leveling by Baltimore \& Ohio R. R.
Canal Dover, Tuscarawas County, 1 mile northwest of, set in southwest end of bridge seat of southeast abutment of culvert, at telegraph pole \(74 / 4\); copper bolt (B. \& O. b. m. 35)
Canal Dover, 0.25 mile west of station, in east pedestal of water tank, at telegraph pole 73/11; copper bolt (B. \& O. b. m. 36)
Canal Dover, 0.5 mile southeast of, in northeast end of mud wall of northwest abutment of Tuscarawas River bridge; copper bolt (B. \& O. b. m. 37)
Canal Dover, 1.25 miles southeast of, at telegraph pole \(72 / 1\); section of rail set vertically in ground (B. \& O. b. m. 38)
Canal Dover, about 1.25 miles southeast of, 200 feet southeast of telegraph pole \(72 / 1\); section of rail set vertically in ground (B. \& O. b. m. 38 A )
Primary leveling by James B. Maguire and J. H. Wetzel in 1901.
From point near Navarre southeast along Wheeling \& Lake Erie R. R. to Sherrodsville.
874.694
884.847

Zoar, 600 feet north of station, south side of track, abutment of iron bridge 153 D over mill race, in coping stone; aluminum tablet stamped " 893 Steubenville" \(\qquad\)
Zoar, in front of station; top of rail
898. 210
892.4

Somerdale, at road crossing; top of rail
884.4
893. 761
895.3

Primary leveling by J. B. Maguire and J. H. Wetzel in 1901 and S. R. Archer
and C. B. Minks in 1909. From Sherrodsville northwest along Wheeling \& Lake Erie R. R. to Zoar,

Sherrodsville, 1,200 feet north of station, in northeast corner of bridge 166 A ; iron bolt
915. 74

Sherrodsville, 2.4 miles north of, in southeast corner of bridge 165 A ; iron bolt marked " 905 "
906.29

Sherrodsville, 5 miles north of, in southeast corner of bridge 162 A ; iron bolt_.-
897.39

New Cumberland, 2.2 miles north of, northeast corner of bridge 159 A ; iron bolt
889.19

Somerdale, 0.5 mile north of, in southeast corner of bridge 157 C ; iron bolt
884.53

Valley Junction, 0.3 mile west of, in southeast corner of bridge 156 A ; iron bolt
886. 58

Valley Junction, 2.2 miles north of, in northwest corner of bridge 154 A ; iron bolt marked " 891 "

Feet.
899.0
889.694 stamped " 899 "
east of railroad at road crossing; iron post Zoar station, 4 miles west of, 20 feet south of railroad, at road crossing; iron post stamped " 880 "
880.420

Canal Dover, southwest corner of city hall; iron post stamped " 898 "
898.120
874. 201

\section*{From Canal Dover southeast to New Philadelphia,}

Canal Dover, 1 mile east of, telephone pole marked " \(72-1\)," section rail between tracks, Baltimore \& Ohio R. R. Bench mark No. 38. (Precise line value 892.905 not accepted, dependence being placed on copper bolt at New Philadelphia)
892.671

From Zoar station northeast along Pennsylvania R. R. to Waynesburg.
Mineral City, in front of Pennsylvania R. R. station; top of rail_Mineral City, Pennsylvania R. R. and Baltimore \& Ohio R. R. crossing, northwest corner of tracks, 50 feet northwest of center of crossing; iron post stamped " 953 " \(\qquad\)
Mineral City, 3 miles northeast of, crossing of private road to house on west side of railroad, 50 feet west of public road, in top of stone of retaining wall on west side of track at crossing; chiseled square_
Magnolia, 100 feet west of station, on north railroad right of way line, west of public road, 30 feet northwest of crossing, at foot of telegraph pole; iron post stamped " 972 "
Magnolia, in front of station; top of rail
950.0
953.175
968.89

Milepost 13 ; center of steel post (Pennsylvania R. R. bench mark) _- 1,000.0
Waynesburg, at north edge of town, opposite Pennsylvania R. R. station, in southwest corner of St. Paul's Reformed Church lawn, 3 feet from northwest corner of dwelling house and 3 feet from sidewalk; iron post stamped " 993 " \(\qquad\)
Waynesburg, street crossing at station; top of high rail
993.644
982.6

Waynesburg, center of town, in southwest corner of crossroads, on top of steel post ; paint mark
\[
1,002.50
\]

From Mineral City north along Baltimore \& Ohio R. R. to point 3 miles south of Canton.
Mineral City, 150 feet northwest of Baltimore \& Ohio R. R. station, at street crossing; top of rail
Sandyville, in front of station; top of rail
952.7

Sandyville, 160 feet north of station, 30 feet west of tracks, under northeast corner of water tank; iron post stamped " 939 "
938.5.
939.037

East Eparta, 100 feet southwest of station, 40 feet south of lumber shed, north side of private road west to house, in fence corner; iron post stamped " 959 "
958.985

East Sparta, 2.3 miles north of, at northeast corner of road crossing, on east railroad right of way line, 30 feet north of public road, 30 feet east of railroad, 35 feet northwest of northwest corner of highway bridge over Nimishillen Creek; iron post stamped " 965 "

\title{
North Industry, 0.7 mile southeast of, 660 feet west.of railroad crossing, northwest corner of bridge abutment of steel highway bridge over Nimishillen Creek; iron post stamped " 981 " \\ Feet. 981.612 \\ North Industry, in front of station; top of rail 1,000. 1 \\ North Industry, northeast corner of concrete platform around sta- tion, 200 feet south of road crossing, in top of curbing; chiseled square \\ ..... 1, 000.91
}
CANTON QUADRANGLE.
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Precise leveling by D. H. Baldwin in 1902.
From Krumroy south along Cleveland Terminal \& Valley R. R. to Canton,
Myersville, 200 feet northeast of station, on northeast corner of highway bridge, southeast corner of foundation; bronze tablet stamped "1076 Cleveland" ..... 1, 075.424
Myersville, in front of station; top of rail ..... 1,073. 5
Aultman (Greentown), in front of station; top of west rail ..... 1,107. 9New Berlin, about 400 feet east of Cleveland Terminal \& Valley R. R.highway bridge over Nimisila Creek, northeast corner of west abut-ment, on coping stone; bronze tablet stamped " 1069 Canton 1901"- 1, 067. 880New Berlin (Marchand), in front of station; top of rail1,067. 7
New Berlin, 2.08 miles south of, west abutment of bridge 44, over brook, on foundation coping stone; chiseled square ..... \(1,050,45\)
Canton, Cleveland Terminal \& Valley R. R. station, north side of doorsill to women's waiting room; chiseled square ..... 1, 032. 03
Canton, in front of station; top of rail ..... 1, 030. 4
Canton, bridge 77, on northeast corner of east abutment; chiseledsquare (Pittsburgh, Fort Wayne \& Chicago Ry. bench mark) _...... 1, 029.16
Primary leveling by James B. Maguire in 1901.
At Canton.
Canton, bridge 76, Pittsburgh, Fort Wayne \& Chicago Ry.; railroad bench mark ..... \(1,037.695\)
Canton, southeast corner of Stark County courthouse, 4.5 feet aboveground; bronze tablet stamped "1062 Canton"1,061. 529
From Louisville southwest along highway via Osnaburg to North Industry.

Louisville, 0.22 mile west of station, Pittsburgh, Fort Wayne \& Chicago Ry. bridge 69 over east branch of Nimishillen Creek, northwest corner of east abutment; bronze tablet stamped " 1097 Canton"--- 1, 097. 190
Osnaburg, 340 feet north of Wheeling \& Lake Erie R. R. crossing, at Market Street, 225 feet south of Liberty Street, and 125 feet north of Walnut Street, in center of east wall of culvert; bronze tablet stamped " 1146 Canton" \(1,146.222\)
From Myersville (Lake post office) east along highway to Hartville, thence south along Wheeling \& Lake Erie R. R. to Canton.

Feet.
Hartville, on north side of station; east window sill (west end)_.... 1, 164.51
Middle Branch, Wheeling \& Lake Erie R. R. station, west side of
waiting room; north end of doorsill

From Hartville northeast along highways to New Baltimore.
New Baltimore, 0.75 mile south of, on road from New Baltimore to
Louisville, bridge over branch of Deer Creek, on northeast corner
of south abutment; bronze tablet stamped " 1130 Canton" (re-
ported destroyed)
From point 1.2 miles south of Middle Branch along highways to Louisville.
Louisville, highway bridge over east branch of Nimishillen Creek, 800 feet north of Pittsburgh, Fort Wayne \& Chicago Ry., on northeast corner of west wing wall of south abutment; temporary bench mark
\(1,106.84\)

\section*{CARROLLTON QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by A. T. Bagley and R. G. De Frees in 1902.
From Harlem Springs north along highway to Carrollton triangulation station.
Harlem Springs, 3 miles north of, on Augusta Road at forks of road west to Carrollton Road, old \(\log\) house in southwest angle of corners, in stone wall. probably of iron bridge 600 feet south of corners; circle cut
Carrollton triangulation station, 3.7 miles east of Carrollton, on land of Mr. Ray, in top of marble post; bronze triangulation tablet stamped "1378 Stbnvl"

1,376. 478
From Waynesburg northeast along Pennsylvania R. R. to Bayard, thence east to point 2 miles east of East Rochester.
Primary leveling by R. G. DeFrees in 1900 and S. R. Archer and C. B. Minks in 1909.

Waynesburg, 0.6 mile northeast of station, at road crossing, in south abutment of east wing of steel highway bridge over Sandy Creek,
in top stone; chiseled square
973.05

Malvern, 0.3 mile west of Pennsylvania R. R. station, 150 feet north of road crossing, on west side of public road, at fence corner; iron post stamped " 992 " \(\qquad\) 992. 474

Malvern, in front of Pennsylvania R. R. station; top of rail__........ 998.4
Oneida, Pennsylvania R. R. and Wheeling \& Lake Erie R. R. crossing; top of rail
\(1,013.7\)
Oneida, 75 feet northeast of Pennsylvania R. R. station, in west wing of south abutment of steel highway bridge over Sandy Creek; chiseled square
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1,013.56

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Oneida, 0.6 mile northeast of railroad station, southeast corner of road crossing, 30 feet south of railroad; iron post stamped " 1040 "- 1, 040.050
Minerva, Pennsylvania R. R. and Lake Erie, Alliance \& Wheeling R. R. crossing; top of rail.

1, 052.0
Minerva, 100 feet east of Pennsylvania R. R. station, east side of street, 40 feet north of railroad, foot of telephone anchor pole at street crossing; iron post stamped " 1053 "
Feet. 1, 052.708
Bayard, 0.4 mile southwest of, 50 feet north of center of road forks at
schoolhouse, east end of stone culvert, in top; chiseled square_-_ 1,071.20
Bayard, 0.4 mile southwest of, at T road south, southwest corner of road forks, inside fence corner ; iron post stamped " 1079 "
Bayard, 1 mile southeast of, Pennsylvania R. R. crossing, in base of warning post at northeast corner of crossing; spike
1, 094.04
East Rochester, in front of Pennsylvania R. R. station; top of rail_1,092. 0
East Rochester, 1.7 miles east of station, at southwest corner of road crossing, west side of public road, 50 feet south of railroad, 20 feet south of Pennsylvania R. R. right of way line, at fence line; iron post stamped " 1095 "

From Sherrodsville north and east along Wheeling \& Lake Erie R. R. and highway to Carrollton triangulation station.
Atwood, 1.2 miles south of, 40 feet south and 10 feet east of road
crossing, near telephone pole; iron post stamped " 945 "
Dellroy, 200 feet east of station, 15 feet north of railroad; iron post stamped " 926 "
925. 781

Scott, 1.6 miles north of, 15 feet west of railroad, at railroad culvert 30 C ; iron post stamped " 953 "
952. 699

Scott, 1.8 miles north of, in culvert 30 B ; aluminum tablet stamped "Prim. Trav. 1906, 955 "
954.963

Deckman Duty brick plant, 0.8 mile north of, overhead railroad crossing, in stone abutment; cut mark, painted 1, 052.06
Carrollton, courthouse, in front steps of south side, between pillars and walls of building; aluminum tablet
\(1,130.397\)
Carrollton, 2.6 miles east of, T road northeast of Washington Hall schoolhouse, on southeast abutment of iron bridge ; chiseled square_

1, 064.82
Carrollton, 3.7 miles east of, on farm formerly owned by Mr. Campbell, now owned by George Ray, in marble slab at triangulation station; bronze tablet stamped " 1377 "

1,376.478

From Oneida south along Wheeling \& Lake Erie R. R. to Carrollton.
Oneida, 1.1 miles south of, 75 feet north of road crossing, top of east wing of south abutment of bridge 17 A ; chiseled square
Oneida, 2.3 miles southeast of, northeast corner of road crossing, at fence corner; iron post stamped " 1023 "
\(1,023.672\)
Hibbetts, 2.2 miles southeast of, 40 feet north of the northwest corner of Stemples crossing, at fence corner of right of way line and north fence line of public road; iron post stamped " 1051 "
\(1,051.526\)
Carrollton, in front of Wheeling \& Lake Erie R. R. station; top of rail

1,131. 8
Carrollton, front entrance of courthouse, south side of steps, in top of stone base of marble columns, about 10 feet above pavement; aluminum tablet stamped " 1130 "
\(1,130.397\)
From Minerva along highways southeast to Specht, thence southwest to Stemples Crossing on Wheeling \& Lake Erie R. R.

Minerva, in front of Lake Erie, Alliance \& Wheeling R. R. station;
\(\qquad\)

Minerva, 4.3 miles southeast of, 30 feet east of track, at road cross- Feet. ing, north side of public highway; iron post stamped " 1049 "--_ 1, 049. 413
Watheys, road crossing at, iron highway bridge, west side of railroad, in top of stone of south wing of east abutment; chiseled square

Watheys, 0.5 mile southeast of, 0.1 mile south of old Specht post office, at road crossing, north of railroad right of way line, west side of public highway, 40 feet north of track; iron post stamped " 1049 "

1,049. 603
Specht, 2.2 miles southwest of, 0.25 mile west of Eckley, 3.2 miles east of Stemples crossing, northwest corner of crossroads, inside of fence line, near maple tree 6 inches in diameter; iron post stamped " 1199 "

1, 198. 773
Stemples crossing, 2.3 miles east of, T road southeast, at point 6 feet above level of road, north of road at forks, in top of stone; chiseled square
\(1,144.69\)
Stemples crossing, 1.1 miles east of, in northwest corner of crossroads, in top of stone culvert; chiseled square

1, 231.12
Hibbetts, 2.2 miles southeast of, 3.6 miles north of Carroliton, northwest corner of Stemples crossing, at fence corner on west railroad right of way line, 40 feet northwest of crossing ; iron post stamped " 1051 " \(1,051.526\)

From Waynesburg southeast along highway to Dellroy.
Waynesburg, 2.1 miles southeast of, east of road, in top stone of culvert; chiseled square
\(1,160.83\)
Waynesburg, 2.5 miles southeast of, in southeast corner of crossroads, at fence corner ; iron post stamped " 1161 "

1, 161. 333
Waynesburg, 3.5 miles southeast of, at five points, in center of south crossroads, in top of stone; chiseled square

1, 221. 40
Waynesburg, 3.5 miles southeast by 1.2 miles south of, T road east, in top of stone at southeast corner; chiseled square
\(1,204.90\)
Waynesburg, 3.5 miles southeast of, T road west, near house east of road at forks in southwest corner of yard, inside fence corner; iron post stamped " 1193 " 1, 193. 790
Dellroy, 0.2 mile north of Wheeling \& Lake Erie R. R. station, iron highway bridge, in top stone of approach to west wing of north abutment; chiseled square
926. 02

Dellroy, 200 feet east of Wheeling \& Lake Erie R. R. station, 15 feet north of tracks, inside fence corner at northeast corner of crossing ; iron post stamped " 926 "
925. 781

\section*{CELINA QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Primary leveling by H. Clark in 1911.
From point 2 miles south of Celina north along highways via Celina and Mendon to point 1 mile south of Elgin.

Celina, 2.2 miles south of, at \(\mathbf{Y}\) road, on northwest corner of stone abutment of iron bridge over Coldwater Creek; chiseled circle
\[
45281^{\circ}-\text { Bull. } 651-17-6
\]

Celina, 1.8 miles south of, \(\mathbf{1 0 0}\) feet from edge of reservoir, at T road, on southeast corner of iron bridge floor; paint mark (circle) _--
Celina, west side of Main Street at railroad crossing, north side of railroad; iron post stamped " 875 "
Celina, northeast side of town, at corner of Wayne Street and pike leading to Mendon, in front of Seymour Craig's residence; spike in telephone pole \(\qquad\)
Celina, 1 mile northeast of, at \(Y\) road, on south end of iron culvert under highway running east-west; paint mark \(\qquad\)
Selina, 1.5 miles northeast of, in northwest corner of bridge floor at Y road; copper nail

Feet.
871. 70
874.720
890.82
878. 70
869.58

Celina, 2.7 miles northeast of, at road crossing, on west side of northsouth highway; copper nail in root of large elm tree
851.62

Celina, 4.4 miles northeast of, in front of Fairview Church, at road crossing; iron post stamped " 848 "
847.752

Celina, 5.7 miles northeast of, at road crossing in front of Mount Zion Church; spike in base of telephone pole
834.84

Celina, 6.2 miles northeast of, 0.5 mile north of Mount Zion Church, 50 feet east of north-south highway at road crossing; spike in base of fence post
833.92

Celina, 6.7 miles northeast of, at T road in front of W. M. Webb's residence ; spike in base of fence post \(\qquad\)
Mendon, 2.2 miles south of, at T road; iron post stamped " 830 "
828.44

Mendon, 1.5 miles south of, at road crossing at Twelvemile Creek school, southwest corner of stone abutment of iron bridge over Twelvemile Creek; chisel mark
829. 566
817. 19

Mendon, 4.8 miles south of, at T road in front of W. A. Bedell's residence; spike in base of telephone pole
833.37

Mendon, \(\mathbf{0 . 5}\) mile north of, northeast corner of road crossing, 600 feet north of iron bridge over St. Marys River, in corner of field; iron post stamped " 805 "
804.965

Mendon, 1.3 miles northwest of, on west side of road at \(\mathbf{T}\) road; spike in base of fence post, marked " 810 "
810.20

Mendon, 1.8 miles northwest of, in front of Anderson Bethel Church, on west side of road at road crossing; spike in base of fence post_-
Mendon, 2.3 miles northwest of, at road crossing, on west side of road, 300 feet south of E. N. Drake's residence; spike in base of fence post
856.40

Mendon, 3.3 miles northwest of, on southeast corner of stone abutment of culvert, 300 feet west of Wm. Morbaugh's residence at road crossing; chisel mark
827.98

Mendon, 3.8 miles northwest of, at road crossing, on west side of road,
in front of W. L. Bolton's residence, 0.2 mile east of tile works;
spike in base of fence post
822.24

Mendon, 4 miles northwest of, at T road, 40 feet southeast of southeast corner of iron bridge over creek; iron post stamped " 808 "-
Mendon, 4 miles north of, at southwest corner of west abutment of cement culvert under east-west highway at road crossing, 0.5 mile north of Jas. Hickernell's residence
811. 43

Elgin, 1.5 miles southwest of, on south side of east-west highway at road crossing, about 1,200 feet west of John Goodwin's residence; spike in base of fence post.

Elgin, 1 mile south of, southwest corner of road crossing; south ban
ister of cement culvert

From Mount Zion Church northwest along highways via Mercer to Rockford,
 thence south and east to point 0.25 mile southwest of Triangle.

Feet. 818.51

Celina, 8.2 miles northeast of, 0.5 mile north of Mount Zion Church, 50 feet east of highway, at road crossing; spike in base of fence post
833.92

Mercer, 1.6 miles southeast of, at \(Y\) road in front of James Hays's residence; spike in base of telephone pole
828.40

Mercer, 0.5 mile southeast of, at road crossing, on northeast corner of stone culvert under north-south pike; chisel mark
816. 72

Mercer, northwest side of village, at road crossing, on north side of highway, about 100 feet southeast of iron bridge; iron post stamped " 805 " \(\qquad\)
Mercer, 1.1 miles northwest of, at north side of highway, in front of Charles Hayes's residence, at road crossing; spike in base of telephone pole
811.46

Rockford, 2.4 miles southeast of, 600 feet west of residence, on north side of highway at Y road; spike in base of fence post.
814.83

Rockford, 1.7 miles southeast of, on south side of highway, in front of F. S. Foster's residence at \(Y\) road; spike in base of telephone pole
Rockford, north end of Main Street, 300 feet south of iron bridge over St. Marys River; iron post stamped " 807 "
804.18
806. 842

Rockford, 1.2 miles south of, at southwest corner of road crossing; spike in base of telephone pole
806.47

Rockford, 2.6 miles south of, on east side of north-south highway at road crossing, in front of Alfred Custer's residence; iron post stamped " 829 "
828. 707

Rockford, 4.3 miles south of, in front of Hopewell Quaker Church, at road crossing; spike in base of fence post
Rockford, 5.7 miles south of, on east side of north-south pike at road crossing, at St. John's Lutheran Church; spike in base of fence post \(\qquad\)
Rockford, 6.7 miles south of, at Shively, about 70 feet northwest of store, at road crossing; iron post stamped " 858 " \(\qquad\)
Rockford, 7.2 miles south of, at Hope Evangelical Church, 0.5 mile south of Stedke, at road crossing; spike in base of telephone pole_-
Rockford, 8.3 miles south of, in front of Miller Church, on west side of north-south highway crossroads ; spike in base of fence post....
Rockford, 8.8 miles south of, on west side of north-south highway at T road, about 0.8 mile north of Buck School; spike in base of fence post.
 Rockford, 9.5 miles south of, about 60 feet southwest of Buck School, at road crossing; iron post stamped " 885 " \(\qquad\)
Rockford, 10.3 miles south of, 1 mile south of Buck School, in middle of crossroads; top of rock
856.86
857.826
862.69
873.75
902.43
885.225
872.72
872.78
882.84

Rockford, 12.7 miles south of, 1 mile south of Union School, at road

Feet. crossing; iron post stamped " 887 ,
Triangle, 2.8 miles west of, at road crossing, in front of Bennett School; spike in base of telephone pole
887.070
Triangle, 1.8 miles west of, at road crossing, 1 mile east of Bennett School; spike in base of telephone pole
889.43
Triangle, 0.6 mile southwest of, on south side of east-west highway at Y road; spike in base of fence post
877. 46
From point 12.7 miles southwest of Rockford north and east along highways to Rockford.
Rockford, 12.7 miles southwest of, at road crossing, 1 mile south of Union School ; iron post stamped " 887 "
887.070
Triangle, 5 miles west of, about 100 feet northwest of Crouch School, at road crossing; spike in base of fence post
890.67
Erastus, 1 mile east of, 1 mile west of Crouch School, at road crossing; spike in base of fence post
887.50
Erastus, at road crossing, in middle of town; southeast corner of cement watering trough
894. 78
Erastus, 1 mile west of, at road crossing; iron post stamped " 890 "--
Erastus, 1 mile west by 1 mile north of, in east end of culvert floor under north-south highway at T road; spike
889.516
Wabash, 1.25 miles east by 0.5 mile south of, at road crossing, south end of iron culvert under east-west highway
865.39
Wabash, 1.25 miles east of, at road crossing, at stone culvert under north-south highway; top of east end of arch
876. 85
Durbin, 1 mile west of, at road crossing; iron post stamped " 872 "-
Durbin, 1 mile west by 0.5 mile north of, on north side of highway at road crossing; spike in base of fence post
80.133
871. 764
873. 70
Durbin, 1 mile west by 1.5 miles north of, on east side of highway at T road; spike in base of telephone pole_
869.72
Durbin, 1 mile west by 2.5 miles north of, at southeast corner of road crossing; spike in base of fence post
868.48
Durbin, 1 mile west by 3.5 miles north of, at road crossing; iron post
stamped "Prim. Trav. Sta. No. 22, 1909, 857 ".-.---....-- 857.481
Chattanooga, 3 miles east by 0.5 mile south of, at road crossing at Burthwell; spike in base of telephone pole_
841. 76
Chattanooga, 3 miles east of, on north side of road at crossing; spike in base of fence post.

Chattanooga, 3 miles east by 1.5 miles north of, on east side of northsouth road and south side of east-west road at crossing; spikic in base of fence post
828.59

Chattanoog , : e miles east by 2 miles north of, at road crossing; iron post stamped " 819 '
819.346

Chattanooga, 3 miles east by 3 miles north of, at T road, in front of T. G. Spry's residence ; spike in base of fence post
811.90

Rockford, 4.5 miles west of, at road crossing, in front of M. C. Tickle's residence; spike in base of fence post
816.79

Rockford, 4.5 miles west by 0.5 mile north of, about 0.8 mile northwest of M. C. Tickle's residence, 0.25 mile south of Geo. Hill's residence; iron post stamped " \(8 \geq 9\) "
818. 740

Rockford, 5.2 miles northwest of, southwest corner of crossroads, at Zion Church and Winkler School, in northwest corner of platform of iron pump; nail marked " 812 "
812.17
Rockford, 5 miles northwest of, 0.25 mile east of Winkler School, at road crossing ; spike in base of telephone pole
reckford, 4 miles northwest of, at T road, in front of Henry King's residence; spike in base of fence post. \(\qquad\)
Rockford, 3 miles northwest of, at \(Y\) road, about. 600 feet southeast of Maplewood farm; iron post stamped " 801 "
Feet.
807.75
801.40
801.346

From Shively west along highways to point 4 miles northwest of Durbin.
Shively, 1 mile west of, at Hopewell School (district No. 8), at road crossing; spike in base of fence post
Shively, 2 miles west of, at road crossing; spike in base of fence
post
Shively, 3 miles west of, 100 feet southeast of Center Church, at road crossing; spike in base of telephone pole

From point 1 mile west of Erastus along highways 1.2 miles.
Erastus, 1.6 miles west of, southwest corner of T road south; chiseled square on west end of stone drain, marked " 873.1 "
Erastus, 2.2 miles west of, southwest corner of crossroads; chiseled square on west end of stone drain, marked " 885.6 "

From point 4 miles northwest of Mendon to point 9.8 miles south of Van Wert.
Van Wert, 10.8 miles south of, on county line, at road crossing near Wesley Chapel ; spike in base of fence post
Van Wert, 9.8 miles south of, at T road, in front of schoolhouse (district No. 9 ) ; spike in base of fence post

From Schumm south and west along highways to point 5 miles northwest of Rockford.

Schumm, 1 mile south of, northeast corner of T road north; spike in base of fence post, marked " 809.7 "
809.99

Schumm, 1 mile south by 0.5 mile west of, on north side of road at T road south; spike in base of fence post, marked " 809.4 " \(\qquad\)
Willshire, 2.5 miles southeast of, on Rockford and Fort Wayne road, at northeast corner of road forks; spike in base of fence post, marked " 793.9 "
Willshire, 2.25 miles southeast of, southwest corner of road forks; spike in base of fence post, marked " \(797.7{ }^{4}\)

From Rockford north along highways 3.5 miles.
Rockford, 1.4 miles north of, at northeast corner of T road east; spike in base of fence post, marked " 836.7 "
836. 76

Rockford, 1.6 miles north of, at T road east crossing railroad; top of rail, painted " 844.2 "
844.22

Rockford, 2.4 miles north of, at northeast corner of crossroads; spike in base of corner fence post, marked " 823.8 "
823. 81

Rockford, 3.5 miles north of, 2 miles south of Ohio City, in northwest corner of crossroads ; spike in base of telephone pole, painted " 830.9 "
809.69
794. 22
798. 01
(ix.oni
866.42
864.87
885.60
816.07
802.32

รो:
Primary leveling by E. C. Bibbee in 1914.

\section*{Near Padua.}
Padua, 1 mile west of, at southeast corner of \(T\) road east, on Ohio- Feet.
Indiana State line ; iron post stamped " 895 "

CHAGRIN FALLS QUADRANGLE.
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(\left.81^{\circ} 15^{\prime}-81^{\circ} 30.\right]\)
Primary leveling by R. C. Seitz in 1905.
From Macedonia east along highway to Twinsburg, thence north to Barry, thence east to Punderson Lake.
\(\begin{array}{ccc}\text { Twinsburg, in culvert in southeast triangle of road crossing; alumi- } & \\ \text { num tablet stamped " } 985 \text { Adj 1903" } & 984.830\end{array}\)
Solon, in belt line at northwest corner of town hall ; aluminum tablet
stamped "1037 Adj 1903"
Barry, at center of Orange Township, in southeast corner of foundation of town hall, 325 feet south of crossroads; aluminum tablet stamped "1031 Adj 1903"Russell Center, in southeast corner of foundation of town hall;aluminum tablet stamped "1094 Adj 1903"1,094. 028
Ford, 0.91 mile west of, in south wing wall, east abutment of small iron bridge; aluminum tablet stamped "1162 Adj 1903" ..... 1, 161.918
From Auburn west along highway to Bainbridge, thence south to Aurora, thence west to Twinsburg.
Bainbridge, at crossroads, in east culvert west side of road; alumi- num tablet stamped "1166 Adj 1903" ..... \(1,166.180\)
Aurora, 635 feet north of crossroads, in stone culvert west side of road; aluminum tablet stamped "1119 Adj 1903" ..... 1,119. 245
CHARDON QUADRANGLE,
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\). ]
Primary leveling by C. H. Moore in 1903 and C. R. Harvey in 1904.
From Painesville south along Baltimore \& Ohio R. R. to Chardon, thencesouthwest along Cleveland \& Chardon Electric Ry. to Bass Lake.

Painesville, on front entrance step at southeast corner of courthouse ; chiseled circle680.25

Painesville, on east side of soldiers' monument in City Park, in lower water table; aluminum tablet stamped " 678 Cleveland"
677. 458

Concord, north side of Painesville-Concord road, 200 feet west of Baltimore \& Ohio R. R. crossing; in top of 2 by 5 foot sandstone coping stone, in center of culvert, bronze tablet stamped " 897 Cleveland"

S96. 427
Painesville, 6.25 miles south of, on culvert stone on east side of Baltimore \& Ohio R. R. track, south side of east-west road crossing; chiseled square
Chardon, southwest corner Court and Washington streets, north side at northeast corner of frame house, in foundation wall; bronze tablet stamped "1233 Cleveland"

\section*{From Fowlers Mill east to Huntsburg, thence north to Madison}

Claridon, 1.25 miles west of, southeast side of bridge over outlet branch Cuyahoga River, flush in abutment; bronze tablet stamped "Cleveland 1136" \(\qquad\) Feet. \(1,135.668\)
East Claridon, 0.5 mile east of, in northwest corner of bridge over Cuyahoga River, in abutment stone; aluminum tablet stamped "Cleveland 1130"
\(1,129.443\)
Huntsburg, 2 miles north by 1 mile west of, southeast corner of crossroads, in northwest corner of foundation of frame farmhouse; aluminum tablet stamped "Cleveland 1283" \(\qquad\) 1,282. 459
Montville, in southwest corner of M. E. Church; aluminum tablet stamped "Cleveland 1239"

1,238, 286
South Thompson, 25 feet south of post office, east side of road, in stone foundation of frame house; bronze tablet stamped "Cleveland 1170"
\(1,169.244\)
Thompson, in southwest corner of stone foundation of Congregational Church; bronze tablet stamped " 1277 Cleveland"

1,276. 266
Madison, 2.5 miles south of; in southwest corner of bridge over Grand River, in abutment stone; aluminum tablet stamped "696 Cleveland"
695.761

CHESTERHILI QUADRANGLE.
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Precise leveling by the Coast and Geodetic Survey.
From Coolville west along Baltimore \& Ohio Southwestern R. R. to Canaanville.
Coolville, Athens County, about 3.8 miles west of, on east abutment of small railroad bridge; chiseled square marked "B M" (C. \& G. S. b. m. XLIII)

Guysville, about 1 mile west of, on east abutment of Baltimore \& Ohio R. R. bridge ; chiseled square marked "B M" (C. \& G. S. b. m. XLIV)

Guysville, about 2.5 miles west of, on west abutment of railroad bridge over Little Hocking River ; chiseled square marked "B M" (C. \& G. S. b. m. XLV )

Canaanville, about 492 feet east of Canaan Chapel, on west abutment of small bridge ; chiseled square marked "B M" (C. \& G. S. b. m. XLVI)
-

Primary leveling by William E. Earle and R. G. De Frees in 1903 and F. W. Hughes in 1904.

From Federal south along Marietta, Columbus \& Cleveland R. R. to Amesville, thence along highway to Canaanville.

Amesville, 200 feet from railroad track, brick store of Lovel, Beasley \& Totman, in top of sandstone foundation, ir. south end of west wall; bronze tablet stamped " 630 Columbus"
Amesville, 1 mile south of, on Athens and Amesville pike, 150 feet northeast of house and barn, on northwest stone abutment of iron bridge over creek; cross mark
Amesville, 3 miles south of, 4.5 miles north of Canaanville, on southeast stone abutment of new iron bridge over Dutch Creek; cross_-
Canaanville, 0.25 mile northwest of station, southeast corner of Methodist Church facing south, in sandstone foundation; aluminum tablet stamped " 675 Columbus"
Feet. 675.406
From Guysville south along highway to Mills schoolhouse, thence west via
 Hull to Binghams Gad, 1 mile north of Judson.
Guysville, southwest face of foundation of house of C. C. Hulbert; bronze tablet stamped " 652 Columbus 1903 " ..... 652.154
Guysville, east end of platform; head of bolt ..... 621.18
Guysville, 3.1 miles south of, 500 feet west of Mills School, at forks of road, in southwest foundation of highway bridge over stream; bronze tablet stamped " 738 Columbus 1903 "
Rhodehaver Corners, 0.5 mile south of, forks of ridge road west to Hull, in northwest corner of ; nail in base of fence post ..... 925.94
Rhodehaver Corners, 1.5 miles southwest of, at forks of road 1 mileeast of Hull (old location), at wooden bridge over East Branchof Shade River, on northeast stone abutment; chiseled square
\(\qquad\)Hull (old location), 0.5 mile west of, at byroad to south, on south-east foundation of small bridge west of forks; chiseled square767.44800.32
From Coolville station west across Hocking River and along highway via Deep
 Hollow to Mills schoolhouse, 3 miles south of Guysville.
Deep Hollow schoolhouse, 0.3 mile west of, at wooden bridge over Jordan Run where road turns south, on southeast foundation; chiseled square
649.54
Mills schoolhouse, 0.1 mile west of, on Coolville-Guysville pike, at junction of road from east, on southwest abutment of bridge over stream; square cut
738.98
From Dunbar northwest along highway to Chesterhill, thence west to Federal
Bartlett, in northwest face of stone foundation of house of Lewis Knapp; bronze tablet stamped " 898 Columbus 1903 "
898.164
Bartlett, 3 miles north of, at northwest corner of wooden bridge over Coal Run, on abutment; square cut
733.59
Chesterhill, in sill at northwest corner of foundation of school building; aluminum tablet stamped " 995 Columbus 1903 "
994. 594
Chesterhill, 3 miles west of, at forks of road west uphill to Joy, on northeast foundation of bridge over Opossum Run; square cut
772.04
Wrightstown, in northeast corner of foundation of Christian Chureh; aluminum tablet stamped " 1041 Columbus 1903" \(\qquad\) 1,040. 716
From Browns Mill west along highway via Dale to Chesterhill.

Dale ( 3 miles west of Wolf Creek), 4 feet south of northwest corner of foundation of store; aluminum tablet stamped " 972 " \(\qquad\)
Chesterhill, 4 miles east of, southwest corner of Tabor Christian Church, in top stone of foundation; aluminum table stamped " 948 "
971. 632

\title{
CHILLICOTHE QUADRANGLE.
}

Precise leveling by N. A. Camphell and W. H. Monahan along Norfolk \& Western Ry. in 1906.
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
From Chillicothe to Locks.
Chillicothe, on north side of steps of front entrance to courthouse, in base of pedestal of lamp post; chiseled square, marked "B. M. Q. U. S. C. \& G. S. Aug. 5, 1879 "

Feet.
638.001

Ienick, in front of station; top of rail
627.0

Renick, 1.2 miles south of, north abutment of railroad bridge, west of track, top of retaining wall; aluminum tablet stamped " 624 ".-
Locks, in front of station; top of rail

Locks, 0.19 mile south of, north abutment of bridge over road, west side of track, top of retaining wall; aluminum tablet stamped "610"

Precise leveling by the Coast and Geodetic Survey.
From Schooleys station west along Baltimore \& Ohio Southwestern R, R. to Chillicothe.

Schooleys, 1.5 miles east of, on east abutment of railroad bridge over Walnut Creek; chiseled square marked "B M" (C \& G. S. b. m. LV) \({ }^{2}\)
657.572

Chillicothe, on pedestal of lamp-post on the north side of steps of front entrance of the courthouse ; chiseled square marked "B M" (C. \& G. S. b. m. Q) 638.001

Precise leveling by E. L. McNair along the Norfolk \& Western Ry. in 1905.
From Chillicothe to Elmwood.
Chillicothe, in wall at side of entrance to courthouse; bronze tablet
stamped " 643.67 " 643.195
Chillicothe, crossing of Baltimore \& Ohio Southwestern R. R. and Norfolk \& Western Ry. ; top of rail
626.7

Chillicothe, 0.5 mile north of, in top of south abutment of Norfolk \& Western Ry. bridge on west side, 12 feet from center of track and 5.75 feet below top of rail; aluminum tablet
620.307

Chillicothe, 5.6 miles north of, 90 feet south of Delano station, at southeast corner of crossroads, in bridge seat stone; bronze tablet stamped " 691 Columbus 1899 "
690.752

Chillicothe, 5.6 miles north of, in top of concrete bridge over small stream at Delano station, Scioto Valley Traction R. R., at southeast corner of crossroads; aluminum tablet
693. 952

Kinnikinnick station, Norfolk \& Western Ry. ; top of rail
694.4
710.3

Kingston, 1,000 feet north of, in top of stepstone of arch culvert, southwest corner; bronze tablet stamped " 774 Columbus 1899." (On spur line 0.46 mile)
774.068

Kingston, Norfolk \& Western Ry. station; top of rail
765.2

Kingston, 0.75 mile north of, in top of southwest corner of a stonearch bridge across a branch on Norfolk \& Western Ry.; aluminum tablet
746. 711

Elmwood flag station; top of rail

\section*{Primary leveling by J. J. McNulta and James Rayburn in 1911.}

\section*{From Meade to Kingston (portion of line).}


Bench mark near Amanda connected with line from Leistville.
Amanda, 0.8 mile east of, on east side of pike at fork to west, 80 feet south of culvert; iron post stamped " Prim. Trav. Sta. No. 7, Ohio 941 "

\section*{Elevations along west border of quadrangle.}
Chillicothe, 2 miles north of, at switch to Marfield's Mill; top of north rail
Chillicothe, Paint Street crossing of Cincinnati, Hamilton \& Dayton Ry. ; top of south rail of main track
Chillicothe, 1 mile south of, southwest corner of crossroads; copper nail in side of telephone pole
613.57
Chillicothe, 2 miles south of, copper nail in top of guard rail
624.95

Primary leveling by R. P. Thompson in 1905 and H. W. Peabody and R. C. Seitz in 1906.

From Chillicothe northward along highway via Delano to Kingston.
Chillicothe, on north side of steps to front entrance of courthouse, on pedestal of lamp-post; cut marked "Q. b. m. U. S. C. \& G. S. Aug. 5, 1879 "
638. 001

Delano, 1,000 feet west of Norfolk \& Western Ry. station, at east side of National pike and south of Poorhouse Lane, in northeast corner of top of concrete bridge of the Scioto Valley Traction R. R. over small stream; aluminum tablet \(\qquad\)
Kingston, in water table at southwest corner of south face of Kingston Hotel, at northeast corner of Main and Pickaway streets; aluminum tablet
693.952
796. 483

From Kingston east along highway to Whisler, thence south to Hallsville, thence west to Kinnikinnick.

Kingston, 2.54 miles east of, 400 feet east of road north, at northwest corner of iron highway bridge, top of round iron post
750.45

Whisler, in southwest corner of south face of foundation wall of Cumberland Presbyterian Church; aluminum tablet
Hallsville, at northeast corner of three corners, in east face of foundation wall, 10 feet north of southeast corner of S. H. Clark's brick store; aluminum tablet

\section*{From Whisler east along highway to Adelphi.}

Whisler, 3.71 miles east of, 200 feet west of north-south road, on
northeast abutment of iron highway bridge over Salt Creek; chiseled square

Feet.
760.47

From Chillicothe southeast along Baltimore \& Ohio Southwestern R. R. to Vigo.
Chillicothe, 4 miles southeast of, in top of main pier at southeast corner of overhead-crossing bridge; aluminum tablet stamped "623-1906"
623. 252

Schooleys, southeast corner of station building, in east face; aluminium tablet stamped " 655-1906"
654.805

From Vigo northeast along highway to Cox.
Londonderry (Gillespieville post office), at northwest corner of crossroads, in south face of brick store; aluminium tablet stamped "686-1906" \(\qquad\)
Londonderry, about 150 feet north of northeast corner of crossroads, 126 feet northeast of Radcliff's store, in top of sandstone post; aluminum tablet stamped "Prim. Trav. Sta. No. 11 " \(\qquad\)
Londonderry, 2.7 miles northeast of, at northeast corner of road fork to north, in south face of foundation at southwest corner of Friends Church; aluminum tablet stamped " 626-1906" \(\qquad\) 626.184

From Adelphi west along highway to Hallsville.
Adelphi, 2.05 miles southwest of, at southeast corner of three corners at road to south, 100 feet southeast of Rose's house; spike in root of locust tree
904.67

From point near Benick south along highway to Waller.
Waller, in lot on west side of road, 200 feet south of \(T\) road east; iron post stamped " Prim. Trav. Sta. No. 15, 629 "
628. 644

From Hallsville south along highway to bridge 4 miles east of Chillicothe.
Hallsville, 2.9 miles south by 0.8 mile west of, at southwest corner of crossroads, in east face at northeast corner of Pleasant View Church; aluminum tablet stamped "792-1906"
Charlestown, 1 mile north of Tucson, southwest side of town, at road forks, at southeast corner of bridge over Walnut Creek, in bridge seat; aluminum tablet stamped "730-1906" 729.933

Mooresville, at southeast corner of iron bridge over Walnut Creek, in bridge seat; aluminum tablet stamped " 679-1906_..
679.554

Primary leveling by F. L. Whaley in 1914.
From Chillicothe northwest along highway to Adamsville.
Chillicothe, north part of town, west side of High Street, in front of Mrs. Rosa Rahile's residence, on sidewalk curb; chiseled square marked "634.1 T. B. M."

Primary leveling by J. J. McNulta in 1911. (Part of a line in which 0.8 foot is
From Chillicothe southwest along highway toward Huntington town hall.
Chillicothe, 1 mile south of, southwest corner of Waverly and Paint Creek pikes intersection, in telegraph pole; copper nail

Chillicothe, 2 miles south of, on Paint Creek pike, in top of guard rail along pipe ; copper nail

Feet.
624.95

CINCINNATI QUADRANGLE.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 45^{\prime}\).]
For bench marks in this quadrangle see East Cincinnati and West Cincinnati quadrangles.

\section*{CIRCLEVILLE QUADRANGLE.}
\[
\text { [Latitude } 39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime} \text {; longitude } 82^{\circ} 45^{\prime}-83^{\circ} \text {.] }
\]

Precise leveling by E. L. McNair along the Norfolk \& Western Ry. in 1905. From Hayesville north along Norfolk \& Western Ry, to Ashville.

Hayesville, 0.75 mile south of, in west end of top of coping stone of arch culvert across a small draw on Norfolk \& Western Ry; aluminum tablet. \(\qquad\)
Circleville, 4 miles south of, in north end of west abutment of covered bridge over Sippo Creek; bronze tablet stamped " 707 Columbus 1899." (On spur line 0.54 mile)

Circleville, 1.62 miles south of, in east side of south end of top of a stone culvert on the Norfolk \& Western Ry. at south end of siding at Gregg station; aluminum tablet \(\qquad\)
Circleville, Norfolk \& Western Ry. station; top of rail
Circleville, at northwest corner of main building of courthouse ; iron post stamped " Prim. Trav. Sta. No. 4" (On spur line 0.25 mile) --
Circleville, 2 miles north of, in south end of west parapet wall of box culvert; aluminum tablet stamped " 693 Columbus 1899 " (interpolated primary elevation). (Reported destroyed, 1912) _-.
Circleville, 4 miles north of, 60 feet south of viaduct across Scioto Valley Traction R. R. and Norfolk \& Western Ry., about 500 feet north of elevator at siding, 12 feet west of center of track of Norfolk \& Western Ry. ; iron post \(\qquad\)
Cromley, 0.25 mile south of, 2 miles south of Ashville, in cover stone on east side of a small stone culvert on Norfolk \& Western Ry.; aluminum tablet. (Reported destroyed, 1912)
Ashville, in front of station; top of rail
Primary leveling by James Rayburn and J. J. McNulta in 1911.
From Circleville southeast along highway to Leistville, thence southwest to point near Meade (portion of line),
Circleville, at northwest corner of main building of courthouse; iron post stamped "Prim. Trav. Sta. No. 4, 694 " \(\qquad\)
Circleville, 1.9 miles southeast of, at road south, in fence post east of road; copper nail stamped " 721 "
Circleville, 3.25 miles southeast of, at district No. 5 schoolhouse, southeast corner of crossroads, on rock in culvert; chiseled square marked " 804.5 " \(\qquad\)
Circleville, 4.4 miles southeast of, in corner of yard of E. Thatcher's house, southwest corner of Thatcher's crossroads; iron post stamped " 854 Ohio"
693. 568
721. 16
804.47

Circleville, 6.3 miles southeast of, 100 feet northwest of crossroads, on southeast wing wall of bridge; chiseled square, painted "U. S. T. B. M. 818 "

Leistville, in northeast corner of crossing of Circleville and Adelphi pike and Maysville pike; iron post stamped " 851 Ohio" \(\qquad\)
Meade, 0.7 mile northeast of, at road to east, in corner post of wire fence, northeast corner of road; copper nail painted "U. S. T. B. M. 806.3 "

\subsection*{851.213}
806.36

From Leistville northeast along highway to Oakland, thence west 1 mile to crossroads, thence north to Circleville pike, thence east to point near Amanda (portion of line).

Leistville, 1 mile northeast of, 500 feet southwest of crossroads, on northeast wing wall of bridge over stream; chiseled square painted "U. S. T. B. M. 841 "
840.97

Leistville, 2.2 miles northeast of, at road south, southeast angle of road, in box culvert; copper nail painted "U. S. T. B. M. 969 "--
Leistville, 2.9 miles northeast of, southeast corner of T road south, in corner fence post ; copper nail painted "U. S. T. B. M. 975 "----
Tarlton, northwest corner of Main and German streets, at southwest corner of Ingham Wylie's house ; iron post stamped " 892 Ohio"--
Tarlton, 1.4 miles north of, at T road east, west side of road. in corner fence post on section line; copper nail marked "U. S. T. B. M. \(1065.3^{"}\) \(\qquad\) 1, 065. 32
Oakland, 1 mile south of, northeast corner of crossroads, in telephone pole; copper nail painted "U. S. T. B. M. 1063.20 "

1, 063. 14
Oakland, at road west on section line, north end of town, east side of road at head of \(T\), in telephone pole; copper nail stamped "U. S. T. B. M. 1053.3 " \(\qquad\) \(1,052.23\)
Oakland, 1.6 miles west of, 3 miles north of Tarlton, in southwest corner of crossroads, in northeast corner of yard of district No. 16 schoolhouse and United Brethren Church; iron post stamped " 1015 Ohio"

1, 015: 305
Oakland, 3.1 miles west of, at T road east; top of section corner rock,
painted " U. S. T. B. M. 1091.5 "
Amanda, 2.7 miles west of, intersection of Lancaster pike at Israel Evangelical Lutheran Church, in southwest angle of road, opposite David Young's house ; iron post stamped " 974 Ohio" \(\qquad\)
Amanda, 1.7 miles west of, iron bridge over Clear Creek, in southeast wing wall, center of top rock, 3 inches from west edge; chiseled square painted " U. S. T. B. M. 891.4 "
973.600

Amanda, 1,500 feet west of railroad crossing \(T\) road north to Royalton, 50 feet west of road, on coping stone of stone culvert south of road; chiseled square, painted " U. S. T. B. M. 902.8 "

From point near Amanda north to Royalton, thence west to Ashville, thence south to point 4 miles north of Circleville.

Amanda, 1.2 miles north of, east side of road at T road west, 15 feet south of center of \(T\), in telephone pole; copper nail stamped "U. S. T. B. M. 938.8 "
Amanda, 2.1 miles north of, at road intersection, north side of road, 60 feet northwest of center of intersection, in small telephone pole; copper nail painted "U.S.T. B. M. 934.5"

Amanda, 3 miles north of, southwest corner of crossroads at Amanda Township Cemetery, in corner of cemetery; iron post stamped "Ohio 935 "

Feet. 934. 964

Royalton, 1.5 miles south of, in southwest corner of wing wal of iron bridge, 200 feet south of crosscoads; chiseled square painted "U. S. T. B. M. \(940.5 "\)
940.32

Royalton, at southeast corner of public-school building; iron post stamped "Prim. Trav. Sta. No. 6, 1906, Ohio 1011 " 1,011. 211
Royalton, 1.2 miles west of, southeast angle of lane south, in telephone pole ; copper nail painted "U. S. T. B. M. 959 "
959.02

Royalton, 2 miles west of, northeast angle of crossroads, in telephone pole ; copper nail stamped " U. S. T. B. M. 932 "
931.66

Royalton, 3.7 miles west of, at southwest corner of yard of H. S. Keizeru, northeast corner of crossroads; iron post stamped " 877 Ohio"
876.782

Royalton, 4.6 miles west of, soutinwest corner of crossroads, in concrete foundation of corner post of farm fence; chiseled square painted "U. S. T. B. M. 832.3"
832.38

Ashville, 4.5 miles east of, on east side of road at T road east; iron post stamped " Prim. Trav. Sta. No. 5, 1906, Ohio 790 " \(\qquad\)
Ashville, 3.5 miles east of, T road west, at Brinker's store, east side of road, chiseled square on fence post foundation; copper nail painted "U. S. T. B. M. 732.9"
789.943

Asinvilie, 2 miles east of, 800 feet east of Walnut Creek crossing, in northwe t corner of crossroads; iron poṣt stamped " 712 Ohio" --
Ashville, 1.5 miles east of, south side of road, on section line, at \(T\) road north; in fence post; copper nail painted " U. S. T. B. M. \(711.6^{"}\) \(\qquad\)
Ashville, 0.8 mile northeast of, at district No. 3 or Greenfield schoolhouse, at northeast corner of crossroads, in sleeper of culvert; copper nail painted " U. S. T. B. M. 714.3 "
714.08

Ashville, 0.5 mile east of, east side of road at \(T\) road west to Ashville, near small graveyard in telephone pole; eopper nail stamped "U. S. T. B. M. 710.6 "
710.39

Ashville, 1 mile south of, west side of road, at T road east, in telephone guy pole ; copper nail painted " U. S. T. B. M. 710 "
709. 78

Ashville, 2 miles south of, 0.5 mile east of Rhoades, in root of elm tree at southeast corner of intersection; copper nail stamped " \(\mathbf{U}\). S. T. B. M. 704 "
703. 85

Rhoades, 0.8 mile west of, northeast corner of intersection of Columbus and Circleville pikes, in corner wire fence post; copper nail painted " U. S. T. B. M. 698.8 "
732.66
711.929
711.37

Circleville, 4.5 miles north of, on Columbus pike at brick schoolhouse, northeast corner of crossroads, in telephone pole; copper nail, painted " U. S. T. B. M. 699.6 "
699.39

Circleville, 4 miles north of, 60 feet south of viaduct over highway and street car line, about 500 feet north of elevator at siding, 12 feet west of center of track; iron post stamped " 693 Ohio"
693.040

From Circleville northeast along highway to point 2.8 miles west of Amanda.
Circleville, southeast corner of Main and Mingo streets, on stone; chiseled square painted "U. S. T. B. M. 690 "

Circleville, 1.3 miles northeast of, northeast corner of fair grounds, southwest corner of road east; chiseled square on rock, painted Feet. "U. S. T. B. M. 715 " 715.3

Circleville, 3 miles northeast of, on Lancaster pike, southeast corner of crossroads; iron post stamped " 778 Ohio"
777.534

Circleville, 3.9 miles northeast of, northeast corner of T road north to Mineral Springs, on stone ; chiseled square painted " U. S. T. B. M. " 865 "
865.06

Circleville, 4.4 miles northeast of, at west entrance to Infirmary, southeast corner of culvert, on cornerstone; chiseled square painted "U. S. T. B. M. S91"
Circleville, 4.7 miles northeast of, northeast corner of crossroads, in telephone pole; copper nail painted "U. S. T. B. M. 931 ".
Circleville, 5.3 miles northeast of, northeast angle of T road north, on concrete culvert ; chiseled square painted "U. S. T. B. M. 966 "-
Circleville, 6.5 miles northeast of, on Lancaster pike, in southeast corner of crossroads on county line; iron post stamped " 1055 Ohio"
Circleville, 7.5 miles northeast of, southeast corner of \(\mathbf{T}\) road south, in culvert ; copper nail painted "U. S. T. B. M. 1072.3 "
Circleville, 8.7 miles northeast of, southwest angle of crossroads, in telephone pole; copper nail painted "U. S. T. B. M. 1023.4" \(1,023.41\)

From crossroads on Circleville and Lancaster pike at county line north along county line to Ashton and Royalton pike.
Lancaster pike, 1.3 miles north of, northeast corner of \(T\) road north, on county line, in fence post ; copper nail painted " U. S. T. B. M. 1075.2 "

Lancaster pike, 2.2 miles north of, 150 feet north of T road east, south side of road; chiseled square on concrete culvert, painted "U. S. T. B. M. 1014 "

Lancaster pike, 3.2 miles north of, 1 mile east of Ringgold, in southeast corner of crossroads, intersection of county line and Ringgold pike; iron post stamped " 948 Ohio"
そinggold pike, 1.4 miles north of, southeast angle at lane west, in telephone pole; copper nail painted "U. S. T. B. M. 841.2 "
Walnut township district No. 6 schoolhouse, at southwest corner of crossroads, in fence post at northeast corner of schoolhouse ; copper nail painted "U. S. T. B. M. 852 "
Royalton, 3.6 miles west of, at northeast corner of crossroads, southwest corner of yard of H. S. Kiger's house; iron post stamped " 877 Ohio"
876. 782

From store 3.5 miles east of Ashville south to Circleville and Lancaster pike.
Ashville, 3.5 miles east of, at Brinker's store, easi side of road at T road west, in foundation of fence post; chiseled square and copper nail painted " U. S. T. B. M. 732.9 "
732.66

Hedges Chapel, M. E. Church, 25 feet south of crossroads, west side of road, on concrete walk; chiseled square painted " U. S. T. B. M. 734.1"
735. 89

Hedges Chapel, M. E. Church, 1 mile south of, at election house, northwest corner of crossroads; iron post stamped " 763 Ohio"--
Emanuel Erangelical Church and Dry Run schoolhouse, northeast corner of crossroads at, on stone; chiseled square painted "U. S. T. B. M. 820.5 "

Emanuel Evangelical Church and Dry Run schoolhouse, 1 mile south of, northeast corner of crossroads, at southwest corner of George Heffner's house; iron post stamped " 807 Ohio"

Feet.

Grace Chapel, 3 miles east of, south side of road at intersection of Ringgold pike, in telephone pole; copper nail, painted "U. S. T. B. M. 781.6" \(\qquad\) 781.32

Lancaster pike, 1 mile north of, in northwest angle of T road west; chiseled square on stone, marked " 777 "
776.71

Circleville, 3 miles northeast of, in southeast corner of crossroads, on Lancaster pike; iron post stamped " 778 Ohio"
777.534

From Circleville northwest along highways to Spunkeytown Crossroads (portion of line).
Circleville, floor of bridge over Scioto River
Circleville, Scioto River, surface of water under bridge, June 14, 1911
Circleville, 1 mile west of, 140 feet west of milepost 1 , south side of road, on stone in retaining wall; chiseled square painted "U. S. T. B. M. \(660^{\prime \prime}\)

Circleville, 1.6 miles west of, at Spunkeytown Crossroads, 150 feet south of entrance to Thomas Brown's yard, at old tollgate; iron post stamped "Prim. Trav. Sta. No. 76, Ohio 665 "

\section*{From point near Ashville to South Bloomfield (portion of line).}

Ashville, 0.5 mile west of, on Bloomfield turnpike, southwest corner of T road south, in north side of telephone pole; copper nail \(\qquad\)
South Bloomfield, 0.25 mile south of, on Bloomfield pike, west side of road, in telephone pole; copper nail painted "U. S. 698" \(\qquad\)
South Bloomfield, in southeast corner of schoolhouse yard; iron post stamped "Prim. Trav. Sta. No. 2, 697 Ohio"

\section*{Near Westfall.}

Westfall, 0.3 mile south of schoolhouse, east side of road at road corners; iron post stamped "661 Ohio"
660. 785

Primary leveling by C. H. Burns in 1907.
From point southwest of Middle Fork southwest via Stringtown to Adelphi. Stringtown, in sandstone post at southwest corner of Wm. Ballard's pasture; aluminum tablet stamped "Prim. Trav. Sta. No. 9, 821 "--

\section*{CLARINGTON QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\circ}-40^{\circ}\); longitude \(80^{\circ} 45^{\circ}-81^{\circ}\).]
Primary leveling by B. J. Green and C. H. Birdseye in 1902.
From Benwood southwest along Ohio River \& Western Ry, to Kelsey.
Weegee Creek Bridge, on southeast abutment; chiseled square_
645.22

Jacobsburg triangulation station, 0.5 mile west of Key station, Robert McKelvey's residence, in top of foundation at northeast corner of house; aluminum tablet stamped " 1385 Stbnvl"
\(1,384.815\)
From Kelsey south along Ohio River \& Western Ry, and public roads via Armstrong Mills and Crabapple to Cameron, thence east to Graysville.
Armstrong Mills, 0.12 mile east of, wagon-road bridge over Captina Creek, at northeast corner of bridge floor ; square cut in stone....
Armstrong Mills, 0.25 mile west of, on northeast corner of foundation of brick church; bronze tablet stamped " 806 Stbuvl"
770.23
805.507
Cameron, iron bridge over Sunfish Creek, on top of stone supporting truss at west end of south abutment; bronze tablet stamped " 698

Feet.Stbnvl" 698.031

Clarington, 2 miles west of, iron bridge over Nigger Run, on top stone of southwest abutment; chisel mark
From Kelsey northwest along highway to Belmont.
Kelsey, in front of station; top of rail
1,243. 8

\section*{At Myers Knob.}
Myers Knob triangulation station, 5 miles southwest of Bellaire, in
top of monument; bronze tablet_----------1,359.863
From Dexter schoolhouse (2 miles east of Beallsville) east along German Ridge to Powhatan Point.
Beallsville triangulation station, 3 miles east of Beallsville, on top of Gale Knob, on top of marble monument; bronze triangulation tablet 1, 414. 740
Switzer, 1 mile east of, Switzerland Township, on north side of foundation east of front entrance to German Lutheran Church; aluminum tablet stamped "1291 Stbnvl" \(1,290.815\)

\section*{CLEVELAND QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by D. H. Baldwin in 1902.
From Cleveland south along Wheeling \& Lake Erie R. R. to Bedford.
Cleveland, south corner of Front and River streets, north corner of Johnson Block, on corner stone of water table; chiseled cross (U. S. Engineer Corps bench mark No. 2)
577. 736
Cleveland, zero mark of U. S. Engineer Corps water gage, plane of reference for harbor improvements, and mean elevation of Lake Erie for years 1860 to 1875 , inclusive \({ }^{1}\)
572.677

Cleveland, in front of Wheeling \& Lake Erie R. R. station; top of rail
641.6
Cleveland, grade crossing of Wheeling \& Lake Erie R. R. and Cleveland Terminal \& Valley R. R.; top of rail
587. 35
Cleveland, east corner of Independence Street and East Clark Avenue, north corner of railroad bridge over canal and street, on fourth step of wing wall above avenue; chiseled square
591.93
Newberg, in front of station; top of southwest rail
780.7
Cleveland, grade crossing of Pennsylvania R. R. and Wheeling \&
Lake Erie R. R.; top of rail_
785.01
Cleveland, Miles Avenue, crossing near station; top of rail_...........
849.2
Cleveland, Miles Avenue, 0.84 mile south of station; northwest corner of girder bridge No. 15 over Akron, Bedford \& Cleveland R. R., on coping stone of foundation; chiseled square
822.72
Bedford, 2.6 miles northwest of; top of stone milepost " C 10 " (railroad bench mark)
906. 50
Bedford, in front of Wheeling \& Lake Erie R. R. station; top of rail_-
Bedford, north corner of town hall, face of fourth course of foundation stones from top; chiseled cross
946.0
949.64
From Bedford along Pennsylvania R. R, to Macedonia.
Bedford, in front of Pennsylvania R. R. station; top of rail
941.0
Bedford, 1.62 miles south of; grade crossing of the Akron, Bedford \& Cleveland and the Pennsylvania railroads; top of rail
994.9

\footnotetext{
\({ }^{1}\) This elevation was obtained from primary leveling from bench mark No. 2 and is 0.09 foot lower than would be obtained by using the difference by the Lake Survey.
\[
45281^{\circ}-\text { Bull. } 651-17-7
\]
}

\title{
Macedonia, 1.52 miles north of, southwest corner of girder bridge Feet. over highway, on coping stone of foundation ; chiseled square_...- 1,038. 76 \\ Macedonia, southwest wing wall of girder bridge over road, in top of highest step; bronze tablet stamped " 1004 Cleveland " \\ 1,003. 395
}

\section*{From Macedonia west along highway to Northfield.}

Little York, in front of station; top of rail
973.2

Little York, 350 feet south of station, on north end of arch wall east side of highway; chiseled square
969.98

Highland Springs, in front of station; top of rail
1, 071.9
Primary leveling by George Bailey in 1901.
From Cleveland east along highway to Warrensville, thence south to Macedonia.
Cleveland, Lake Erie; U. S. Engineer Corps water-gage readings (mean elevation for years 1886-1900, inclusive)
572.153

Cleveland, Superior Street, in front of soldiers' monument in public square, west end of coping; aluminum tablet stamped " 608 Cleveland 1901 "
668.692

Warrensville, west end of brick schoolhouse, north face, in foundation 1 foot from ground; bronze tablet stamped " 1046 Cleveland 1901"

1, 047.794
Bedford, 2.5 miles northeast of, red brick schoolhouse at intersection of 5 roads, left side of door, bottom step near wall; small square
\(1,082.07\)
From Cleveland via North Royalton and Boston to Millers Corners.
Cleveland, Big Four railway bridge over Cuyahoga River, southeast side of track, on east end of abutment; chiseled cross
592. 26

North Royalton, Church of Christ, east face of foundation, about 2 feet from ground; bronze tablet stamped " 1237 Cleveland 1901 " 1, 236. 640
Boston, between Cuyahoga River and mill race to paper mill, southeast corner of masonry pier; bronze tablet stamped " 664 Cleveland" \(\qquad\) 663.815

\section*{COLLEGE CORNER QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by E. C. Bibbee in 1915.
From point 9.25 miles north of Morning Sun west to State line, thence north to point 3 miles west of West Florence.

Morning Sun, 9.25 miles north of, in west side of south abutment of wooden bridge over stream; aluminum tablet stamped " 1119 " (Bull. 411, p. 131)
\(1,119.908\)
T. 7 N., R. \(1 \mathrm{E} ., 50\) feet north by 12 feet east of the southwest corner of sec. 3, on east abutment of south end of stone culvert; chiseled square, " 1114 "" painted on culvert

1, 113.90
T. 7 N., R. 1 E., 150 feet east by 15 feet south of northeast corner of sec. 8 , on south side of road, on large bowlder; chiseled square, " 1110 " painted on bowlder.
\[
1,109.72
\]
T. 7 N., R. 1 E., 15 feet north by 15 feet east of southwest corner of sec. 5 , on east abutment of south end of stone header over end of 3-foot tile culvert; chiseled square, " 1119 " painted on telephone pole

\section*{PRECISE AND PRIMARY LEVELING.}
T. 7 N., R. 1 E., at southwest corner of sec. 6,3 miles west and 1 mile south of West Florence, on Ohio-Indiana State line, 2 feet east of corner fence post, on sandstone rock; chiseled square, " 1129 " painted on telephone pole

Feet.
\(1,128.77\)
Tps. 7 and 8 N., R. 1 E., 27 feet north and 15 feet east of corner of secs. 1 and 6,3 miles west of West Florence, on Ohio-Indiana State line, at northeast corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 38, 1135 "

Frcm point 3 miles west by 1 mile south of West Florence along highways south on State line and east to point 2 miles north of Morning Sun.
T. 7 N., R. 1 E., at southwest corner of sec. 7, 10 miles north of College Corner, on Ohio-Indiana State line, at northwest corner of T road east, on north end of concrete header; chiseled square, " 1119 " painted on header
\(1,118.59\)
T. 7 N., R. 1 E., 600 feet north of southwest corner of sec. 18,9 miles north of College Corner, on Ohio-Indiana State line, on east abutment of south end of concrete bridge; chiseled square, " 1102 " painted on bridge girder
T. 7 N., R. 1 E., 30 feet north by 22 feet east of southwest corner of sec. 19,8 miles north of College Corner, on Ohio-Indiana State line, iron post stamped " 1094 Ohio"

1, 094. 240
T. 7 N., R. 1 E., 680 feet west of northwest corner of sec. 31,7 miles north of College Corner, on west abutment on north side of covered bridge; chiseled square, "1064" painted on bridge

1, 063.85
T. 7 N., R. 1 E., at southwest corner of sec. 31, 6 miles north of College Corner, on Ohio-Indiana State line, on east limestone header over end of tile; chiseled square, " 1046 " painted on telephone pole near
College Corner, 5 miles north of, at northeast corner of T road east, 20 feet north by east of center of \(T\) road east; iron post stamped "Prim. Trav. Sta. No. 37, 1052 "
\(1,052.150\)
T. 6 N., R. 1 E., 60 feet north of southwest corner of sec. 7, 4 miles north of College Corner, on Ohio-Indiana State line, in root of elm tree 4 feet in diameter; copper nail, " 1043 " painted on tree \(1,043.15\)
T. 6 N., R. 1 E., corner of secs. \(7,8,18\), and 17,4 miles northeast of College Corner, on corner-stone rock; highest point, "1035" painted on corner fence post \(1,034.80\)
Fairhaven, 1 mile southwest of, at southwest corner of sec. 9, T. 6 N., R. 1 E., near northwest corner of T road north, on south end of large flat rock over west end of tile drain; chiseled square, " 972 " painted on fence near
Fairhaven, 1 mile southeast of, 20 feet south by 12 feet east of northwest corner of sec. 15, T. 6 N., R. 1 E., in base of telephone pole; 60 -penny spike, " 1027 " painted on pole
\(1,027.30\)
From point 4 miles north of College Corner along highway south along State line and east to Oxford.
T. 6 N., R. 1 E., 20 feet north by east of northwest corner of sec. 19, 2.92 miles north of College Corner, on Ohio-Indiana State line, 1 foot east of fence, in root of maple tree; copper nail, "1027" painted on fence
T. 6 N., R. 1 E., at southwest corner of sec. 19, 2 miles north of College Corner, on Ohio-Indiana State line, 20 feet north by 15 feet west of center of T road east, on corner stone ; chiseled square, "1014" painted on fence

College Corner, 0.93 mile north of, 60 feet north by 20 feet west from southwest corner of sec. 30, T. 6 N., R. 1 E., on Ohio-Indiana State
line, on east end of south side of concrete walk leading to Frank Rose's residence; chiseled cross, " 989 " painted on mail-box post_-

Feet. 989.34

College Corner, in southeast corner of Union Schoolhouse yard; iron post stamped " 991 Ohio"
991.340

College Corner, on Ohio-Indiana State line, at corner of Preble and Butler counties; street intersection, " 996 " painted on curb
College Corner, at Cincinnati, Hamilton \& Dayton Ry. crossing, on Ohio-Indiana State line; top of rail, " 989 " painted on crossing sign \(\qquad\)
College Corner, 0.58 mile south of, 100 feet south of southwest corner of cemetery, 10 feet east of wheel track, in root of elm tree 4 feet in diameter; copper nail, " 977 " painted on fence near
996.3
989.1
976. 84

College Corner, 1.25 miles south of, 40 feet east of Ohio-Indiana State line, on south side of road, in root of walnut tree 1.3 feet in diameter ; copper nail, " 979 " painted on fence opposite
T. 5 N., R. 1 E., 0.25 mile east of southwest corner of sec. 7, 2 miles southeast of College Corner, 0.25 mile east of Ohio-Indiana State line, at northeast corner of T road north, on large stone; chiseled square, " 973 " painted on telephone pole
972. 81
T. 5 N., R. 1 E., 30 feet north by 20 feet east from southwest corner of sec. 18, 3 miles south of College Corner, on Ohio-Indiana State line, in root of maple tree; copper nail, " 973 " painted on telephone pole near \(\qquad\)
Tps. 5 and 10 N., Rs. 1 E. and 1 W., 20 feet south by 45 feet west of corner of secs. \(19,24,25\), and 30,4 miles west of Oxford, on OhioIndiana State line, in northeast corner of Frank Hansel's field, at T road south; iron post stamped "Prim. Trav. Sta. No. 36, Ohio 1910889 " \(\qquad\) Oxford, 3.17 miles west of, on Oxford and Fairfield pike, directly in front of R. Drake's residence, on base of concrete hitching post; chiseled square, " 998 " painted on hitching post \(\qquad\)
Oxford, 2.08 miles west of, on Oxford and Fairfield pike, on south end of concrete walk leading to Perry Aker's residence; chiseled square, " 1031 " painted on mail-box post
Oxford, 1 mile west of, at northwest corner of George Mann's barnyard, on south side of road, 4 feet north of fence, in root of maple tree; copper nail, " 969 " painted on telephone pole near \(\qquad\)

COLUMBIANA QUADRANGLE.
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\). ]
Primary leveling by H. W. Peabody in 1906.
From Calla east along highway to New Middletown, thence south via Petersburg to East Palestine.

Calla, 3.5 miles east of, in east face of northeast corner of Paradise Reformed Church, at southwest corner of crossroads; aluminum tablet stamped " 11651906 " \(\qquad\) \(1,164,308\)
Calla, 6.5 miles east of, at Coalmines, 70 feet east of Youngstown \& Southern Electric R. R., in wing wall, at southwest corner of small iron bridge; aluminum tablet stamped " 1133 "

New Middletown, 3 miles west of, in wing wall, at southeast corner of iron bridge over branch of Yellow Creek; aluminum tablet stamped " 1068 "

Feet.
New Middletown, in west face of northwest corner of school building at southeast corner of road forks at south edge of village; aluminum tablet stamped " 1257 "
\(1,256.347\)
Petersburg, in east face of southeast corner of Presbyterian Church; aluminum tablet stamped " 1115 " \(1,114.685\)
Petersburg, in west part of village at road forks, on stone step to Methodist Church; chisel mark.
\(1,137.91\)
Unity, 500 feet west of northwest corner of main crossroads, in west face and 10 feet from southwest corner of Methodist Church; aluminum tablet stamped " 12161906 " \(1,215.565\)
East Palestine, in north face near northwest corner of public school building on School Street; aluminum tablet stamped "1027 1906"- 1, 026.537
East Palestine, 48.8 miles west of Pittsburgh, southeast corner of southeast pier to coal tipple at State line (Pennsylvania R. R. bench mark)

\section*{From Petersburg west via Columbiana to Washingtonville.}

New Springfield, 360 feet east of main crossroads, in center of north face of public school building, in water table; aluminum tablet stamped " 12131906 "

1,213. 099
Columbiana, 3 miles east-northeast of, on northwest corner of \(T\) road to west, in east face of southeast corner of Henry Vandel's dwelling; aluminum tablet stamped "1143 1906" \(1,142.866\)
Columbiana, southeast corner of Main and Pittsburg streets, in north face of northwest corner of M. E. Church; aluminum tablet stamped " 1138 1906" \(\qquad\) 1, 137. 978
Columbiana, 2.5 miles north by 1 mile west of, southwest corner of crossroads, in east face near northeast corner of Germantown schoolhouse; aluminum tablet stamped "1175 1906 " 1, 174. 762

From Columbiana south to point near Fairview schoolhouse, thence east to New Waterford.

Columbiana, southwest corner of doorsill of station, 59.61 miles west of Pittsburgh; Pittsburgh, Fort Wayne \& Chicago Ry. bench mark_ 1, 116. 791
Middleton, about 500 feet north of main crossroads, in south face of southeast corner of schoolhouse; aluminum tablet stamped " 1262 1906 "
New Waterford, in north face near northwest corner of public school
building; aluminum tablet stamped " 10531906 "
New Waterford, northeast corner of north coping of Pennsylvania R. R. bridge; Pennsylvania R. R. bench mark
\(1,057.055\)

From East Palestine south along highway to Negley, thence west and southwest along Pittsburgh, Lisbon \& Western R. R. to Elkton.

Negley, 0.5 mile west of station, in bridge seat at northeast corner of Pittsburgh, Lisbon \& Western R. R. bridge over Leslie Run; aluminum tablet stamped " 847 1906"

Mill Rock, 3.5 miles west of Negley, at southeast corner of railroad
and highway crossing, at northwest corner of stone mill; aluminum tablet stamped " 928 1906"

Feet.
927. 873

Signal, 0.25 mile east of, in bridge seat at south corner of bridge over public road; aluminum tablet stamped " 10691906 "
Elkton, in bridge over Elk Run, last stone in northwest abutment; aluminum tablet stamped " 898 Stbnvl"

\section*{From Elkton north to Fairview schoolhouse.}

Elkton, 2.5 miles north of, in center of southeast face of church; aluminum tablet stamped " 11531906 " \(\qquad\) 1, 152. 492
Fairview schoolhouse, 4 miles south of Columbiana, in east face at southeast corner; aluminum tablet stamped "1286 1906"

COLUMBUS QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ} 15^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ} 15^{\prime}\).]
For bench marks in this quadrangle see Dublin, East Columbus, West Columbus, and Westerville quadrangles.

\section*{COLUMBUS GROVE QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\). ]
Precise leveling by the Coast and Geodetic Survey.
From Ottawa south along Cincinnati, Hamilton \& Dayton Ry. to Lima.
Columbus Grove, about 3 miles north of, 110 feet above milepost 56 , on the southwest quarter of abutment of Cincinnati, Hamilton \& Dayton Ry. bridge 51, on second step below bridge seat course, about 6 inches from face and 6 inches from edge of stone; chiseled square (C. \& G. S. b. m. \(\mathrm{O}_{1}\)
Columbus Grove, north side of Sycamore Street, about 33 feet east of Cincinnati, Hamilton \& Dayton Ry., on the A. H. Day Building, at the left side of east entrance (in 1899 occupied by post office), on southwest corner of iron plate under iron post; square cut with a cold chisel (C. \& G. S. b. m. P P
770.993

Columbus Grove, Theodore Kunneke Building, southwest corner of Sycamore and High streets, in water table on the south side of Sycamore Street, about 24 feet west of east corner, at head of stair descending into basement; brass bolt marked with a horizontal line (C. \& G. S. b. m. Q \(\mathrm{Q}_{1}\) )
775.919

West Cairo, Allen County, 2.5 miles north of, on Cincinnati, Hamilton \& Dayton Ry., 50 feet below public-road crossing, on southeast quarter of culvert over Sycamore Creek, southwest corner of second step ; chiseled square (C. \& G. S. b. m. R1)

West Cairo, 410 feet west of Cincinnati, Hamilton \& Dayton Ry. track, south side of main cross street, on the northwest corner of foundation of dwelling of Charles Wallis, in north face near west angle of water table; brass bolt with horizontal line (C. \& G. S. b. \(\mathrm{m} . \mathrm{S}_{1}\) )
814.618

Bath Township, midway between West Cairo and Lima, on Cincinnati, Hamilton \& Dayton Ry., at east-west road on section line between secs. 17 and 18, in front of Henry Boose's residence, in the northeast quarter of viaduct arch, under track, on south end of seventh step from top; chiseled square (C. \& G. S. b. m. T1 )

\section*{Primary leveling in 1905 by G. M. Dimmick.}

From Columbus Grove northeast along highway to Pandora, thence west to point 3 miles north of Columbus Grove.
Columbus Grove, northeast corner sec. 33, T. 1 S., R. 7 E., corner of Sycamore and High streets, north face of Kunneke Building, in water table, 24 feet west of northeast corner; aluminum tablet stamped " 776 Adj 1903"

Feet.
775.937

Columbus Grove, 3 miles north of, between secs. 9 and 10, T. 1. S., R. 7 E., in west end of south abutment of bridge 51 ; aluminum tablet stamped " 748 Adj 1903"
748.046

From point near Columbus Grove west to Kalida, thence south to Rimer, thence east and south to West Cairo.
Columbus Grove, 7.45 miles northwest of, center of sec. 13, T. 1 S., R. 6 E., in brickwork of schoolhouse (district 3), at south end of east face; aluminum tablet stamped " 740 Adj 1903 " \(\qquad\)
Kalida, center of sec. 5, T. 1 S., R. 6 E., in brickwork of schoolhouse, at west end of south face; aluminum tablet stamped " 731 Adj 1903 " \(\qquad\)
Rimer, 2.3 miles north of, south side of sec. 30 , T. 1. S., R. 6 E., in brickwork of schoolhouse (district 3), at south end of west face; aluminum tablet stamped " 749 Adj 1903 "
740.070
731. 084
748.447

Rimer, near center of sec. 7, T. 2 S., R. 6 E., in brickwork of schoolhouse (district 9), at north end of east face; aluminum tablet stamped " 760 Adj 1903 " \(\qquad\)
Vaughnsville, east side of sec. 10, T. 2 S., R. 6 E., in foundation wall of Christian Church, at south end of west face; aluminum tablet stamped " 768 Adj 1903 " \(\qquad\)
Columbus Grove, 3.5 miles south of, west side of sec. 10, T. 2 S., R. 7 E., 70 feet south of highway, in west end of south abutment of railroad culvert over Sycamore Oreek; aluminum tablet stamped " 791 Adj 1903 "
West Cairo, north side of sec. 32, T. 2 S., R. 7 E., in water table of residence of Chas. Wallis, at north end of west face; aluminum tablet stamped " 815 Adj 1903 "
759. 708
768.003
790.543

Mas2t
814.594

From Rimer south along highway to Allentown, thence east to Lima.
Rimer, 3.17 miles south of, west side of sec. 29 , T. 2 S., R. 6 E., in water table of schoolhouse (district 3), at south end of west face; aluminum tablet stamped " 783 Adj 1903"
Elida, at southwest corner sec. 8, T. 3 S., R. 6 E., in water table of Methodist Church, at east end of south face; aluminum tablet stamped " 797 Adj 1903 "
783. 276
797. 126

Allentown, 3.48 miles south of, northeast corner of sec. 29, T. 3 S., R. 6 E ., in south end of east face of brickwork of schoolhouse; aluminum tablet stamped " 823 Adj 1903 "
823. 257

From Lima northeast along highway to Beaverdam, thence west to West Cairo.
Lima, 3 miles north of, near southeast corner of sec. 7, T. 3 S., R. 7 E., in top of last step of northeast retaining wall of arched stone highway passage under railway track; aluminum tablet stamped " 821 Adj 1903 "
821.196

Lima, 6.15 miles northeast of, SW. \(\frac{1}{4}\) sec. 11, T. 3 S., R. 7 E., 400 feet north of 5 corners, in top of north end of west retaining wall of stone highway culvert; aluminum tablet stamped " 876 Adj 1903 "-

\section*{SPIRIT LEVELING IN OHIO.}

\section*{CONESVILLE QUADRANGLE. \\ [Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]}

From point 5.6 miles north of Zanesville north 5 miles.
Primary leveling by C. H. Semper and E. C. Bibbee in 1908.

Zanesville, 5.6 miles north of, in ground west of track opposite mile-
Feet.
723.66

Gilbert, 300 feet south of station, in top of north abutment of railroad bridge; aluminum tablet stamped " 710 "
Gilbert, in front of station; top of rail
709. 899
715.1

Gilbert, 1.6 miles north of, west of track opposite milepost T-9; top of rail set vertically in ground, marked "B. M. 736 "
735. 53

Ellis, 0.5 mile north of, west of track opposite milepost T-8; top of rail set vertically in ground, marked "B. M. 723 "
723.15

Ellis, 1.5 miles north of, west of track opposite milepost T-7; top of rail set vertically, marked "B. M. 716 "
716. 35

Ellis, 1.6 miles north of, 100 feet south of flag station, 80 feet west of track, west of road, in top of culvert masonry; aluminum tablet stamped "716"
716. 403

Ellis, 2.5 miles north of, west of track opposite milepost T-6; top of rail set vertically in ground, marked "B. M. 719 "
718. 65

\section*{From Trinway northeast via Conesville to Coshocton.}

Adams Mills, in canal lock, in top of south end at east side of gate wall; aluminum tablet stamped " 736 "
735. 765

Adams Mills, 2.5 miles east of, 60 feet west of milepost P-130, in culvert 10 feet south of Pennsylvania R. R.; aluminum tablet stamped " 748 " \(\qquad\)
Conesville, in front of station; top of rail
747.970

Conesville, 1,170 feet north of station, west of track, in front foundation stone of water tank; aluminum tablet stamped " 745 " \(\qquad\)
Franklin, in front of station; top of rail \(\qquad\)
Franklin, 1.6 miles north of, at railroad crossing, in top of bridge seat on west side of north end of abutment of highway bridge; aluminum tablet stamped " 769 "
769. 193

\section*{From Sonora north to Conesville.}

Sonora, 2.52 miles northwest of, 600 feet north of C. Reichel's residence, in northeast abutment of stone-arch bridge; aluminum tablet stamped " 877 "
876. 800

East Greenwood, center of T road east, in top of section corner stone; aluminum tablet stamped " 982 "
981.837

Adamsville, 1.54 miles south of, in east abutment of concrete bridge over Simms Creek; aluminum tablet stamped " 849 "
849.091

Opposite T road west, on northwest corner of barn; chiseled square marked " 894.7"
894.57

Adamsville, 0.91 mile south of, at northeast corner of \(T\) road east, on stone; chiseled square painted " 1005.6 "

1, 005.51
Adamsville, in northeast corner of street crossing in front of botel, on large stone; chiseled square marked " 1019.8 "

1, 019. 19
Adamsville, 1.57 miles north of, on rock in center of \(T\) road west; chiseled square marked " 982.2 "
982.09
Adamsville, 2.31 miles north of, 500 feet north of \(T\) road east, 60
feet west of public road, in southeast corner of barn owned by \(F\). Hanks; aluminum tablet stamped " 1032 "

Feet. 1,031. 512
Adamsville, \(\mathbf{3 . 6 1}\) miles north of, at \(Y\) road east, in center of road, 4 feet from west fence; chiseled square painted " 1006.0 "
\(1,005.90\)
Ferncliff, 0.25 mile south of, in southeast corner of foundation of J. W. Vensel's house ; aluminum tablet stamped " 1081 " \(\qquad\) 1, 081. 212
Wills Creek, 3.07 miles south of, on west side of south abutment of bridge over Wolf Creek; chiseled square marked " 742.1 " \(\qquad\) 741.91

Wills Creek, 2.36 miles south of, 150 feet north of \(T\) road, in west side of south abutment of small wooden bridge; aluminum tablet stamped "751"
750.621

Wills Creek, 2 miles south of, on east side of north abutment of iron bridge; chiseled square marked "744.9"
744.63

Wills Creek, 0.9 mile south of, 50 feet west of large covered bridge, at T road east, on large rock ; chiseled square marked " 738.6 "-
738.38

Wills Creek, 50 feet west of \(T\) road, in west side of north abutment of new iron bridge; aluminum tablet stamped " 747 "
747.223

Wills Creek, 0.88 mile west of, 350 feet west of Robinson Church, on
large stone north of road ; paint spot, painted " 858.9 "
Conesville, 0.5 mile north of, tool house and waiting room of Wheeling \& Lake Erie R. R. station, on southwest corner of platform; bolt head painted " 744.4 " \(\qquad\)
Conesville, 1,170 feet north of station, west side of front foundation of Pennsylvania R. R. water tank; aluminum tablet stamped " 745 "-
744.11

From point 3 miles southwest of Plainfield via Marquand to point 2 miles soụth of Wills Creek.
Plainfield, 3.92 miles southwest of, 50 feet east of \(\mathbf{T}\) road north, in north side of west abutment of small wooden bridge; aluminum tablet stamped " 749 "
Marquand, 0.55 mile north of, at T road north, on top step of church; chiseled square marked " 791.9 " \(\qquad\)
Marquand, in west side of south pier of iron bridge over Wills Creek; aluminum tablet stamped " 749 " \(\qquad\)
Marquand, 1.09 miles west of, on large rock north of road; chiseled square marked " 806.0 "
744.981
749. 466
791.87
748.523

From Marquand southeast via Otsego to Bloomfield.
Marquand, 2.09 miles east of, on south side of east abutment of small wooden bridge; chiseled square marked " 805.6 "
805.54

Otsego, at southeast corner of schoolhouse; iron post stamped "Prim. Trav. Sta. No. 59, 809 "
809. 408

Otsego, 1.05 miles south of, on stone on east abutment of small culvert; chiseled square painted " 793.6 "
793.53

Otsego, 3.35 miles south of, in west side of south abutment of small wooden bridge; aluminum tablet stamped " 815 "
814.848

CONNEAUT QUADRANGLE.
[Latitude \(41^{\circ} 45^{\prime}-42^{\circ}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).]
From Pennsylvania-Ohio State line west along Pennsylvania \& Ohio Electrio R. R. tracks to Ashtabula.

Primary leveling by E. I. Shea in 1904.
Conneaut, in southeast corner of Hotel Cleveland, in face of stone foundation wall; aluminum tablet stamped " 662 Cleve"

> North Kingsville, in face of stone sill at northwest corner of large brick building at southeast corner of crossroads; aluminum tablet stamped "715 Cleve"

> Feet.
> 715.220

From Conneaut south along highway to Pierpont, thence west to bridge north of Jefferson.

Farnham, 0.3 mile south of former post office, in south wing wall on southeast end of covered bridge No. 1 over Conneaut Creek; bronze tablet stamped " 745 Cleveland 1904"
745. 535

Bushnell, south abutment stone on west side of iron girder bridge over Ashtabula Creek, 800 feet south of former post office; aluminum tablet stamped " 865 Cleve" \(\qquad\)
Monroe Center, in top of stone culvert on west side of road; bronze tablet stamped " 909 Cleve"
865.092

Pierpont, in stone base at northeast corner of Congregational Church; bronze tablet stamped "995 Cleve"
908.787

Giddings, in west end of culvert stone on north side of road 630 feet west of post office; aluminum tablet stamped " 952 Cleve" \(\qquad\)
Griggs Corners, 300 feet south of former post office, in top stone of north wing wall at northeast corner of iron girder bridge over Griggs Creek; aluminum tablet stamped " 881 Cleye"
880.867

CONTINENTAL QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\circ}\). ]
Precise leveling by C. H. Semper in 1906.
From Crossville west along Cincinnati, Hamilton \& Dayton Ry, to Roselms.
Crossville, 3.62 miles west of, 1 mile east of Cloverdale, bridge over Big Auglaize, west abutment; aluminum tablet stamped " 728 "-
727. 684

Cloverdale, crossing of Toledo, St. Louis \& Western R. R. with Cincinnati, Hamilton \& Dayton Ry.; in front of station
723.5

East Mandale, in front of station; top of rail
723.4

Mandale, in front of station; top of rail
727.4

Mandale, schoolhouse 150 feet west of canal, north side of railroad, east foundation; aluminum tablet stamped " 723 "
722.710

Roselms, in front of station; top of rail
725. 5

Roselms, on east face of McMillan's gristmill; aluminum tablet stamped " 724 "
724.334

From Roselms north along highway to Melrose, thence east to Oakwood, thence north to Big Auglaize River bridge south of Defiance.

Roselms, 0.89 mile north of, north abutment of hridge over Middle Creek, top of east side; square marked "U. S. 716 B. M." \(\qquad\)
Roselms, 3.06 miles north of, south abutment, west side of steel highway bridge; aluminum tablet stamped " 712 "
716.05
712.314

Melrose, northwest corner of State and Superior streets, in cement sidewalk; aluminum tablet stamped " 717 "
717. 160

Oakwood, railroad bridge on Main Street, in face of east abutment; aluminum tablet stamped " 707 "
707. 381

Oakwood, 3.88 miles north of, at crossroads, small bridge, north abutment, west face; aluminum tablet stamped " 718 "

Oakwood, 7.87 miles north of. southeast corner of foundation of schoolhouse at crossroads; aluminum tablet stamped " 717 " \(\qquad\)
Oakwood, 10.09 miles north of, Gorman schoolhouse, west face of foundation; aluminum tablet stamped " 711 "
716. 806

Oakwood, 11.36 miles north of, bridge over Big Auglaize, face of south abutment; square marked "U. S. \(\square\) B. M. 687" \(\qquad\)
Primary leveling by R. C. Seitz in 1907.
From Continental west along New York, Chicago \& St. Louis R. R. to Oakwood.
Continental, in foundation under New York, Chicago, \& St. Louis water tank; aluminum tablet stamped " 726 " \(\qquad\)
Continental, at crossing of the New York, Chicago \& St. Louis and the Ohio Electric railroads; top of rail \(\qquad\)
Continental, at crossing of the New York, Chicago \& St. Louis and the Toledo, St. Louis \& Western railroads; top of rail \(\qquad\)
Hartzburg, at highway crossing, in northeast bridge seat of bridge, 500 feet south of railroad; aluminum tablet stamped " 719 "

From Roselms west, north, and northeast along highways to point near Defiance.

Grover Hill, on south abutment of small iron bridge across Main Street, 1,090 feet north of railroad, in west wing wall; aluminum tablet stamped " 725 "
Grover Hill, in front of station; top of rall \(\qquad\)
Grover Hill, 1.02 miles northwest of, at northwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 4, 727 "
Melrose, 4 miles west of, 990 feet north of New York, Chicago \& St. Louis R. R., 250 feet west of crossroads, in face of south wing wall of east abutment of small iron bridge; aluminum tablet stamped " 708 " (disturbed)
725.389
725.4
725.5
719. 233
725.247
728.6
726.991
707.881
721. 208
703.687
716. 440
717. 141

Primary leveling by H. B. Hoel in 1909.
At Cloverdale.
Cloverdale, intersection of Toledo, St. Louis \& Western R. R. and Cincinnati, Hamilton \& Dayton Ry., in front of station; top of rail painted " 724 "
723. 6

Primary leveling by C. E. Mills in 1911.
From point 4 miles west of Melrose to Broughton.
Hodges, 0.2 mile north by 0.2 mile east of, at northeast corner of crossroads; spike in base of telephone pole, marked " 720.5 "
From point 2.5 miles northeast of Emmett east to point 4 miles northwest of Junction.
Emmett, 0.5 mile north by 3 miles east of, at northeast corner of cross- roads; spike in base of telephone pole, marked " 717.1 "

Feet. 716.79
COSHOCTON QUADRANGLE.
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\). ]
Primary leveling by C. H. Semper in 1908 and S. R. Archer in 1909.
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From Coshocton east to West Lafayette.

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Coshocton, in front of station; top of rail ..... 777.0Coshocton, southeast corner of courthouse; aluminum tablet stamped"Prim. Trav. Sta. No. 57, 777 "776.868
Coshocton, 3.2 miles east of, 900 feet west of milepost \(P\) 119, infront face of concrete foundation of semaphore pole; aluminumtablet stamped " 767 "767.632Coshocton, 4 miles east of, crossing of Wheeling \& Lake Erie R. R.and Pennsylvania R. R.; top of rail769.5
From Chili north along highway to Charm.
Chili, 0.1 mile north of, 150 feet south of crossroads, in top of east wing of north abutment of steel highway bridge over White Eyes Creek; chiseled square
Chili, 2.1 miles northwest of, 0.2 mile east and 0.3 mile south of section corner of secs. \(14,17,13\), and 18, Crawford Township, southwest corner at T road west; iron post stamped " 857 "
New Bedford, 0.3 mile southwest of, southwest corner at \(T\) road southwest, in top of stone; chiseled square \(1,123.42\)
New Bedford, south part of town, at road forks, in west end of stone culvert, at top; chiseled square ..... \(1,136.16\)
New Bedford, general store 400 feet east of crossroads, north side of Main Street, in southeast corner of stone foundation; aluminum tablet stamped " 1155 " ..... \(1,154,958\)
New Bedford, 0.1 mile north of, in southwest corner at T road wèst, county line between Holmes and Coshocton counties, in top of stone step; chiseled square ..... \(1,181.94\)
New Bedford, 2.8 miles north of, northwest corner at \(T\) road west; iron post stamped "1194" ..... 1, 193. 742Charm, 1.5 miles southwest of, at four corners, northeast corner ofnorth road forks, in top of stone; chiseled square1, 208. 63
From Coshocton northwest along Pennsylvania R, R, to Warsaw.
Coshocton, in southeast corner of courthouse; aluminum tablet stamped "Prim. Trav. Sta. No. 57, 777 " ..... 776. 868
Roscoe, in center of crossroads, in top of foundation of well; chiseled square ..... 774.24Coshocton, 3.7 miles northwest of, 116 feet north of railroad, in eastwing of north abutment of swing bridge at road crossing; alumi-num tablet stamped " 776 "776.400
Warsaw Junction, 2.4 miles east of, in top of south end of south wingof concrete dam in Walhonding River; aluminum tablet stamped" 787 "786. 869
Warsaw Junction, 1.4 miles east of, in top of west abutment, northwing, railroad bridge over highway; chiseled square797.28

From Warsaw north along Cleveland, Akron \& Columbus Ry, to Killbuck.
Warsaw Junction, 3 miles northeast of, 60 feet west of railroad, at road crossing, in northeast corner of yard of W. H. Darling's residence, at foot of telephone pole; iron post stamped " 794 "

Feet.
793.984

Warsaw Junction, 4 miles northeast of, in west wing of south abutment of railroad bridge over Killbuck River, in top stone; chiseled square
788.27

Metham, in front of station; top of rail
794.6

Metham, 0.1 mile north of station, northeast corner of road forks, 40 feet east of railroad, at railroad crossing; iron post stamped " 793 "
792. 720

Metham, 1.7 miles north of, east wing of north abutment of railroad bridge 121 over Killbuck River ; chiseled square
794.17

Blissfield, 175 feet west of station, south side of Main Street, 40 feet northeast of crossing, in northwest corner of yard; iron post stamped "Prim. Trav. Sta. No. 171907796 "
796.106

Blissfield, 1.1 miles northeast of, in north wing of west abutment of railroad bridge 120 over Killbuck River, in top stone; chiseled square


Helmick, in front of station; top of rail
796.36

Layland, 1.2 miles south of, south end of switch to sand mill, west right of way line, 50 feet west of track, 580 feet south of sand mill; iron post stamped " 795 " \(\qquad\) Layland, in front of station; top of rail
794.622

Layland, 1.3 miles north of, in east wing of south abutment of railroad bridge 118 over Killbuck River; chiseled square
798.9
804.52

Layland, 2.1 miles north of, 0.8 mile south of Carpenter's switch, 0.8 mile north of railroad bridge over Killbuck River, east right of way line, 30 feet west of center of public road, 300 feet north of bend in public road to east; iron post stamped " 804 "
803.497

\section*{From grade south along highways to Coshocton.}

Clark (Bloomfield), 0.8 mile north of post office, southwest corner at second-class road west; iron post stamped " 941 "
941.347

Clark, 0.3 mile north of, 200 feet south of \(T\) road east, in west wing of north abutment of small iron bridge; chiseled square
823.93

Clark, 2.5 miles south of, west side of Coshocton and Millersburg road, northeast corner of yard on property line, residence of \(D . C\). Miley; iron post stamped " 1127 "
\(1,126.571\)
Clark, 4.5 miles southwest of, 1.3 miles northwest of Mound, T road southwest, 25 feet south of center of road forks, in top of west end of plank drain; copper nail
\(1,023.79\)
Mound, northeast corner of crossroads, 25 feet southwest of west end of steel bridge over Mill Creek; iron post stamped " 817 "
816.897

Mound, 2 miles south by 0.7 mile southeast of, southeast corner of road forks, 25 feet north of large maple tree, 60 feet northeast of small steel bridge over Little Mill Creek; iron post stamped " 805 "-
Keene, 1.6 miles southeast of, north side of road forks at \(T\) road south, inside fence line, 50 feet north of center of road forks; iron post stamped " 770 "
769.687

Canal Lewisville, 2 miles north of, northeast corner at T road east, in top of stone; chiseled square

Canal Lewisville, 175 feet south of crossroads, in east wing of west abutment of steel highway bridge over canal; aluminum tablet stamped " 774 "

Feet.
774.255

\section*{COVINGTON QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).]
Primary leveling by H. W. Peabody in 1905 and H. B. Hoel in 1909.
From Versailles northeast along Cleveland, Cincinnati, Chicago \& St. Louis Ry. to point 1 mile east of Russia.

Versailles, east edge of sec. 24, T. 11 N., R. 3 E., west part of town, southwest corner of Cleveland, Cincinnati, Chicago \& St. Louis Ry. bridge over Indian Creek, in back wall; aluminum tablet stamped " 969 Adj 1905 "
968.659

Versailles, northwest corner of tower house, at intersection of Cleveland, Cincinnati, Chicago \& St. Louis Ry, and Cincinnati, Hamilton \& Dayton Ry., inside painted ring on concrete base of bell crank of interlock switch; chiseled square painted " 980.66 " \(\qquad\) 980.46

Versailles, 3 miles east of, 40 feet south of railroad and 25 feet west of public road, near railroad crossing, at Darke-Shelby county line, on right of way; iron post stamped " 978 " \(\qquad\) 977.917

Russia, 1.5 miles east of, at railroad crossing, southwest corner of school yard at Huffman schoolhouse, 60 feet north of railroad and 25 feet east of road; iron post stamped " 969 "
969.204

From Versailles along Cincinnati, Hamilton \& Dayton Ry, to Covington, thence via Pittsburg, Cincinnati, Chicago \& St. Louis Ry. to Piqua.

Bloomer post office, 25 feet east of road, 20 feet north of railroad, near crossing, at southwest corner of yard of residence of W. W. Sands, on right of way; iron post stamped " 1021 "
Abe, at south end of plank at railroad crossing; top of west rail painted " 975.83 "
975.6

Abe, 0.5 mile south of, at railroad crossing, 10 feet west of railroad, 25 feet north of public highway; iron post stamped " 965 " 964.385

Covington, in public school yard, on corner of Pearl and Maple streets, 15 feet south of west entrance to school building; iron post stamped " 933 "
932. 755

Covington, 3 miles east of, 30 feet north of railroad at crossing, 30 feet west of public highway, on right of way; iron post stamped " 972 "

From Bloomer north along highway to county line, thence east to Lockington.
Bloomer, 0.6 mile north by 3 miles east of, northeast corner of crossroads; iron post stamped " 981 "
980. \(86: 3\)

Bloomer, 0.6 mile north by 6 miles east of, 25 feet north of eastwest road, at \(T\) road south, in southeast corner of field; iron post stamped " 984 "
Lockington, 0.5 mile south by 1 mile west of, at southwest corner of crossroads, on large rock, inside painted ring; chiseled square, painted " 910.58 "
910. 26

Lockington, 0.3 mile west of, on east side of north-south road, at T road east; iron post stamped " 884 "

From Covington west along Pennsyivania R. R. via Bradford to Oakland.
Bradford, 50 feet west of telegraph office, 25 feet north of Logansport division railroad track in railroad yard; iron post stamped " 992 "

Feet. 991.849

\section*{From Bradford south along highway to Laura.}

Bradford, 2.5 miles south of, southwest corner of Newberry Township, Miami County, southwest corner of yard of schoolhouse 14 ; iron post stamped " 982 "
981.703

Painter Creek, 2 miles east by 1 mile north of, northwest corner of crossroads, 50 feet east of residence of J. E. Hollacher, southwest border of sec. 16, T. 8 N., R. 4 E.; iron post stamped " 996 "--
Painter Creek, 2 miles east by 1 mile south of, at northwest corner of T road north, center of S. W. \(\frac{1}{4}\) sec. 28, T. 8 N., R. 4 E.; iron post stamped " 1005 "
\(1,005.416\)
From Covington south along Cincinnati, Hamilton \& Dayton Ry. to Ludlow Falls.
Covington, 2.5 miles south of, near railroad crossing, 20 feet east of public highway, 30 feet south of railroad; iron post stamped " 925 "
924.541

Pleasant Hill, in front of station; top of east rail
907.4

Pleasant Hill, 1 mile south of, at railroad crossing, 20 feet west of railroad, 30 feet south of highway, on right of way; iron post stamped " 880 "
Ludlow, 50 feet northeast of Cleveland, Cincinnati, Chicago \& St. Louis R. R. station, on south side of Ludlow Creek, in south face of pier of electric railroad overhead bridge, 3.5 feet from west edge; aluminum tablet stamped " 893 Adj 1905 "

From Covington southeast 4.5 miles along Troy pike, thence south to Fenner pike, thence east to point 3.5 miles west of Troy.

> Covington, 4 miles southeast of, on north side of diagonal road at T road west; iron post stamped " 958 "
> 958.094
> \begin{tabular}{ll} 
Pleasant Hill, 3 miles east by 0.5 mile south of, at southeast corner \\
of crossroads; iron post stamped " 947 " & \\
\hline
\end{tabular}

CRESTLINE QUADRANGLE.
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\). ]
Primary leveling by R. C. Seitz in 1906.

\section*{At Mansfield.}

Mansfield, Park Avenue crossing of Pennsylvania R. R., east face of north end of retaining wall of bridge 153 ; aluminum tablet stamped " 1149 "

Primary leveling by C. E. Mills and J. J. McNulta in 1911.

\section*{From Mansfield north along highways to point 2.5 miles south of Greenwich.}

Mansfield, 1 mile north of, in front of Austin Manufacturing Co.'s storehouse ; square cut on stone
Mansfield, crossing of Pennsylvania R. R. and State road; top of north rail of eastbound track of nain line
Mansfield, 4.5 miles north of, on top of concrete wall at sot:theast corner of crossroads; square cut

1,281. 75
Mansfield, 4.5 miles north by 1 mile west of, northeast corner of Feet. T road; copper nail in telephone pole ..... 1, 267.96
Mansfield, 8 miles north of, southwest corner of crossroads; copper nail in side of telephone pole_ ..... 1, 102. 45
Greenwich, 3.5 miles south of, on stone steps of entrance to school- house; square cut ..... \(1,151.18\)
Greenwich, 2.5 miles south of, in southeast corner of crossroads, 15
feet north of northwest corner of United Brethren Churcl; iron post stamped " 1130 " ..... 1, 129.944
From Mansfield west along electric railroad to Crestline.
Mansfield, east side of park, on curbstone opposite courthouse ; square cut ..... 1, 237. 33
Mansfield, east side of station; copper nail in telephone pole ..... 1, 159. 31
Mansfield, 2.5 miles west of, northwest corner of \(T\) road north; square cut on top of large stone ..... \(1,230.23\)
Mansfield, 3 miles northwest of, in northeast corner of crossing, 200 feet south of Roseland schoolhouse; iron post stamped " 1287 " ..... 1,286. 596
Mansfield, 5 miles west of, at Stewards pay station on Central Ohio R. R., electric; copper nail in station platform ..... 1, 387.39
Crestline, 7.5 miles east of, at stop 107, in floor of platform at sta- tion; copper nail ..... \(1,421.30\)
Crestline, 7 miles east of, in northeast corner of railroad crossing; iron post stamped " 1400 Ohio" ..... \(1,400.377\)
Crestline, 4.5 miles east of, center of road crossing at Shelby road station; top of north rail ..... \(1,315.17\)
Crestline, 3.5 miles east of, in southeast corner of crossing ; iron post stamped " 1264 Ohio" ..... 1, 264. 239
Crestline, \(\mathbf{1 . 5}\) miles east of, opposite schoolhouse (Sandusky Town- ship subdistrict No. 2) ; spike in telephone pole ..... 1, 185. 21
From point 3 miles southwest of Greenwich southwest along Cleveland, Cin-cinnati, Chicago \& St. Louis Ry, to Crestline.
Greenwich, 3 miles southwest of, in northeast corner of crossing;iron post stamped " 1060 Ohio"1, 059. 744
Greenwich, 4 miles southwest of, northwest corner of crossing; spike in side of crossing sign ..... 1, 065.69
Shiloh, northeast corner of Main Street and crossing of railroad; iron post stamped " \(=084\) " ..... 1, 084.157
Shiloh, 3 miles southwest of, in northwest corner of road crossing; iron post stamped " 1064 " ..... 1, 063.704
Shelby, northeast corner of crossing of Main Street and railroad; iron post stamped "1103 Ohio" (probably destroyed) ..... 1, 103. 251
Vernon Junction, east of railroad, on north side of east-west road, near telephone pole; iron post stamped " 1125 Ohio" ..... \(1,124.600\)
Crestline, 5 miles north of, southeast corner of crossing; copper nail in top of fence post ..... \(1,147.08\)
Crestline, 4 miles north of, northwest corner of crossing, at T road southwest; copper nail in top of fence post ..... \(1,142.92\)
Crestline, 3 miles north of, southeast corner of crossing; spike in telephone pole ..... \(1,144,59\)
Crestline, 1.5 miles north of, west side of railroad, center of two crossroads; spike in signpost ..... 1, 148. 04Crestline, northwest corner of Bucyrus and Thomas streets, oppositecity hall; iron post stamped " 1161 Ohio"1,160. 486

\section*{From point near Tiro north along highways 4 miles, thence east to Plymouth.}

Dekalb, 3.8 miles northeast of, on east side of old State road, 100 feet south of mail box in front of W. H. Pettit's residence ; chiseled Feet.

Tiro, 3.25 miles northeast of, on old Columbus and Portland State Road, northeast corner of crossroads; iron post stamped " 1063 "-- 1, 063.098
Tiro, 4.3 miles northeast of, southeast corner of crossroads, on stone at base of stone fence post; chiseled square, marked " 1042.9 "\(1,042.47\)
Plymouth, 2.25 miles west by 1.7 miles south of, northeast corner of \(T\) road east, on sandstone rock 2 feet square; chiseled square, marked "1007.2"

1,006. 72
Plymouth, 2.25 miles west of, 1 mile south of Columbus-Portland State road, northeast corner of crossroads ; iron post stamped " 1007 "-
Plymouth, 2.25 miles west of, northwest corner of crossing, on north abutment, west wing wall of small iron bridge, 25 feet south of railroad; chiseled square, marked " 958.6 "
958. 08
\(\begin{array}{cll}\text { Plymouth, } 3.4 \text { miles west of, northwest corner of private-road cross- } & \\ \text { ing; spike in base of fence post, marked " } 960.2 \text { " } & 959.69\end{array}\)
Plymouth, 1.5 miles west of, at road crossing, 25 feet south of railroad track; square cut on bridge
973.519

From Plymouth south and east along highway to Cleveland, Cincinnati, Chicago \& St. Louis Ry., 3 miles north of Shelby.
Plymouth, southeast corner of railroad crossing; iron post stamped "1012 Ohio"

1, 012.512
From point near Crestline to point near Galion.
Crestline, 1.25 miles south of, northeast corner of crossing; copper nail

1, 176. 98
Crestline, 2.25 miles south of, center of cross roads at Patton station; top of north rail of north-bound track
\(1,174.40\)
Primary leveling by S. R. Archer and E. C. Bibbee in 1912.
From Stewards (pay station on Central Ohio R. R., electric) north along highway 7 miles, thence east to point 2.2 miles south of Rives (leveled twice).
Stewards pay station on Central Ohio electric line ; copper nail in floor at northeast corner of station platform, marked " 1387.39 " (Bull. 518, p. 54)
Stewards pay station, 0.2 mile north of, at east center of SE. \(\frac{1}{4} \mathrm{sec}\). 11, just south of crossroads; painted spike head in northwest corner of small bridge, marked " 1373.8 "-
\(1,373.84\)
Stewards pay station, 0.7 mile north of, near east center of sec. 11; chiseled square cut in top of northeast corner of concrete culvert, marked " 1334.8 "
\(1,334.81\)
Stewards pay station, 1.1 miles north of, near southeast corner of sec. 2, 0.1 mile north of schoolhouse, southwest corner of bridge over stream; chiseled square on top of retaining wall, marked "1280.3"
Stewards pay station, 1.8 miles north of, at west center of NW. \(\frac{1}{4} \mathrm{sec}\). 1 , in southeast corner of crossroads ; chiseled square on top of south end of iron pipe drain under road to east, marked " 1223.1 "
Spring Mill station, 0.4 mile west of, on west side of north-south road, at southeast corner of sec. 35, opposite \(T\) road east; copper nail in top of locust stump on top of bank, marked 1206.27 " \(1,206.27\)
\[
45281^{\circ}-\text { Bull. } 651-17-8
\]

Spring Mill station, 0.5 mile northwest of; top of north rail of BaltiFeet. more \& Ohio R. R. crossing, marked "1193.2" 1, 193.3
Spring Mill station, 1 mile north by 0.4 mile west of, near south center of sec. 26 , on west side of north-south road at \(T\) road east; copper nail in top of stake in ground at foot of telephone pole, marked "1203.4"

1, 203. 49
Spring Mill station, 2 miles north by 0.4 mile west of, at south center of SW. \(\frac{1}{4}\) sec. 23 , in northeast corner of crossroads, at fence corner; iron post stamped " 1209 " \(\qquad\) 1, 209. 063
Spring Mill station, 3.3 miles north by 0.4 mile west of, 0.1 mile east of south center of sec. 14 , in center of road forks to south; chiseled square in top of corner stone, marked " 1196.0 "
Spring Mill station, 4.5 miles north by 0.4 mile west of, 0.25 mile west of southeast corner of sec. 11, just inside of fence, 50 feet northwest of center of crossroads, 20 feet north of northwest fence corner ; copper nail in root of 10 -inch cherry tree, marked " 1165.5 "--
Spring Mill station, 5.4 miles north by 0.4 mile west of, 0.1 mile south by 0.25 mile west of northeast corner of sec. 11, northeast corner of crossroads, east side of north road; chiseled square on top of south end of concrete culvert, marked " 1111.5 " 1, 111. 46
Shelby, 3.8 miles east of, near northwest corner of sec. 12, in southeast corner of crossroads, at fence line ; iron post stamped " 1119 "-1, 118. 992
Shelby, 5 miles east of, at east center of sec. 1, jog in east-west road to north on township line, northwest corner of road forks south, at fence line; chiseled square on top of stone, marked "1098.01"
Ganges, 1 mile southeast of, 0.25 mile east of center of sec. 6 , in southeast corner of crossroads, at fence corner ; chiseled square cut in top of stone, marked "1096.8"
From Vernon Junction gast along highway to point 1.5 miles north by 1 mile east of Amo, thence north to point 1 mile north of Rives. (The latter part corrects part of a previous list.)
Vernon Junction, east part of town, north, of road, east of railroad at road crossing Pennsylvania R. R., at fence and at foot of telephone pole; iron post stamped " 1125 "
Vernon Junction, 0.5 mile east of, northwest corner of crossroads, in base of small hedge tree used as corner post of fence; nails marked " 1130.5 "
Shelby, 2.5 miles south of, 1.25 miles east of Vernon Junction, southwest corner of T road west, top of west end of concrete end to tile drain under road south; painted square marked " 1121.6 "

Shelby, 3 miles south of, on west side of north-south road at road
 forks east, at foot of brace to corner fence post ; chiseled square on
 top of large stone, marked " 1137.8 "

1, 137. 82

Shelby, 3 miles south by 0.4 mile east of, just east of branch of Black Fork, 40 feet southwest of center of crossroads; nails in root of 2-foot maple tree, marked " 1130.6 "
Shelby, 1.5 miles southeast by 1.8 miles south of, at south center of SW. \(\frac{1}{4}\) sec. 21, Jackson Township, on south side of east-west road, at road forks north; nails in top of stake in ground at foot of telephone pole, marked " 1137.2 "
\(1,137.27\)
Shelby, about 2.5 miles southeast by 1 mile south of, center of crossroads; chiseled square on top of corner stone to secs. \(21,22,27\), and 28, Jackson Township; marked "1160.7"

Shelby, 3.5 miles southeast of, on diagonal road from Shelby to Spring Mill, near south center of sec. 22, Jackson Township, in center of east-west road, 30 feet east of center of crossroads ; chiseled square cut in top of stone, marked " 1187.6 "

Feet.
1, 187. 64
Jackson Township, north center of NE. \(\frac{1}{4} \mathrm{sec}\). 26, in southeast corner of crossroads ; chiseled square on top of stone, marked " 1226.7 "-
Amo, 1.1 miles northwest by 1 mile west of, just west of half section line in front of house on north side of road; chiseled square on top of east stone abutment of south wing wall of bridge over stream, marked "1207.6"
\(1,226.72\)

Amo, 1.1 miles northwest by 0.5 mile west of, in center of road, cor.ners of secs. 24 and 25, Jackson Township, and secs. 19 and 30 of Franklin Township; chiseled square cut in top of corner stone, marked " 1208.5 "
\(1,208.53\)
Amo, 1.1 miles northwest of, on New State road, in northeast corner of crossroads; top of west corner of south end of concrete walk leading to house, marked "1217.3"
\(1,217.34\)
Amo, 1 mile north of, private road to east, in southwest corner of T road west; chiseled square in top of bowlder, marked "1229.0"-_ 1, 229. 10
Amo, 1.5 miles north of, in southwest corner of crossroads, inside of fence corner ; copper nail in root of 10 -inch elm tree, marked "1191.9"
\(1,191.95\)
Amo, 1 mile east by 1.5 miles north of, in northeast corner of crossroads; iron post stamped " 1162 "

1, 162. 760
Amo, 1 mile east by 2 miles north of, in center of \(T\) road south, corner of secs. 16, 17, 20, and 21, Franklin Township; chiseled square in top of corner stone, marked " 1146 "
Rives (Rome), 4 miles south of, near east center of NE. \(\frac{1}{4} \mathrm{sec}\). 17, Franklin Township, T road east, in northeast corner of road forks ; copper nail in top of corner fence post, marked " 1110 "\(1,110.76\)
Rives (Rome), 3 miles south of, east center of sec. 8, Franklin Township, in northwest corner of crossroads; copper natl in base of telephone pole, marked " 1102 "
Rives (Rome), 2.2 miles south of, east center of sec. 5, Franklin Township, on east side of north-south road, at road west; iron post stamped " 1060 "
Rives (Rome), 1.7 miles south of, in northwest corner of sec. 4, Franklin Township, in southeast corner of road forks, \(T\) road southeast ; copper nail in top of corner fence post, marked " 1042 " \(1,043.07\)
Rives (Rome), northeast corner of crossroads at, chiseled square on top of stone near telephone pole, marked " 1107 "
\(1,108.61\)
Rives (Rome), 1 mile north of, in northwest corner of crossroads; iron post stamped "1108" (value from Greenwich in 1916 by Archer, 1,107. 924)

1, 108. 886
From point near Ganges north and east to point 1 mile north of Rives (Rome).
Ganges, near center of sec. 31, in center of town, in grass plot in roads at \(T\) road east, at foot of birdhouse pole; chiseled square on top of concrete base, marked " 1085.9 "

1, 085.95
Ganges, north edge of town, northeast stone wing wall of bridge over Black Fork; chiseled square in top of north end, marked "1044.5"-1, 044. 47
Ganges, 0.9 mile northwest of, at \(T\) road north on township line between Cass and Blooming Grove townships, on west side of road, inside of fence line; copper nail in root on north side of 8 -inch cherry tree, marked " 1066.5 " \(\qquad\) Feet.
Ganges, 0.9 mile northwest by 1.1 miles north of, center of road forks east ; chiseled square on top of stone, marked " 1070.7 "
Ganges, 0.9 mile northwest by 1.6 miles north of, east center of sec. 24 , at T road south, on north side of east-west road, 25 feet west of private road north, at foot of mail-box post ; iron post stamped " 1070 "
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1, 070. 71

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Rives (Rome), 1.5 miles northwest of, on Rome-Shiloh road, 75 feet south of forks west ; chiseled square on top of stone abutment at northwest corner of bridge over stream, marked "1093.7" \(\qquad\) 1, 093. 76
Rives (Rome), 1.4 miles northwest of, on Rome-Shiloh road, in southeast corner of road forks east; copper nail in root of \(2 \frac{1}{2}\)-foot oak tree, marked " 1121.9 " \(1,121.87\)
From Mansfield north along highway 3 miles. (Releveled twice over old line.)
Mansfield, 100 feet north of railroad crossing; chiseled square on retaining wall on southwest corner of bridge 153 1, 151. 150

Mansfield, 1.8 miles north of ; chiseled square on south end of west side of stone arch culvert
Mansfield, 3.4 miles north of, at southwest corner of T road west; iron post stamped " 1279 " 1, 278. 564
CUMBERLAND QUADRANGLE. [Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From Sundale along Baltimore \& Ohio R. R. to Cambridge.
New Concord, 60 feet north of station; iron post stamped " 843 " ----
843.243
New Concord, in front of station; top of rail................................. 844.9
New Concord, 2.7 miles northeast of, 50 feet south of track, in fence
corner; iron post stamped " 815 "
Cassell, 60 feet north of railroad, in northeast corner of top of stone
abutment to highway bridge; aluminum tablet stamped "804"---- 804.115
Cassell, in front of station; top of rail
806.3
Cassell, 1.83 miles northeast of, in concrete culvert south of track; aluminum tablet stamped " 804 "
804. 423
Primary leveling by C. H. Semper and H. W. Peabody in 1908.
From Cambridge south to Belle Valley.
Cambridge, 3.5 miles south of, in foundation of railroad water tank at scale house; aluminum tablet stamped " 803 "-
802.680
Byesville, 100 feet west of railroad, in front face at southeast corner of Burt Block; aluminum tablet stamped " 813 "
813. 302
Derwent, 0.8 mile south of; railroad crossing of Baltimore \& Ohio and Pennsylvania lines
802.3

Pleasant City, in front of station; top of rail
804.2


\section*{From Freeland southeast along Ohio River \& Western Ry, to Belle Valley.}

Spratt, 0.3 mile east of station, in south face near southwest corner of

Spratt's milk house, 50 feet north of highway; aluminum tablet stamped " 941-1908"

Feet.
940.448
837.43
862.039
966. 484
738.546

\section*{From New Concord south via Claysville to Spratt.}

New Concord, 60 feet north of station, in concrete street crossing about 3 inches above ground; iron post stamped " 843 "
843.243

New Concord, 2.75 miles southeast of, 1,000 feet north of J. Keck's residence, in south side of west abutment of covered bridge over Crooked Creek; aluminum tablet stamped " 831 ". \(\qquad\)
New Concord, 4.6 miles southeast of, 15 feet east of public road, at the residence of Harley Watson, on concrete walk; chiseled square painted "1128.47"-
 \(1,128.41\)
Claysville, 0.87 mile west of, 150 feet south of public road, in northwest corner of foundation of residence of E. E. and J. J. Kelley; aluminum tablet stamped " 1022 "
Rix Mills, 0.5 mile south of, 150 feet east of T road, in southeast corner of foundation to residence of B. W. St. Clair; aluminum tablet stamped " 1113 "
\(1,113.117\)
Spratt, 2.34 miles north of, 700 feet south of H. Tonis's residence, in concrete step at entrance of Rich Hill high school ; aluminum tablet stamped " 1088 "

1,087. 910

\section*{From Renrock west to Rowland.}

Renrock post office, 250 feet south of T road, 15 feet east of public road, in northwest corner of foundation to Silas Thorlas's residence; aluminum tablet stamped " 793 "
793.436

Menrock, 1.24 miles west of, 100 feet south of Dickerson's residence, 7 feet from center of road, on large rock on west side of road; chiseled square marked " 909.9 "
909.93

Knight, 150 feet south of Oak Grove Church, at southeast corner of crossroads, on rock at end of culvert; chiseled square painted " 1014.51 "
\(1,014.53\)
Knight, 0.5 mile west of, 10 feet from center of road 0.05 mile east of T road; spike in root of oak tree painted " 1064.16 "
Knight, 1.22 miles west of Oak Grove Church, 75 feet south of public road leading from Knight to Lisleburg, in northeast corner of foundation to residence of J. C. Wilson; aluminum tablet stamped "1091"
Young Hickory (Lisleburg), 580 feet west of church, 50 feet east of Marietta and Cumberland road, on stone in center of \(T\) road; chiseled square painted " 1070.68 "

\section*{DAYTON QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longltude \(84^{\circ}-84^{\circ} 15^{\prime}\).], Precise leveling by the Coast and Geodetic Survey. From Troy south along Cincinnati, Hamilton \& Dayton Ry, to Dayton.
Concord Township, Miami County, 70 feet below lock, 2.5 miles south of Troy, southwest quarter of masonry of feeder lock, northwest corner of sixth step from top; chiseled square (C. \& G. S. b. m. S \(\mathbf{S}_{2}\) )
Tippecanoe, on Miami \& Erie Canal, east side of Tippecanoe lock, south end, on center coping stone of wing; chiseled square (C. \& G. S. b. m. T \(\mathrm{T}_{2}\) )

Feet.
812.836
806.931

Tippecanoe, north side of Main street, on first building east of canal, power house of Tippecanoe Electric Light \& Water Co., southeast corner, south face, on water table, 5 inches below brick work and 7 inches north of corner ; brass bolt marked with a horizontal line (C. \& G. S. b. m. U 2 )
801.209

Van Buren Township, on Miami \& Erie Canal, 2.5 miles below Tippecanoe, Picayune lock, east jaw, on coping stone, 12 feet south of south king-post and 6 inches east of edge of wall; chiseled square (C. \& G. S. b. m. V 2 )
797. 226

Tadmor, Montgomery County, on Miami \& Erie Canal, east abutment of steel bowstring girder bridge over canal, northwest corner, on north face, 1 foot east of corner and 3.5 feet above ground; brass bolt marked with a horizontal line (C. \& G. S. b. m. W \({ }_{2}\) ) \(\qquad\)
Butler Township, on Cincinnati, Hamilton \& Dayton Ry., 2.4 miles below Tadmor, on bridge 8 over Poplar Creek, west side of north abutment, first step below bridge seat, 5 inches east of west face of stone and 7 inches north of south face; chiseled square (C. \& G. S. b. \(\mathrm{m} . \mathrm{X}_{2}\) )

Harrison Township, on line of the Cincinnati, Hamilton \& Dayton Ry., about 1 mile north of Dayton city limits, on north abutment of bridge over Miami River, west side of abutment, 6 inches south of north edge and 17 inches east of west edge ; chiseled square (C. \& G. S. b. m. \(\mathrm{Y}_{2}\) )
754.670

Dayton, Cincinnati, Hamilton \& Dayton Ry. bridge 2 over Mad River, south abutment, east end, 22 inches west of east end of stone and 6 inches south of north face; chiseled square (C. \& G. S. b. m. \(Z_{2}\) )-
Dayton, northwest corner of Main and Sixth streets (city workhouse) ; point of pyramidal top of stone fence post 3.5 feet above sidewalk (C. \& G. S. b. m. Dayton City)
791.025
773. 414

Dayton, southwest corner of South Main and West Fifth streets, southeast corner of post office, east face, on water table, 3.9 feet above pavement and 1 foot north of corner; brass bolt marked with a horizontal line (C. \& G. S. b. m. As)
Dayton, Cincinnati, Hamilton \& Dayton Ry. bridge over Miami River one-third mile south of union station, west pier, north end, on nose of coping stone of pier, midway between sides and 20 inches back from point; chiseled square (C. \& G. S. b. m. B \({ }_{3}\) )

\section*{Primary leveling by R. G. DeFrees in 1903.}

From Dayton northeast along Big Four Route to Osborn, thence north along highway to McKendree Church, thence west to point near Grayson.
Dayton, corner of Main and Fifth streets, in east face of water table at southeast corner of post office ; brass bolt (C. \& G. S. b. m. A \({ }_{3}\) )--
Harshman, 2 miles northeast of, 20 feet south of track, in stone wing wall of bridge 153 ; aluminum tablet stamped " 790 Columbus" "----

Simms, in platform at southwest corner of station; nail
Osborn, in school building, in top of sill of foundation, 5 feet west of front door; aluminum tablet stamped " 826 Columbus 1903 " \(\qquad\) Medway, at northwest corner of Valley turnpike and New Carlisle pike, on east end of east doorsill of hotel building; chiseled square_
New Carlisle, at northeast corner of city hall, in sill of window at north side; aluminum tablet stamped " 907 Columbus 1903 " \(\qquad\)
New Carlisle, 4 miles north of, 900 feet east of McKendree Church, at iron bridge over drain, on north side of west abutment; aluminum tablet stamped " 955 Columbus 1903 "

From Grayson west along highway to Grange Hall, thence south to Dayton.
Cowlesville, 2 miles west of, at east side of road 0.25 mile south of crossroads at Grange Hall, near first house south of crossroads, in west face of foundation of large barn; aluminum tablet stamped " 902 Columbus 1903 " \(\qquad\)
Ginghamsburg, 1.5 miles south by 1.5 miles west of, at Anderson schoolhouse, Butler Township, in face of front doorsill; aluminum tablet stamped " 999 Columbus 1903 " \(\qquad\)
Spanker, 2 miles southeast of, north of Shiloh Church, in west end of north abutment of Eagle Ford Bridge; aluminum tablet stamped " 772 Columbus"


Dayton, on southwest corner of first granite step of soldiers' monument; city engineer's bench mark (city elevation, 26.44) \(\qquad\)
Dayton, Union Street Bridge over Miami River, in top of parapet wall at southeast corner; aluminum tablet stamped " 755 Columbus 1903 " \(\qquad\) At Tippecanoe.

Tippecanoe, in east side of foundation of school building, north of front door ; aluminum tablet stamped " 845 Columbus 1903 "
From Picayune lock east to West Charleston, thence south and west to point near Taylorsburg.

Tippecanoe, 2.5 miles south of, at Picayune lock on Miami and Erie Canal, on coping stone 12 feet south of south king-post, 6 inches east of edge of wall ; chiseled square (C. \& G. S. b. m. V 2 ) \(\qquad\)
West Charleston, in west face of sill of foundation of school at north, west corner ; aluminum tablet stamped "Columbus 1903 " \(\qquad\)
Phoneton, 2.25 miles south of, 0.33 mile south of .Wayne Chapel, at west side of road, in south face at southeast corner of foundation of residence of David Orm; aluminum tablet stamped " 958 Columbus 1903 " \(\qquad\)
Taylorsburg, at southwest corner of west abutment of canal bridge, on coping stone; large chiseled cross
Tadmor, 2.3 miles south of, Cincinnati, Hamilton \& Dayton Ry. bridge 8, over Poplar Creek, on west side of north abutment; square (U. S. C. \& G. S. b. m. X \({ }_{2}\) )

From Osborn northeast along Big Four Route to Enon.
Osborn, 1 mile northeast of, Mad River Township, at road crossing, on top stone at northeast corner of abutment of iron bridge over creek; chiseled cross.
902.064
998.379
771. 752
748.57
745. 565
845.397
958. 259
773. 414

Feet.
799.63
825.971
851.50
906.651
955.279

Tithit
797. 226
966.562
796. 70
831.97

\title{
DEFIANCE QUADRANGLE.
}

\title{
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\circ}\).] \\ Precise leveling by C. H. Semper in 1906.
}

From Auglaize River north to Deflance, thence north along highway 10 miles, thence east to Ridgeville Corners, thence east 2 miles.

Defiance, county jail, southwest corner, aluminum tablet stamped "Prim. Trav. Sta. No. 8, 692 "

Feet.
691. 793

Defiance, 2.52 miles north of, at crossroads southwest corner of Kelley schoolhouse; aluminum tablet stamped " 713 "
713. 343

Defiance, 5.67 miles north of, southeast corner of schoolhouse at crossroads; aluminum tablet stamped " 720 "
719. 663

Defiance, 8.64 miles north of, southeast corner of crossroads schoolhouse; aluminum tablet stamped " 714 "
713. 764

Evansport, 4.05 miles east of, county-line road, front face foundation of Fred Behrman's house; aluminum tablet stamped " 734 " \(\qquad\) 734.344

Ridgeville Corners, Hunn Bros'. store, southeast corner water table at front entrance; aluminum tablet stamped " 741 "
741. 152

\section*{Primary leveling by W. H. Monahan in 1907.}

From Defiance east along highway to point 5 miles south of Florida.
Defiance, 4.33 miles southeast of, in southwest corner of foundation of George Becker's residence; aluminum tablet stamped " 726 "
Defiance, 8.32 miles southeast of, on concrete culvert at west side of road; aluminum tablet stamped " 728 "
726.073
728. 453

From Defiance west along highway 4.9 miles, thence north to point near Stryker, thence east and south to point 9.6 miles north of Defiance.

Defiance, 1.76 miles west of, on northwest abutment of iron bridge over Tiffin River; aluminum tablet stamped " 681 "
681. 064

Defiance, 4.93 miles west of, 150 feet south of road to east, in schoolhouse on east side of road; aluminum table stamped " 715 " \(\qquad\)
Defiance, 4.8 miles north by 4.9 miles west of, in northwest abutment of bridge over creek; aluminum tablet stamped " 683 " \(\qquad\)
Defiance, 4.93 miles west by 7.24 miles north of, on west side of forks of road, in schoolhouse; aluminum tablet stamped " 709 "--
Pefiance, 4.93 miles west by 9.34 miles north of, near front entrance of schoolhouse at southwest corner of crossroads; aluminum tablet stamped " 712 " \(\qquad\)
Stryker, 2.5 miles south by 0.8 mile west of, at northwest corner of schoolhouse on northeast corner of crossroads; aluminum tablet stamped " 716 "
715. 365
683.333
709. 310
712.176
715. 630

Defiance, 12.70 miles north of, 739 feet west of crossroads in northeast abutment of bridge over creek; aluminum tablet stamped " 703 "
702. 797

Primary leveling by C. W. Howell in 1911.

\section*{Southwest of Stryker.}

Stryker, 2.6 miles southwest of, on fourth plank from south end of iron bridge over Tiffin River ; circle, painted "T. B. M. 701.3 "
DELAWARE QUADRANGLE.
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by Carleton McRae in 1901.
From Delaware north along highway on east side of river to Marlboro Church.

Feet.
895.58
871. 491
925. 470

From Delaware north to Troy schoolhouse and return.
Delaware, 5 miles north of, in stone entrance to Troy Chapel; bronze tablet stamped " 941 C "
942. 909

From Delaware west along highway to Scioto River, thence north, east, and south to Troy schoolhouse.
Delaware, 5.25 miles west of, in north side of west abutment of bridge on Marysville pike; bronze tablet stamped " 871 C " (destroyed)
r------------------
From Warrensburg west on Bokes Creek to point near county line.
Lybrand, 1 mile north of, 4 miles north of Ostrander, on culvert 100 yards west of schoolhouse ; aluminum tablet stamped " 928 C "
930.107

From Marlboro Church west to Radnor, thence north to Prospect, thence east via Waldo to Windfall Church.

Radnor, near top step of township hall; bronze tablet stamped "937 C"
938. 091

Prospect, in west steps of city hall; aluminum tablet stamped " 908 C" \(\qquad\)
Waldo, 2.5 miles northeast of, on north end of bridge seat of bridge over Olentangy River; bronze tablet stamped "940 C" \(\qquad\) 909. 725
941.318

DELPHOS QUADRANGLE.
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).]
Primary leveling by R. C. Seitz in 1907.
Southwest of Grover Hill.
Grover Hill, 1.02 miles west by 1.68 miles south of, at south abutment of small iron bridge, in face of east wing wall; aluminum tablet stamped " 730 " \(\qquad\)
Primary leveling by H. B. Hoel in 1909.
From Rimer along Northern Ohio Ry. to Delphos, thence north along Toledo, St. Louis \& Western R. R. to Muntanna.

Rushmore, southeast corner of yā̈d of Herbert Thurston, 40 feet north of railroad crossing; iron post stamped " 760 "
759.511

Rushmore, 2.4 miles west of, at railroad crossing, in right of way, 40 feet west of road, 40 feet north of railroad; iron post stamped " 765 "
764. 464

Fort Jennings, 0.7 mile south of, at railroad crossing, 30 feet east of crossing, on right of way; iron post stamped " 755 "
754. 423

Fort Jennings, railroad crossing at station; top of rail, painted " 753.83 "
753. 6

Douglass, 0.8 mile south of, at railroad crossing, 30 feet east of
Toledo, St. Louis \& Western R. R. track, 30 feet north of road, on
right of way; iron post stamped " 746 "---------
Douglass, railroad crossing at station; top of rail, painted " 744.52 "--
Muntanna station, 40 feet west of railroad crossing, 35 feet north
of highway, on right of way; iron post stamped " 729 "-
From Delphos west 3 miles along Pennsylvania R. R., thence north along
highway to Roselms.
Delphos, in northeast corner of yard of tower house at crossing of Pennsylvania and Toledo, St. Louis \& Western railroads; iron post stamped " 780 "

Feet.
745. 266
744.2
728. 839

Delphos, near; railroad bench mark (Pennsylvania R. R. levels, adjustment of 1903, give elevation as 781.355 )
779. 645

Delphos, 3.2 miles west of, 30 feet west of road, 10 feet south of railroad, on right of way; iron post stamped " 777 "
781. 299

Seamersville, 3 miles south of, in southwest corner of northeast field at crossroads; iron post stamped " 763 "
776.388

Seamersville, in southwest corner of yard of John Dunlap at crossroads; iron post stamped " 745 "
762. 836

Roselms, 3 miles south of, at crossroads, in southwest corner of yard of Elm Grove schoolhouse (subdistrict 1, Jackson Township) ; iron post stamped "733 Ohio"
733. 107

From Middlepoint west 2 miles along Pennsylvania R. R., thence north along highway to point 3 miles south of Grove Hill.
Middlepoint, west end of plank at railroad crossing at station; top of south rail, painted " 782.3 " \(\qquad\)
Middlepoint, 0.5 mile west of, at railroad crossing, on right of way, 50 Yeet west of road, 10 feet south of railroad; iron post stamped "785" \(\qquad\)
Van Wert County Infirmary, 0.25 mile west of, southeast corner of crossroads; iron post stamped " 777 Prim. Trav. Sta. No. 11 ",
784. 754
777.213

Middlepoint, 2.5 miles west by 5 miles north of, northeast corner of crossroads; iron post stamped " 752 "
751.575

Grove Hill, 3 miles south by 1 mile west of, northeast corner of crossroads; iron post stamped " 736 "
735.653

From Delphos south along Cincinnati, Hamilton \& Dayton Ry. to Southworth.
Delphos, 2.9 miles south of, at railroad crossing, 30 feet south of highway and 30 feet west of railroad, on right of way ; iron post stamped " 791 "
790. 414

Southworth post office, north end of plank at railroad crossing; top of east rail, painted " 814.89 "
Southworth post office, 0.4 mile south of, northwest corner, north side of \(T\) road west, 50 feet west of canal inside fence; iron post stamped " 813 "
813.118

From Middlepoint south along highway to point 2.5 miles south of Venedocia. Middlepoint, 0.5 mile west by 2.8 miles south of, at northwest corner of T road; iron post stamped " 791 ". \(\qquad\)
Venedocia, 1 mile south of, at southeast corner of \(\mathbf{T}\) road east; iron post stamped " 804 "
790. 708
803.998

From Venedocia east to Southworth.
Landeck, 2 miles south by 0.5 mile west of, southeast corner of crossroads; iron post stamped " 813 "
812. 318

DESHLER QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Precise leveling by the Coast and Geodetic Survey.
From North Baltimore west along Baltimore \& Ohio R. R. to point 1 mile east of Deshler.
North Baltimore, Wood County, about 1.5 miles west of, at road crossing, in south end of a culvert, in center of the top; copper bolt marked "U.S.B.M." (C. \& G. S. b. m. L6)

Feet.
717. 320

North Baltimore, about 2.5 miles west of, on Baltimore \& Ohio R. R. right of way, at road crossing, in south end of concrete culvert; chiseled square marked " U.S.B.M." (C. \& G. S. b. m. M \({ }_{6}\) )
Hoytsville, about 1 mile east of, at road crossing 164 feet south of Baltimore \& Ohio R. R. tracks, 33 feet south of the junction of highway, on west end of north abutment of a small iron bridge; redmetal disk (C. \& G. S. b. m. N \({ }_{\mathrm{s}}\) )
Hoytsville, about 1 mile west of, at road crossing 33 feet south of Baltimore \& Ohio R. R. tracks, on west end of small highway culvert, in middle stone, 3.2 inches from the west face; copper bolt (C. \& G. S. b. m. \(\mathrm{O}_{6}\) )
715.051
707.577
709. 289

Deshler, Henry County, about 1 mile east of, on Baltimore \& Ohio R. R. right of way, at a road crossing, in north end of concrete culvert; red-metal disk in center of top surface (C. \& G. S. b. m. P6) --
From Deshler southwest along Cincinnati, Hamilton \& Dayton Ry, to Leipsic. Deshler, Henry County, northeast corner of Maple and Keiser streets, in southeast corner of main building Presbyterian Church, in water table, east face, about 1 foot north of south corner and 3 feet above ground ; brass bolt marked with a horizontal line (C. \& G. S. b. m. \(\mathrm{H}_{1}\) )
Deshler, north side of Main Street, about 175 feet east of Cincinnati, Hamilton \& Dayton Ry. track, on bank building owned by A. W. Lee, on west end of base stone, under window west of entrance; chiseled square (C. \& G. S. b. m. I 1 )
711. 569
713. 716

Belmore, Putnam County, northeast corner of Defiance and Walnut streets, in east face of the foundation of the Starling Building, 18 feet north of south corner of building, 8 inches below bottom of baseboard, and 10 inches above ground, intersection of two approximately horizontal and vertical chisel cuts in brass bolt leaded horizontally and lettered " U. S. C. \& G. S." (C. \& G. S. b. m. Ji) \(\qquad\)
Leipsic, north side of Railroad Street, about 126 feet east of Main Street, top of foundation, northeast corner of the Lampe Building, under the east end of the window, 11 inches west of corner buttress, 1 foot above sidewalk; chiseled square (C. \& G. S. b. m. K \({ }_{1}\) ) \(\qquad\)
Leipsic, on south side of Commercial Street, 129 feet east from east side of Main Street, on foundation at northeast corner of the Heffler House, 6 inches west of east face and 35 inches above the flagging of sidewalk ; brass bolt marked with a horizontal line (C. \& G. S. b. \(\mathrm{m} . \mathrm{L}_{1}\) )

Primary leveling by R. E. Johnson in 1906.
From Ottawa east along highway to Benton Ridge, thence southeast to bench mark 1.7 miles northeast of Rawson. \({ }^{1}\)
Ottawa, 3 miles east of, on Ottawa-Benton Ridge pike, 350 feet west of \(T\) road north, in southwest corner of yard of residence, in top of marble post; aluminum tablet stamped "Prim. Trav. Sta. No.4, 739"-

\footnotetext{
\({ }^{1}\) The error distributed in a portion of this line is excessive.
}

Gilboa, 200 feet north of Cincinnati, Hamilton \& Dayton Ry. track, in southwest corner of abutment of highway bridge about 600 feet northwest of station; aluminum tablet stamped " 745 "
Gilboa, in front of station; top of rail
Moffitt, 900 feet south of railroad and highway crossing, 900 -north of \(T\) road west, in southwest corner of stone abutment of wooden bridge over Moffitt ditch; aluminum tablet stamped " 753 "-
Moffitt, at road crossing at station; top of rail
Feet.
745. 269
751.6
753. 074
755.1

Benton Ridge, in stone foundation of brick public-school building, under window 8 feet south of northwest corner; aluminum tablet stamped " 778 "
From Leipsic east along New York, Chicago \& St. Louis R. R. to McComb, thence south to Benton Ridge. \({ }^{1}\)
Leipsic, 100 feet northeast of Minnesota Street, in stone window sill of Lampe Building, between side entrance door and door to stairway, 18 inches above sidewalk; aluminum tablet stamped " 767 "--
Leipsic, in front of station; top of rail
767. 006

Townwood, at road crossing ; top of rail
754.6

Shawtown, at road crossing; top of rail
746.7
746.6

Shawtown, 50 feet southwest of railway crossing, 20 feet south of track and 6 inches from west end of stone culvert; aluminum tablet stamped " 742 "
742.392

McComb, north side of the main east-west street, 20 feet east of northsouth street, 60 feet northeast of diagonal turn in street, in stone sill of Smith Building; aluminum tablet stamped " 771 " \(\qquad\)
McComb, 3 miles south of, in stone foundation of brick schoolhouse (subdivision 7), 1 foot from southwest corner ; aluminum tablet stamped " 809 " \(\qquad\) 809.410

Benton Ridge, 1 mile northeast of station; cross on east end of stone abutment of wooden culvert at crossroads \(\qquad\)
From Deshler northwest along Baltimore \& Ohio R. R. 6 miles, thence east and south along highways to Hoytsville.
Deshler, on Main Street, about 30 feet north of Cincinnati, Hamilton \& Dayton Ry, track, in top of base stone of Gianque Block, 4 feet from southeast corner, next to alley; aluminum tablet stamped " 713 "
Deshler, 6 miles northwest of, 1 mile north of Baltimore \& Ohio R. R. tracks, 200 feet south of W. A. Jaqua's residence, in northwest corner of field, at crossroads; iron post stamped "Prim. Trav. Sta. No. 11, 708 "
Deshler, 3.8 miles northeast of, about 0.75 mile east of Cincinnati, Hamilton \& Dayton Ry., about 50 feet southeast of crossroads, at brick schoolhouse; iron post stamped "Prim. Trav. Sta. No. 12, 704 "
759.11
712. 985
707.508
703. 600

Hoytsville, 2 miles north by 1 mile west of, in southwest corner of southwest stone abutment of small iron bridge over ditch; aluminum tablet stamped " 700 "
700.363

Bench marks at Hoytsville and Belmore (set from U. S. Coast and Geodetic Survey precise levels).
Hoytsville, 1 mile east of, 140 feet east of road crossing, in bridge seat course of stone at southwest corner of abutment of Baltimore \& Ohio R. R. bridge; aluminum tablet stamped " 709 "

\footnotetext{
\({ }^{1}\) A check line was also run to standard bench mark 4 miles west of Findlay.
}
Belmore, in east face of base stone, 6 feet north of southeast corner of town hall, 2.5 feet south of double-door entrance, 1 foot from ground; aluminum tablet stamped " 740 "

Feet. 739. 616
DUBLIN QUADRANGLE.
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\). ]
Primary leveling by C. H. Birdseye in 1901-2.
From Columbus northwest to Dublin, thence east to Worthington, thence south to Columbus (double circuit).
Dublin, 5.5 miles south of, west end of south approach wall on east side of Fishinger Bridge over Scioto River; chiseled square \(\qquad\)
Dublin, at west end of steel bridge over Scioto River, in south stone wall ; bronze tablet stamped " 805 Col "
805.592
Worthington, on south side of grammar-school building; in arch of foundation over cellar window; aluminum tablet stamped " 884 C "-
884.353
From Columbus northwest to Hilliard, thence north to Dublin.
Hilliard, 2 miles south by 0.2 mile east of, at cross pikes, northwest corner of stone culvert ; chiseled cross
932.09
Hilliard, high-school building, in south end of lower step; chiseled cross
936. 80
Dublin, 3 miles southwest of, 200 feet south of schoolhouse, on northeast abutment of bridge ; chiseled cross
From Dublin northwest along pikes to New California, thence northeast via Watkins to Bellpoint.
New California, in southwest corner of foundation of Jerome Township high school; aluminum tablet stamped " 993 Col "
993.842
\(\begin{array}{lll}\text { Watkins, } 1.5 \text { miles north of, in top of southwest abutment of covered } \\ \text { bridge; bronze tablet stamped " } 926 \mathrm{Col} \text { " } & \\ \end{array}\)
From Bellpoint east along highways to Stratford, thence south along highway via Gregory to Worthingion,
Bellpoint, in northwest abutment of bridge over Mill Creek, in top stone; bronze tablet stamped " 863 Col "
863.599
Gregory, 0.5 mile east of, in southwest corner of foundation of brick
schoolhouse (subdivision 7) ; aluminum tablet stamped " 949 "---- 949.579
Worthington, 3.2 miles north of, High Street and road east, DelawareFranklin county-line stone; top of stone
914.55
From Dublin west to Kileville.
Kileville, 1 mile east of, Union-Franklin county line, 50 feet east of intersection of post-road and free pike; middle of arrow on countyline stone \(\qquad\) 944.09
Kileville, road crossing at station; top of rail
950.4

\section*{EAST CINCINNATI QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\). ]
Precise leveling by the Coast and Geodetic Survey.
From Loveland southwest along Baltimore \& Ohio Southwestern R. R, to Cincinnati.
Loveland, on east abutment of railroad bridge over Little Miami River; chiseled square marked "B M" (C. \& G. S. b. m. R)

Remington, short distance west of, on pier of railroad bridge over Sycamore Creek; chiseled square marked "B M," (C. \& G. S. b. m. LXII) (reported destroyed in 1899)

Feet.
590.861

Cincinnati, courthouse at, on south face of pillar at south side of main entrance on Main Street, 3 inches above flagging; copper bolt projecting 1.5 inches from masonry on west side; flat surface which surrounds the bench mark is inscribed, "B M No. 1115 ' 25 " ". (C. \& G. S. b. m. T, or City b. m. No. 1)

\section*{From Glendale south to St. Bernard.}

Cincinnati, 12.3 miles north of, Cincinnati, Hamilton \& Dayton Ry. bridge 8 over Mill Creek, south abutment, east end, first step below bridge seat course, 6 inches west of east face, 12 inches south of north face; chiseled square (C. \& G. S. b. m. J J )
Lockland, Hamilton County, Collectors lock, 10 feet north of north side of Lock Street on east wall of lock, on coping stone, 5.6 feet north of south gate, 4 inches east of west face of wall; chiseled square (C. \& G. S. b. m. Ti
Rensselaer, about 1 mile north of Carthage, on Cincinnati, Hamilton \& Dayton Ry., at intersection of Hamilton pike and Forest Avenue, on north abutment of viaduct, west end, first step below britge seat course, on southwest quarter of stone, 6 inches from face and 8 inches from end of stone, 18.5 feet north of outside rail; chiseled square (C. \& G. S. b m. K4)
573.305
574.085
538.987

Carthage, southeast corner of Jackson and Fourth streets, west side of Christian Church building (1879), on water table at base of tower, 6 inches north of south angle of tower and 1.8 feet above ground; brass bolt marked with a horizontal line (C. \& G. S. b. m. L4) \(\qquad\)
Carthage, 10 miles north of Cincinnati on line of Miami \& Erie Canal, on south abutment of Fourth Street Bridge over canal, west end, 6.5 feet above towpath and 2.5 feet below floor of bridge on second step above retaining wall, on seventh step below coping, 2 inches from end and 6 inches from face of stone; chiseled square (C. \& G. S. b. m. \(\mathrm{S}_{4}\) )

St. Bernard, about 8 miles north of Cincinnati, on Miami \& Erie Canal and Baltimore \& Ohio Southwestern R. R., on east face of west abutment of railroad bridge over canal, 4 feet above towpath, in eighth course of masonry from top, 5.75 feet north of prominent corner in southwest bridge-seat stone; horizontal groove in bottom of square cut three-eighths inch deep and 1 inch square, lettered " U. S. C. \& G. S." (C. \& G. S. b. m. R4) \(\qquad\)
Note.-For record of permanent bench marks established by the Cincinnati Topographic Survey of 1912, apply to Department of Public Works, Cincinnati, Ohio.

\section*{Primary leveling by Ralph Stewart in 1898.}

From Miamiville along railroads and highways south, northwest, and northeast to Miamiville.

Miamiville, road crossing at forks of road east end of town, 35 feet east of Pennsylvania R. R., 20 feet south of center of road; iron post stamped " 578 "
Mount Carmel, on coping at southeast corner of foundation of schoolhouse; aluminum tablet stamped "Cin 882 "

Ninemile, steel bridge 0.5 mile south of junction of three forks of

Ninemile Creek, at west end of north abutment; aluminum tablet stamped " Cin 539 "

Feet.
538. 191
486.693
587. 409
837.874

EAST COLUMBUS QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Precise leveling by E. L. McNair along the Norfolk \& Western Ry, in 1905.
Duvall, in top of west side and center of the capstone of a small stone culvert on the Norfolk \& Western Ry., about 30 feet southwest of road crossing and 90 feet south of station; aluminum tablet \(\qquad\) Duvall, in front of station ; top of rail
712. 098
713.2
715.879
715.619
718.6
738.0
722. 868
733.6
751.934
773.4
774.8
768. 6
780. 400
777. 601

Precise leveling by W. H. Monahan in 1906.
From Valley Crossing north along Norfolk \& Western Ry. to Bannon, thence southeast along Toledo \& Ohio Central Ry. to Pickerington.
Obetz, in front of station; top of rail
754.2
752. 482
769.9
783.8
803.5

County line (Franklin and Fairfield) ; top of rail
Pickerington, in front of station; top of rail

\section*{Primary leveling in 1899 by W. F. Hammond. \\ From Duvall north along road via Lockbourne to Columbus.}
\begin{tabular}{l} 
I.ockbourne, in top of south pier at west end of Norfolk \& Western \\
Ry. bridge over Ohio Canal : aluminum tablet stamped " 716 Colum- \\
bus 1899 ". \\
Fheet. \\
\(\begin{array}{l}\text { Shadeville, } 1.5 \text { miles north of, on Spangler Hill, } 500 \text { feet east of road, } \\
\text { iron post set as triangulation point; stamped " } 817 \text { Columbus 1899"- }\end{array}\) \\
\hline
\end{tabular}
From Columbus east to Reynoldsburg, thence south to Marcy, thence west to Duvall.
Columbus, 3 miles east of, in top of south wing wall of west abutment of main bridge over Alum Creek; aluminum tablet stamped " 760 Columbus 1899"
760.035

Reynoldsburg, in second step of south wing of west abutment of bridge over Blacklick Creek; aluminum tablet stamped " 863 Columbus 1899"
862. 703

Lithopolis, 1.5 miles southwest of, on county-line road, in west wing of south abutment of small highway bridge; aluminum tablet stamped " 888 Columbus 1899"-
888.560

Duvall, 2.5 miles east of, in west end of north abutment of bridge over Little Walnut Creek; aluminum tablet stamped " 711 Columbus 1899 "
711. 443

EAST LIBERTY QUADRANGLE.
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by C. E. Mills and S. L. Parker in 1913.
From point 2.9 miles east of Huntsville along highways south to Bellefontaine.
Bellefontaine, 4.2 miles north of, southeast corner of crossroads, 640 feet north of residence of E. C. Peoples; iron post stamped " 1299 "

1, 299.251
Bellefontaine, 3.2 miles north of, at railroad crossing; top of west rail
at center of road_----------------------1,314. 32
Bellefontaine, 20 feet west of north entrance to courthouse; iron post stamped "1251

1,250.880
From point 4.2 miles north of Bellefontaine along highway east 1.6 miles, thence northeast to Big Springs.
Bellefontaine, 4.25 miles north of, southeast corner of crossroads. 640 feet north of residence of E. C. Peoples; iron post stamped "1299"
Bellefontaine, 4.2 miles north by 0.9 mile east of, 20 feet south of center of road at crossing Cleveland, Cincinnati, Chicago \& St. Louis Ry. ; on east end of 12 -inch steel drain under railroad; highest point_ 1, 336. 52
Harper, 0.5 mile southeast by 0.8 mile southwest of, at lane south, at root of 3 -foot walnut tree, on granite bowlder 2 feet in diameter; chiseled square
\(1,380.64\)
Harper, 0.5 mile southeast of, northwest corner of crossroads, on granite bowlder 4 feet in diameter; chiseled square on highest point
\(1,324.02\)
Harper, 0.5 mile southeast by 0.5 mile north of, northeast corner of T road east, on top of concrete anchor for telephone pole; chiseled square
1. 299.15

Feet.
Rushsylvania. 0.9 mile southwest of, at crossing; top of east rail_ ..... 1, 276.8
Rushsylvania, 175 feet southwest of station, southwest corner of con- crete walk at southwest corner of arossroads; chiseled square_-_ 1, 244. 79Rushsylvania, 100 feet south of station, at railroad crossing; top ofwest rail1,242. 0
Big Springs, \(\mathbf{1 . 4}\) miles southwest of, southwest corner of crossroads, 150 feet east of railroad crossing, on west end of stone culvert; chiseled square ..... \(1,179.18\)
Big Springs, 1.2 miles west of, at railroad crossing; top of east rail_ 1, 182.6
Big Springs, 0.5 mile north of, on northeast corner of doorstep atentrance to Big Springs schoolhouse; chiseled square1, 144. 48
From point 2 miles northeast of Harper along highway east and north to Big Springs.
Harper, 0.5 mile southeast by 1.5 miles northeast of, in northwest abutment of iron bridge over Rush Creek; chiseled square ..... 1, 244. 70
Harper, 0.5 mile southeast by 1.5 miles northeast of, 5 miles southeast to \(Y\) road east, 90 feet east of junction of roads, on north end of Feet. steel drain; highest point ..... 1,255. 95
Walnut Grove, 1.4 miles north by 1 mile west of, southwest corner of crossroads, on granite bowlder 1.5 feet in diameter; chiseled square ..... \(1,313.53\)
Walnut Grove, 1.4 miles north of, southwest corner of crossroads, on west end of 10 -inch steel drain under pike; highest point ..... \(1,170.55\)
Walnut Grove, 2.3 miles north of, southeast corner of concrete plat- form at entrance to Equality schoolhouse, at \(\mathbf{T}\) road east; chiseled square ..... \(1,167.29\)
Walnut Grove, 2.7 miles north of, southwest corner of T road south, south end of 2 -foot steel drain under pike; highest point ..... 1, 153. 08
Big Springs, 2.1 miles south of, on top of northeast abutment of iron bridge over Rush Creek; chiseled square ..... 1, 120.80
Big Springs, in front of station; top of west rail at road crossing... ..... 1, 136.3Big Springs, 0.5 mile north of, northeast corner of doorstep toentrance of Big Springs schoolhouse; chiseled square1, 144: 48
From Walnut Grove along highway east 6.1 miles, thence south to Science Hall, 3 miles northeast of West Mansfield.
Walnut Grove, on northeast corner of concrete walk leading to Walnut Grove M. E. Church; chiseled square ..... 1,153. 02
Walnut Grove, 1.3 miles east of, southeast corner of Bell schoolhouse yard at crossroads; iron post stamped "1111" ..... 1,111. 477
Walnut Grove, 3.1 miles east of, 150 feet east of residence of E. J.Clark, at T road north, on end of steel drain under pike; highestpoint1,081. 73
Walnut Grove, 3.7 miles east of, Toledo \& Ohio Central crossing; top of east rail ..... \(1,075.7\)
Walnut Grove, 4.4 miles east of, northwest corner of crossroads, 200feet south of residence of Homer Bates, in base of fence post; cop-per nail\(1,070.49\)
Walnut Grove, 4.8 miles east of, northeast corner of cross roads, on east end of 10 -inch steel drain under road; highest point ..... 1,071.40
\(45281^{\circ}\)-Bull. 651-17-9

\title{
Walnut Grove, 6.1 miles east of, 400 feet west of bridge crossing Bokes Creek, at \(T\) road south, on south end of 10 -inch steel drain Feet. under pike; highest point \\ West Mansfield, 3 miles northeast of, in northwest corner of Science Hall schoolhouse yard, at T road west; iron post stamped " 1057 "- 1, 058. 038
}

From Bellefontaine along highway east to Lunda.
Bellefontaine, 20 feet west of north entrance to courthouse; iron post stamped " 1251 "
Bellefontaine, at top of hill in east end of town, Sandusky Street, road north, southeast corner of concrete crossing ; chiseled square _-

1, 341.76
Bellefontaine, 1.8 miles east of, 80 feet east of road forks, 20 feet south of road; iron post stamped "Prim. Trav. Sta. No. 921910 1449 "
\(1,449.065\)
Bellefontaine, 2 miles east of, on south side of road, in base of fence
post at \(T\) road north ; spike
Bellefontaine, 2.5 miles east of, on Jerusalem Pike, on top of hill, 20 feet south of road, 30 feet west of corner of woods, on granite bowlder; chiseled square

1,529. 61
Campbells Hill; top of north meridian monument
1,533. 26
Bellefontaine, 2.5 miles east of, near top of Campbells Hill; top of south marble monument marking meridian line, marked "U. S. C. \& G. S."

Campbells Hill, 2.5 miles east of Bellefontaine, 1,000 feet south of Jerusalem pike, in orchard; top of hill (highest point in State of Ohio)

1,550
Rellefontaine, 2.9 miles east of, on Jerusalem pike, south side of road at \(T\) road north, in base of large oak tree; copper nail
Bellefontaine, 4 miles east of, on Jerusalem pike, 500 feet west of crossroads, on east abutment of steel bridge over creek; chiseled square
New Jerusalem, 1.2 miles west of, in northwest corner of \(T\) road north, in fence post ; copper nail

1, 351.32
New Jerusalem, east side of road at \(T\) road west; iron post stamped " 1451 ".
\(1,450.718\)
New Jerusalem, 0.9 mile east of, on south side of road, in base of fence post ; copper nail

1, 398. 91
New Jerusalem, 2 miles east of, north side of road, 0.4 mile west of
crossroads, in base of west gatepost at lane ; copper nail
North Greenfield, 1.4 miles west by 0.8 mile north of, 300 feet west of crossroads, on north wing wall west abutment of bridge over creek; chiseled square
\(1,148.34\)
North Greenfield, 1.4 miles west of, northeast corner of crossroads, on
vitrified pipe drain; painted square_-------172.11
North Greenfield, 0.6 mile west of, northwest corner of crossroads, at cemetery ; iron post stamped "Prim. Trav. Sta. No. 93 Ohio 1910, 1132" 1,131. 994
North Greenfield, southeast corner of concrete walk to Methodist Church; chiseled square

1, 102.85
North Greenfield, 1.3 miles east of, at Mill Creek schoolhouse, northwest of \(T\) road north, in base of telephone pole; copper nail_- 1, 089.89
North Greenfield, 2.4 miles east of, 2.1 miles west of Lunda, northwest Feet.corner of crossroads; iron post stamped "1071"\(1,070.351\)
Landa, 0.9 mile west of, at T road north, south end of cast-iron drain; painted square ..... \(1,085.41\)
Lunda, in front of schoolhouse, southwest corner of concrete watering trough; chiseled square ..... 1, 098. 73
Lunda, 600 feet south of station, at road crossing; top of west rail_ ..... 1, 102. 3
From point near North Greenfield north to Walnut Grove.
North Greenfield, 0.6 mile northwest of, on southwest abutment of small iron bridge over ditch; chiseled square ..... \(1,141.58\)
North Greenfield, 0.5 mile north of, northwest corner of crossroads, in base of corner fence post; copper nail ..... \(1,136.60\)
Walnut Grove, 1.4 miles south of, northeast corner of crossroads, in base of telephone pole 100 feet east of main entrance to Pike schoolhouse ; iron bolt ..... \(1,138.70\)
Walnut Grove, northeast corner of concrete walk leading to Walnut Grove M. E. Church ; chiseled square ..... \(1,153.02\)
From point near Jewell Hill east to Pickrelltown, thence southeast 1 mile and north to point near North Greenfield.
Bellefontaine, 4 miles south of, southwest corner of crossroads; iron post stamped " 1216 " ..... \(1,215.843\)
Jewell Hill, 2.1 miles east of, southwest corner of \(T\) road east, in south end of box culvert under pike; copper nail ..... 1, 226.92
Jewell Hill, 2.6 miles east of, in northeast abutment of small wooden bridge; chiseled square ..... \(1,151.68\)
Jewell Hill, 3.1 miles east of, southwest corner of \(T\) road east, inbase of corner fence post; spike\(1,136.80\)
Jewell, 3.9 miles northeast of, 400 feet west of State Bridge over Mad River, 100 feet west of residence of John Cox, at \(\mathbf{T}\) road east; iron post stamped " 1133 " ..... \(1,132.982\)
Jewell Hill, 3.9 miles northeast of, southeast abutment of StateBridge over Mad River; chiseled square\(1,131.79\)
Pickrelltown, 1.3 miles west of, opposite \(T\) road east, on west end of 12-inch steel drain under pike; highest point ..... \(1,370.68\)
Pickrelltown, at northeast corner of crossroads, on southeast corner of stone step to store; chiseled square ..... \(1,418.10\)
Pickrelltown, 1.1 miles southeast of, northwest corner of \(T\) road north, on granite bowlder 4 feet in diameter; chiseled square_-- 1, 468.92Middleburg, 2.4 miles northwest of, 20 feet west of northwest cornerof crossroads, on granite bowlder 3 feet in diameter; highest point- 1, 432.02Zanesfield, 3 miles southeast of, on southeast corner of doorsill ofMarmon schoolhouse (district 1), at T road north; chiseled square_ 1, 241.92
7anesfield, 3.4 miles east of, at road crossing; top of north rail_ ..... 1, 199.3
Zanesfield, 2.7 miles northeast of, northeast corner of T road north,150 feet northeast of residence of O. B. Parker ; iron post stamped"1411"1, 410. 598
North Greenfield, 1.4 miles southwest of, northeast corner of \(T\) road east, in base of corner fence post ; horseshoe ..... \(1,322.47\)
North Greenfield, 1.4 miles west of, northeast corner of crossroads, on vitrified pipe drain; painted square ..... \(1,172.12\)
From point 1 mile east of Pickrelltown south to point near Mingo.
Pickrelltown, 1.8 miles 2ast of, northwest corner of T road south; Feet. iron post stamped " 1396 " ..... 1, 395. 509
Pickrelltown, 2.4 miles southeast of, opposite T road west, in base of telephone pole; iron bolt ..... \(1,372.59\)
Pjckrelltown, 2.9 miles southeast of, on southeast abutment of small iron bridge over Mecochee Creek; chiseled square ..... \(1,260.40\)
Pickrelltown, 2.5 miles southeast of, at T road east, on north end of 12 -inch earthen drain tile under pike; highest point ..... \(1,329.13\)
Pickrelltown, 3.3 miles southeast of, top of southwest abutment of small iron bridge ..... \(1,192.38\)
Pickrelltown, 3.9 miles southeast of, southwest corner of T road north, in base of corner fence post; spike ..... 1, 288.65
Mingo, 3.4 miles north of, 900 feet west of schoolhouse (district 4, Monroe Township), at T road north, in base of telephone pole on south side of road; spike ..... \(1,369.98\)
From point 1 mile east of Pickrelltown east to Pottersburg, thence north toLunda.
Pickrelltown, 1.8 miles east of, northwest corner of \(T\) road south; iron post stamped " 1396 " ..... 1,395. 509
Pickrelltown, 3 miles east of, on top of northeast abutment of con- crete bridge over Mill Creek; chiseled square ..... 1, 190. 24
Middleburg, 3 miles west of, 150 feet east of T road east, on north- east corner of concrete bridge abutment; chiseled square ..... 1, 185. 27
Middleburg, 500 feet north of, northwest corner of \(T\) road west, on granite bowlder 3 feet in diameter; chiseled square ..... \(1,188.93\)
Middleburg, northeast corner of crossroads, directly in front ofSharp's store, in northeast corner of sandstone sidewalk; chiseledsquare\(1,175.41\)
Middleburg, 1.5 miles south of, southeast corner of crossroads; iron post stamped " 1122 " ..... 1, 122.350Middleburg, 2 miles southeast of, northeast corner of T road east, onnorth end of stone culvert under pike; chiseled square1, 082. 62
Pottersburg, 2 miles west of, northwest corner of T road west, on west end of stone culvert under pike; chiseled square ..... 1, 075.90
Pottersburg, 1.4 miles west of, southeast corner of \(\mathbf{T}\) road south, in base of telephone pole ; copper nail ..... 1, 097. 81
Pottersburg, 0.7 mile west of, northeast corner of road forks, in base of fence post; copper nail ..... 1, 095. 25
Raymond, 3 miles southwest by 0.5 mile southeast of, southeast cor-ner of T road northeast, on end of iron drain pipe ; painted square_ 1, 094. 26
Raymond, 3 miles southwest of, southeast corner of crossroads, onstone culvert at Flat Branch; chiseled square1, 075. 30Raymond, 3 miles southwest by 1.2 miles northwest of, southwestcorner of \(\mathbf{T}\) road southwest, in base of telephone pole; copper nail_ 1,080. 67East Liberty, 3 miles east of, 150 feet southwest of road crossing,Toledo \& Ohio Central R. R., on west abutment at south end ofsmall steel bridge; chiseled square1, 075. 52
Lunda, 2.2 miles south of, southwest corner of road forks; iron post stamped " 1084 " ..... 1, 083.762
Lunda, 1 mile south of, northwest corner of crossroads, in base oftelephone pole; copper nail1, 069.40
Lunda, in front of schoolhouse, southwest corner of concrete water-ing trough; chiseled square1, 098.73
Mingo, 3.4 miles north of, 900 feet west of schoolhouse (district 4, Monroe Township), south side of road at T road north, in base of Feet. telephone pole ; spike \(\qquad\) 1, 369.98
Mingo, 3.4 miles north of, 900 feet west of schoolhouse (district 4, Monroe Township), 30 feet southwest of center of \(\mathbf{T}\) road north; iron post stamped " 1371 " ..... 1,370. 495
EDON QUADRANGLE.
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by C. R. French in 1911.
From point 0.2 mile north of Billingstown south along highways via Columbia to point 6 miles southwest of Edon
Billingstown, 0.2 mile north of, at southeast corner of crossroads ; topof concrete fence post, level with road, marked " 1032.135 "1, 033.10
Billingstown, 0.8 mile south of, at northeast corner of crossroads; iron post stamped " 986 Ohio" ..... 986. 896
Billingstown, 1.3 miles south of, at southeast corner of T road east; spike in base of telephone pole, marked " 993.571 " ..... 994.54
Columbia, 1.7 miles north of, at southeast corner of \(T\) road east; painted square on top of rock, marked " 968.5 " ..... 968. 44
Columbia, 1.4 miles north of, at northwest corner of \(T\) road north,20 feet north of, 20 feet north to small walnut tree; painted squareon top of rock, marked " 973.6 "973. 51
Columbia, 0.7 mile north of, at northwest corner of crossroads; spike in base of fence post, marked " 980.367 " ..... 980.32
Columbia, 200 feet north of crossroads, on east side of road, 100 feet southwest to Star grocery ; iron post stamped " 979 Ohio" ..... 978. 908
Columbia, 0.8 mile south of, at northeast corner of crossroads, spike in base of fence post, marked " 984.496 " ..... 984.45
Columbia, 1.5 miles south of, at northwest corner of T road north;painted square on top of bottom step of concrete steps, marked" 963.7 "963. 68Edon, 2 miles west by 3.8 miles north of, on Ohio-Indiana State line,southwest corner of \(T\) road south, on top of rock at fence corner;painted square, marked " 983.073 "983.02

Edon, 2 miles east by 3 miles north of, at crossroads, west side of north-south road, 75 feet north to west road, 100 feet east to south side of house; iron post stamped " 960 Ohio"
Edon, 2 miles north by 2 miles west of, at northeast corner of T road east; painted square on top of rock, marked " 939.400 "
Edon, 2 miles west by 1 mile north of, at southwest corner of crossroads ; spike in base of fence post, marked " 923.206 "923.14
Edon, 2 miles west of, 10 feet north of northeast corner of T road east; iron post stamped " 910 Ohio" ..... 910.203

Edon, 2 miles west by 0.8 mile south of, at northwest corner of \(\mathbf{T}\) road west ; painted square on top of large rock, marked " 912.815 "
Edon, 2 miles west by 2.2 miles south of, at northwest corner of crossroads; spike in base of fence post, marked " 891.274 "
912.74
891.18

Edon, 2 miles west by 3 miles south of, at southeast corner of T road east, on township line ; iron post stamped " 887 Ohio"
886.588

Edon, 2 miles west by 3.9 miles south oí, at southeast corner of crossing of State line road and Bellefontaine road; spike in base of fence post, marked " 878.940 "
From point 2 miles east of Edon west along highway to point 2 miles west of
 Edon.
Edon, 1 mile east of, at southeast corner of crossroads; spike in base of telephone pole, marked " 881.7 "

Feet.

881.74

Edon, east end of, at T road south; stone in center of east-west road,
 marked " 893.3 "

893.34

Edon, 40 feet west of southwest corner of public square; chiseled
square on sidewalk, marked " 900.181 "
Edon, at northwest corner of town hall; iron post stamped " 897 Ohio "
897.343

Edon, 1 mile west of, at northeast corner of crossroads; top of rock at edge of road, marked " 904.6 " \(\qquad\) 904.62

\section*{ELMORE QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by D. C. Witherspoon, A. C. Freundburg, J. A. Belford, and Duncan Hannegan in 1901.
From New Rochester along Napoleon-Fremont road via Helena to Muddy Creek (double-rodded line).
Woodside, 0.5 mile west of, northeast corner of sec. 33 , T. 5 N., R. 12 E., southeast corner of crossroads, in south side of west abutment of culvert over ditch; aluminum tablet stamped " 669 Toledo"-
669. 135
699.109
665. 69

\section*{From Luckey south via Bradner to Rising Sun.}

Pemberville, 1 mile east of, east side of sec. 11, T. 5 N., R. 12 E., in north end of stone abutment, at southeast corner of iron bridge over Portage River; aluminum tablet stamped " 644 Toledo"
643.957

From point near Rising Sun to Girton, thence north to Rollersville.
Rising Sun, 1 mile west of, southeast corner of sec. 26, T. 4 N., R. 12 E., at northeast corner of crossroads, in center of stone in culvert; aluminum tablet stamped " 714 Toledo"
715.042

From Rollersville north to Woodville, thence east and south to Helena.
Woodville, in southeast abutment, first step of bridge over Portage River; aluminum tablet stamped " 630 Toledo"
Hessville, 1.5 miles northwest of, southeast corner sec. 6, T. 5 N., R. 14 E., at Swartzman crossing of Fremont Electric Ry., at northwest corner of south side of culvert; aluminum tablet stamped " 636 Toledo" \(\qquad\)
From Helena south 5 miles via Millersville, thence west to Girton.
Millersville, 3 miles south of, west side of sec. 29, T. 4 N., R. 14 E., 2.3 miles north of Kansas, in southeast pier of iron bridge over creek; aluminum tablet stamped " 699 Toledo"
699. 512

\section*{From point near Rising Sun.}

Rising Sun, 1 mile south of, at junction of county and township lines, in southwest abutment of bridge over creek; chiseled square
717.57

ERA QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by B. J. Green in 1903.
From Duby southwest along Baltimore \& Ohio Southwestern R. R. to Mount Sterling.

Era, in front of station; top of west rail
Feet.
Era, 0.5 mile southwest of station, on south abutment of bridge 14 over Deer Creek, at west end of bridge seat; chiseled square

\section*{Primary leveling by J. J. McNulta in 1911.}

From point 3.1 miles west of Circleville along highway to Westfall, thence west via Kinderhook to point 1 mile south of Woodlyn, thence north via Williamsport, Dawson, and Five Points to point 4 miles southeast of Mount Sterling.

Circleville, 3 miles west of, 180 feet northwest of gate to yard of George Weidinger's house, north side of road, in telephone pole; copper nail, painted "U. S. T. B. M. 674"
673.79

Circleville, 3.8 miles northwest of, on Darbyville pike, northeast corner of crossroads; iron post stamped " 676 Ohio"
675. 772

Circleville, about 3 miles west of, intersection of Washington pike, at northeast corner, in fence post; copper nail, painted "U. S. T. B. M. 694.1"
694.08

Circleville, about 3 miles west of, east side of road, at railroad crossing; top of south rail, marked "691"
691.06

Westfall, schoolhouse of district No. 3, in second step from ground, steps to yard, south side of road; copper nail painted "U. S. T. B. M. 667.9"
667. 82

Westfall, 0.8 mile south of, northwest corner of \(T\) road west, in telephone pole ; copper nail painted "U. S. T. B. M. 688.5 "
688. 42

Westfall, 2.1 miles west of, 250 feet west of Frank Wallace's house, south side of road, in fence post ; copper nail stamped " 723.9 "-
723.90

Westfall, 3 miles west of, at Ferguson's schoolhouse, in fence post on north side of road; copper nail stamped 716.4"
Kinderhook, 0.25 mile south of, 1,200 feet east of Mount Pleasant M. E. Church, in southeast corner of crossroads ; iron post stamped "715 Ohio" \(\qquad\)
Williamsport station, 1 mile south of, on Woodlyn and Dawson pike, west side of road, at \(T\) road east; copper nail
714. 504

Williamsport, at station, 700 feet north of railroad crossing, in front of residence of \(M\). Hunsicker, on stepping-stone; square cut_ \(\qquad\) 757.95

Williamsport, on concrete step of Farmers Bank; square cut.-.-.
Williamsport, at northeast corner of crossroads and northwest corner of school yard; iron post stamped "771 Ohio" \(\qquad\) 771. 002

Williamsport, 1.2 miles north of, on Williamsport and Dawson pike, southeast corner of crossroads ; square cut on stone, painted " 780 "--
Dawson, in southwest corner of Dawson pike and crossroad, 2 miles north of Williamsport; iron post stamped "Prim. Trav. Sta. No. 75,781 "
780.687

Dawson, 1.3 miles north of, on Williamsport and Dawson pike, at \(\mathbf{T}\) road west (private road), in telephone pole; copper nail
770.07
Dawson, 1.8 miles north of, on Williamsport and Dawson pike, southeast corner at \(T\) road east, in top of fence post; copper nail \(\qquad\)
Phersons Corners, southeast corner of crossroads ; iron post stamped " 785 Ohio" \(\qquad\)
Five Points, 1.5 miles east of, Five Points pike at northwest corner of \(T\) road north, in top of fence post; copper nail
Five Points, in northwest corner of crossroads; iron post stamped "855 Ohio" \(\qquad\)
Mount Sterling, 4 miles southeast of, on Mount Sterling pike, at southeast corner of crossroads; square cut on large stone, painted " 881.6 "

Feet.
781. 21
785.258
806. 62
854.852
881. 62
675. 772
683.93
717. 51
707. 73
681. 64
702.973
735.62
774. 85
787. 402
776. 62
734.2
726. 788
707. 73
781. 265
793. 36
816. 01
New Holland, 3.8 miles southeast of, southeast corner of crossroads,in front of schoolhouse ; iron post stamped " 832 Ohio"
New Holland, 3 miles southeast of, in root of large hickory tree in front of J. Porter farm; copper nail_
New Holland, 0.8 mile east of, on Circleville-Washington pike, in root of large oak tree on north side of road at \(T\) road southeast; screw and nut \(\qquad\)
New Holland, on foundation wall of town hall, 3 feet north of main entrance; aluminum tablet stamped " 857 "
From point 2.25 miles northeast of New Holland north to point near Mount
Sterling (portion of line).

Feet.
831.986
841.62
860.21
856.760

New Holland, 2.25 miles north and east of, in root of elm tree stump at \(T\) road west; screw and nut
863. 04

New Holland, 3 miles north and east of, northeast corner of Mouser pike and crossroad; iron post stamped " 861 Ohio"
New Holland, 1.5 miles east by 2.5 miles north of, southwest corner of \(T\) road southwest, in root of large oak tree; steel screw and nut_
New Holland, 1.5 miles east by 4 miles north of, on angle made by road, in south side of telephone pole on north side of road; screw and nut \(\qquad\)
New Holland, 1.5 miles east by 5 miles north of, southeast corner of crossroads, about 300 feet south of Deer Creek Valley Mill; iron post stamped "794 Ohio"
852.48
845.46
793. 525

New Holland, 8 miles northeast of, 1.6 miles east of Deer Creek Valley Mill, on top of concrete culvert across road; square cut.-.-
805.14

New Holland, 9 miles northeast of, in top of step of schoolhouse; square cut in stone
867.63

Mount Sterling, 4 miles east by 1.5 miles south of, on west side of road, in front of residence of D. Beath; iron post stamped " 875 Ohio"
874.539

Mount Sterling, 4 miles southeast of, on Mount Sterling road, southeast.corner of crossroads; square cut on large stone
881.62
- Mount Sterling, 3 miles southeast of, on Mount Sterling road, at T road running west, in northwest corner; iron post stamped " 892 Ohio"
891. 802

Mount Sterling, 1.5 miles east of, on Mount Sterling pike, at T road
east, on stone steps of brick schoolhouse ; Square cut_----.-.-. 900.16

\section*{From Five Points via Darbyville to Robtown.}

Five Points, 1 mile east of, on Darbyville pike, north side of road, 150 feet east of road bridge; copper nail
834. 88

Darbyville, 1.5 miles west of, on Darbyville pike, 2,000 feet east of farm of T. Carpenter, on northeast corner of east abutment of road bridge; square cut
801.94

Darbyville, in southwest corner of \(T\) road south; iron post stamped " 745 Ohio"
744. 552

Darbyville, 1.5 miles east of, on Bloomfield pike, southwest corner of T road south; copper nail in telephone pole
812.29

\section*{From point 2 miles southeast of Derby to Darbyville (portion of line).}

Derby, 2 miles southeast of, on London pike, at northwest corner of crossroads; square cut on large stone

Derby, 3.5 miles southeast of, on London pike, at southwest corner of pike and \(T\) road west; iron post stamped " 845 Ohio"
Derby, 4.5 miles southeast of, on London pike, southeast corner of \(T\) road east; square cut on stone culvert
Darbyville, in southwest corner of \(T\) road south; iron post stamped " 745 Ohio"

From point 3 miles south of Williamsport south to Clarksburg.
New Holland, 7.7 miles southeast of, corner of Clarksburg pike at crossroads; iron post stamped " 781 Ohio"
781. 265

Clarksburg, 3.5 miles north of, north side of drive leading to residence of T. W. Overly ; in side of fence post, copper nail
Clarksburg, 2.5 miles north of, southwest corner of road bridge marked with cross, 300 feet east of J. B. Hinton's house; top of iron rail set in ground. \(\qquad\)
Clarksburg, 1 mile north of, east side of road on farm of George Steinhauser, 75 feet south of gate leading to house, in root of large tree ; copper nail \(\qquad\)
Clarksburg, in town hall yard, about 30 feet east of southwest corner of building; iron post stamped "Prim. Trav. Sta. No. 6, Ohio 771." (This is the post formerly situated in Corcoran property, as described on p. 123, Bul. 276.)

Feet.
844.720
824.55
744.552
774. 69
771.15
768. 12
771.311

EUCLID QUADRANGLE.
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Primary leveling by C. H. Moore in 1903.
From Cleveland northeast along highway to Euclid.
Euclid, 150 feet east of corner of Euclid Avenue and Main Street, at southwest corner of red brick 2-story building on north side of Euclid Avenue, in west face of foundation stone; aluminum tablet stamped " 653 Cleveland"
653. 055

From Warrensville north along highway to South Euclid.
South Euclid, at southeast corner of lower stone step at front entrance of brick schoolhouse; aluminum tablet stamped " 977 Cleve-land"- \(\qquad\)
FELICITY QUADRANGLE, [Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]

Primary leveling by C. E. Mills in 1911.
From Locust Ridge south to Hamersville.
Locust Ridge, at northeast corner of schoolhouse (subdistrict No. 1) yard, 10 feet south of road; iron post stamped " 919 " \(\qquad\) 918. 641

Locust Ridge, 0.7 mile east by 2.2 miles south of, southeast corner of T road east, in base of fence post ; spike marked " 920.6 " \(\qquad\)
Hamersville, 1.25 miles northwest by 0.4 mile north of, southeast corner of crossroads, in south end of wooden drain; spike head painted white marked " 934.3 "
920.61
934.38

Hamersville, 1.25 miles northwest of, southeast corner of crossroads, in base of telephone pole; spike marked " 940.358 "

\section*{Near Boudes Ferry.}
Boudes Ferry, northwest corner of \(T\) road north up hill and road

Feet.
501. 179
867. 69
757. 85

\section*{Near Feesburg.}

Feesburg, 2.2 miles south by 1.2 miles southeast of, north side of road
at forks, at Barr schoolhouse; iron post stamped " 904 "--.-- 904.416
Feesburg, 2.2 miles south of, northeast corner of road forks, 4 feet north of mail box, in base of 8 -inch locust tree; spike marked " 839.4 "
839. 41

Feesburg, 1 mile south of, on east side of road at forks of Higginsport and Felicity pikes, in base of fence post; spike marked " 866.4 "-
Feesburg, southwest corner of \(T\) road west, 7 feet north of pump, in base of telephone pole; spike marked " 941.95 "
866. 36
941.94

Feesburg, 0.5 mile west of, on north side of road at T road south, at Rose Cemetery ; iron post stamped " Prim. Trav. Sta. No. 24, 1910, 932 "

Primary leveling by J. M. Perkins in 1914 and E. C. Bibbee in 1915.
From Bantam southeast along Cincinnati, Georgetown \& Portsmouth R. R. to Hamersville.

Bantam, at crossroads, on concrete curb of town pump; chiseled square
864. 80

South Bantam, 40 feet west of Cincinnati, Georgetown \& Portsmouth R. R. station, in root of ash tree; iron spike
890. 87

South Bantam, 0.4 mile east of, at crossing, in base of trolley guy pole opposite station; iron spike
895.20

South Bantam, 1 mile southeast of, on trestle over highway; top of rail
Bethel, 2 miles west of, on Cincinnati, Georgetown \& Portsmouth R. R., at four roads, in base of locust tree, 100 feet southwest of station; bent iron spike \(\qquad\)
Bethel, 1.6 miles west of, at road crossing ; top of rail_-...................
Bethel, 0.8 mile west of, at road crossing, in root of cedar tree south of crossing at edge of road; iron spike \(\qquad\)
Bethel, 0.2 mile west of, at road crossing; top of rail
876.56
868. 66
875.19
887. 48
890.46

Bethel, near Cincinnati, Georgetown \& Portsmouth R. R. station, at crossing west of station, 20 feet south of track and 4 feet west of sidewalk on west side of street; iron bench-mark post stamped "Ohio 893 " \(\qquad\)
Felicity switch, opposite station, in base of trolley guy pole; iron spike
893.032
901. 22

Bethel, 1.1 miles east of, at road crossing, 4 feet north of track, 8 feet east of road, on concrete culvert ; chiseled square \(\qquad\)
Walkers Mills, at road crossing, northwest of station, in base of Feet. corner fence post; iron spike ..... 926. 51
Yankeetown, 0.3 mile northwest of, at road crossing; top of rail ..... 920.0
Yankeetown, 15 feet north of railway station, on east edge of road; iron bench-mark post stamped "Ohio 935 " ..... 935.015
From Bethel north along highway to point 1.5 miles south of Concord.
Bethel, at corner of Plane and Union streets, on stone founda-tion of corner stone column of doorway of First National Bank;chiseled square890.83
Lethel, 0.5 mile north of, at four roads, on north corporation line, in telephone pole; spike ..... 883.16
Bethel, 1.6 miles north of, at crossroads, in root of large tree south- west of road corner; copper nail ..... 872.97
Concord, 1.5 miles south of, at Hayworths Corner, 30 feet west ofroad intersection, by fence corner; iron bench-mark post stamped"Ohio 748 "748. 229
From point 1.2 miles south of Concord east along highway to point 1 milesouth of Hennings Mill, thence south and east to Locust Ridge. (Part ofline from Olive Branch. See Batavia quadrangle.)
Williamsburg, 4 miles south by 1 mile east of, just west of CloverMethodist Church, at northwest corner of T pike west; iron poststamped "Prim. Trav. Sta. No. 93, 1909, Ohio 895 "895. 061
Williamsburg, 4 miles south by 1.1 miles east of, at T road east, on stump; painted square ..... 883.0
Hennings Mill, 1 mile south of, at \(\mathbf{T}\) road west, in base of large locust tree by fence corner; bent iron spike ..... 901. 33
Hennings Mill, 2.2 miles south of, at T road west, on concrete culvert top; chiseled square ..... 910.68
From Bethel south along Felicity \& Bethel R. R. to Felicity, thence alonghighways south to Rural, thence east to Boudes Ferry.

Bethel, 1.3 miles south of, at Poplar Crossing, 20 feet north of road, and 15 feet east of railway, in base of locust tree on fence line; iron spike \(\qquad\)Bethel, 1.6 miles south of, at road crossing; top of railBethel, 2.8 miles south of, 750 feet south of \(\mathbf{T}\) road east, at anglein highway, 30 feet west of track, in base of large oak tree; copperbench-mark nail
Bethel, 3.3 miles south of, at road crossing; top of rail ..... 921.0Mount Olive, 0.9 mile north of, at road crossing, 10 feet south ofroad, in base of trolley pole; iron spike
Mount Olive, at crossing by railway station, on north edge of road,18 feet west of track; iron bench-mark post stamped " Ohio 884 ".Felicity, 2 miles north of, at Goodwin's crossing, 10 feet south of roadand 20 feet east of track, in root of elm tree; iron spike
\(\qquad\)Felicity, on Osage Avenue; top of railFelicity, opposite station; top of railFelicity, in yard of town hall, 10 feet west of front entrance of townhall ; iron bench-mark post stamped "Ohio 921 "Felicity, 0.6 mile south of, at T road northeast, in corner fence post;iron spike

Felicity, 0.8 mile southeast of, at T road northeast, north of road corner, in fence post; iron spike228. 57905. 41883.902898. 50886.9911.9
921. 031
908.8
892. 88
913.7
©
883.902
-
Felicity, 1.1 miles south of, at \(Y\) roads, on top of stone culvert;

Feet.painted square
893.51
Cedron, at north doorway of Presbyterian Church, on north end of doorstone ; chiseled square
542.43
Cedron, 0.5 mile southwest of, at \(T\) road west, on top of stone culvert; painted square
527. 28
Cedron, 0.8 mile southwest of, at T road northwest, 30 feet southeast of bridge over brook, in root of tree ; copper bench-mark nail_-
Cedron, 1.2 miles southwest of, at road south, on root of large oak; painted square
Rural, 0.6 mile north of, at T road east, on southwest corner of west stone abutment of bridge over creek, on top of corner stone; chiseled square
499. 17

Rural, at junction of river road and Felicity pike, 6 feet west of northwest fence corner, on north edge of river road; iron benchmark post stamped " Ohio 495 "
494.815
Rural, 0.7 mile southeast of, at road corner by church, on stone; painted square
502.07
Utopia, 15 feet south by 30 feet west of center of crossroads; iron post stamped " Prim. Trav. Sta. No. 29, Ohio, 1910 "
510. 002
Utopia, 1 mile southeast of, at \(\mathbf{T}\) road north, on stone; painted square
504. 52
Utopia, 2.1 miles southeast of, at T road east of covered bridge, on southwest corner of bridge, on stone ; painted square

From South Bantam south along highway to point 2.9 miles southwest of Point Isabel.
Nicholsville, 1.2 miles east by 0.7 mile north of, at crossroads, on stump 20 feet northeast of road intersection; copper bench-mark nail
890.66

Nicholsville, 1.3 miles east of, at T road south, 2 feet north of southwest corner fence post ; iron bench-mark post stamped "Ohio 908 "-
Saltair, 1.3 miles north of, at crossroads, in southwest corner fence post; iron spike
907.984
916. 90

Saltair, 0.7 mile north of, at T road west, in base of telephone pole; spike
910.77
\(\begin{array}{ll}\text { Saltair, } 0.5 \text { mile north of, at T road east, on south end of wooden } & \\ \text { culvert; painted square } & 901.94\end{array}\)
Saltair, at crossroads, 15 feet southwest of W. E. Fees's store, in root of large maple tree ; copper bench-mark nail
901. 46

Saltair, 1.1 miles south of, at T road south, on top of stone; painted square
888.132

Point Isabel, 1 mile north of, at crossroads, in corner fence post 20 feet west of road intersection; bent iron spike
888.88

Point Isabel, 0.2 mile north of, at T road west, in root of locust tree; bent iron spike
868. 68

Point Isabel, 200 feet east of crossroads, in northwest corner of school yard ; iron bench-mark post stamped " Ohio 884 "
883.876

Point Isabel, 1.6 miles southwest of, at T road northwest, in root of large sycamore tree, on west side opposite \(T\) road; copper benchmark nail

Point Isabel, 2.9 miles southwest of, at four roads, 0.5 mile southeast of cemetery, in base of telephone pole opposite road southwest; iron spike

Feet.
803. 74

From point 2.9 miles southwest of Point Isabel along highways southwest to point near Neville, thence southeast to Rural.

Point Isabel, 3.97 miles south of, on east side of road, 80 feet north of H. C. Bradley's residence, in root of locust tree 3 feet west of fence line; 60 -penny spike, painted " 826 " on fence \(\qquad\)
Neville, 4.07 miles north of, on Moscow and Felicity pike, in southeast corner of H. C. Bradley's field, opposite T road south; iron post stamped " 861 Ohio," painted o nfence post near \(\qquad\)
Neville, 2.89 miles north of, at the northeast corner of T road north, 100 feet north of John Gropley's residence, on large limestone rock; chiseled square, painted " 741 " on rock and fence \(\qquad\)
Neville, 2.23 miles north of, at junction of creeks, 100 feet south of T road north, on east abutment north side of iron bridge; chiseled circle painted " \(663-53\) " on bridge \(\qquad\)
Neville, 1 mile north of, on Maple Creek, 300 feet east of T road south, at northeast corner of concrete walk leading to Flatrock Church; chiseled square, painted " 558 " on telephone pole opposite_
Neville, 1.09 miles west of, on river road at bridge over Maple Creek, on east abutment south side; chiseled square painted " \(490-80\) " on bridge girder \(\qquad\)
Neville, 10 feet south by 30 feet west of front door of public-school building, in ground of; iron post stamped " Prim. Trav. Sta. No. 27, Ohio, 1910," " 500 " painted on doorstep
825. 38
860.515
740.68
662.55
557. 85
489.37
500.174

Neville, 1.22 miles east of, on river road, on south side of road, on fence line at southeast corner of lane leading to Jess Cawhorn's residence, in root of walnut tree 2 feet in diameter; copper nail and washer, painted " 497 " on corner fence post
497.15

Chilo, 2 miles west of, on river road, 250 feet west of John German's residence, at concrete entrance at northeast corner of large barn on south side of road; chiseled square, painted " 503 " on telephone pole opposite
502.77

Chilo, 1.31 miles west of, 400 feet west of M. G. Easter's residence, 20 feet west of \(T\) road north, on east abutment north side of iron bridge; chiseled square, painted " \(497-83\) " on bridge girder \(\qquad\)
Chilo, at the northeast corner of river road and Felicity pike, in the north part of town, 10 feet east of corner fence post; iron post stamped " 508 Ohio," painted on telephone pole \(\qquad\)
Rural, 1.84 miles northwest of, on river road, 30 feet west of \(T\) road north, 15 feet east of small wooden bridge on south side of road, 200 feet west of I. Lawrence's residence, in top of cottonwood stump ; copper nail and washer, painted " 496 " on stump
496. 86
507. 641
495. 61

Rural, 1.04 miles northwest of, on river road, 300 feet east of R. H. Fay's farm residence, on west abutment south side of iron bridge; chiseled square, painted " 491 " on bridge girder
490.99

From point near Neville along highways north to Clermontville, thence northeast to Nicholsville.

Neville, \(\mathbf{1 . 9}\) miles west of, on river road, 100 feet west of C. R. Wile's residence, on the west abutment south side of bridge over Little Maple Creek ; chiseled square, " 515 " painted on bridge railing

Moscow, 0.98 mile south of, on river road, directly opposite lane leading to Gearge Trobe's residence, 12 feet north of small bridge, 2 feet west of fence line, in base of telephone pole; 60 -penny spike, 2 inches above ground, painted " 519 " on telephone pole

Feet.
518.34

Moscow, 0.38 mile south of, at junction of river road with Moscow and Felicity pike, in forks of road; iron bench-mark post stamped " 500 Ohio"
499. 428

Moscow, 0.64 mile north of, on river road, 100 feet north of T road north, on south abutment east side of iron bridge over Little Indian Creek; chiseled square, painted "492-77" on bridge girder \(\qquad\)
Point Pleasant, 0.81 mile south of, on river road, 800 feet south of J. F. Cheese's residence, on south end of west parapet to small concrete culvert; chiseled square, painted " 514 " on parapet
Point Pleasant, 680 feet south of post office, 60 feet north of \(\mathbf{T}\) road east, 50 feet north of Bushman \& Dunovan's farm residence, on east side of road, 2 feet west of fence; iron post stamped " 496 Ohio"
Point Pleasant, 0.8 mile northwest of, on river road directly opposite Mrs. Edward Cox's residence, 200 feet west of T road north, 10 feet east of southeast corner of blacksmith shop, in top of locust stump; copper nail and washer, painted " 504 "
Clermontville, 0.79 mile southeast of, on river road, 100 feet south of John Rahoni's residence, on wingwall at northwest corner of small bridge; chiseled square, painted " 503 " on bridge \(\qquad\)
Clermontville, 0.43 mile north of, in forks of road, on east end of second step at front gate entrance to M. F. Friedman's residence; chiseled square, " 530 " painted on telephone pole 60 feet east \(\qquad\)
Clermontville, 1.62 miles east of, on pike, on east end of step in front of Lafayette schoolhouse; chiseled square, " 820 " painted on face of step
Clermontville, 2.83 miles east of, on Clermontville and Laurel pike, at the northwest corner of \(T\) road north, on wingwall to small culvert; chiseled square, " 856 " painted on rock
Clermontville, 3.47 miles northeast of, at northeast corner of \(\boldsymbol{T}\) road east, 300 feet north of R. D. Iveton's residence, on north end of small stone culvert; chiseled square, " 890 " painted on rock_
Clermontville, 4.33 miles northeast of, on pike, 40 feet north of lane leading to G. O. Ketchum residence, on fence line at east side of road, in root of maple tree 1 foot in diameter; copper nail and washer, " 890 " painted on tree \(\qquad\)
Nicholsville, 1.75 miles west of, at northeast corner of crossroads, on New Richmond and Nicholsville pike, directly in front of M. Rich's residence; iron post stamped " 895 Ohio" \(\qquad\)
Nicholsville, 0.66 mile west of, on New Richmond-Nicholsville pike, 50 feet east of corner of \(\mathbf{T}\) road south, directly in front of Jackson schoolhouse, in root of maple tree 40 inches in diameter; copper nail and washer, " 878 " painted on tree
877.97

Nicholsville, in north end of cemetery, 60 feet north of Baptist Church, 4 feet south of fence line, in root of walnut tree 2 feet in diameter; copper nail and washer, " 871 " painted on telephone pole 35 feet east
Nicholsville, 1 mile east of, 600 feet east of E. A. McMurchy's residence, on south side of road, 4 feet north of fence line, in root of maple tree 1 foot in diameter; copper nail and washer, " 905 " painted on fence

From point 1.7 miles west of Nicholsville along highways northwest to point near Mount Pisgah, thence northeast to Hamlet.
Nicholsville, 2.31 miles west of, on New Richmond and Nicholsville pike, 35 feet east of J. H. Sapp's residence, 10 feet north of north
fence line, in small lot, in root of black-oak tree 24 inches in diameter; copper nail and washer, " 882 " painted on fence

Feet.
881.81
806.93
633.34
567. 26
816.94
813.128
890.52
891. 43

FINDLAY QUADRANGLE.

\section*{[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]}

\section*{Precise leveling by the Coast and Geodetic Survey.}

From Bloomdale northwest along Baltimore \& Ohio R. R. to point 0.5 mile west of North Baltimore.
T. 3 N., R. 12 E., sec. 31 , 1.5 miles east of Bloomdale, in south end of east abutment of an iron highway bridge; aluminum tablet stamped " 740 Toledo"
740.625

Bloomdale, Wood County, 0.8 mile east of, at city limits, at northeast corner of road junction close to a rail fence; chiseled square on top of stone post lettered "U.S.B.M." (C. \& G. S. b. m. E 6 ) \(\qquad\)
Bloomdale, southwest corner of Main and Second streets north of Baltimore \& Ohio R. R. tracks, in brick building used as hardware store, in north end of stone sill; square cut in outline marked " 749 Bloomdale" \(\qquad\)
B!oomdale, at corner of Garfield and Mulberry streets, main entrance of Trinity Methodist Episcopal Church, in top face of second step; red-metal disk (C. \& G. S. b. m. F \({ }_{6}\) )
742.974
749. 771
752.238

Bairdstown, on Randolph Avenue, 328 feet south of Baltimore \& Ohio R. R. station, in the south doorstep of a double house belonging to E. Knodle ; square cut (C. \& G. S. b. m. H \({ }_{6}\) )

Feet. 739.553

Galatea, on Baltimore \& Ohio R. R. right of way, 492 feet east of Toledo \& Ohio Central Ry. crossing, on upper step of the northwest abutment of a large culvert; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. I \({ }_{8}\) )
727. 458

North Baltimore, west side of Main Street, 131 feet north of Baltimore \& Ohio R. R. tracks, in north end of sill of south part of double store, marked "A. J. Steele, 1900 "; red-metal disk (C. \& G. S. b. m. J \({ }_{6}\) ) \(\qquad\)
North Baltimore, 0.5 mile south of, in southwest abutment of iron bridge over a creek; bronze tablet stamped " 726 Toledo" \(\qquad\)
734.018
726. 640
727.559

Primary leveling by J. A. Belford and Duncan Hannegan in 1901.
From point near Bloomdale via Oil Center to point near North Baltimore.
Bloomdale, on Main Street, at northeast corner of hardware store; square cut in stone step
Oil Center, south side of, sec. 18, T. 3 N., R. 11 E., in northwest abutment of iron bridge over Rocky Ford; copper bolt stamped " 709 Toledo"
709. 229

North Baltimore, 1.3 miles east of, in west side of doorstep at schoolhouse ; chiseled cross
North Baltimore, 0.5 mile south of, sec. 35, T. 3 N., R. 10 E., in southeast abutment of bridge over creek; bronze tablet stamped " 726 Toledo"

\section*{From Galatea south to Findlay.}

Findlay, in north front of courthouse, east of north entrance; aluminum tablet stamped " 779 Toledo"

\section*{Near Findlay (on circuits east and west of).}

Findlay, 5.5 miles east of, sec. 24, T. 1 N., R. 11 E., in stone abutment at northeast corner of bridge over The Outlet 0.5 mile east of its junction with Blanchard River; aluminum tablet stamped " 786 Toledo"
786.356

Findlay, 4 miles west of, sec. 21, T. 1 N., R. 10 E., in east corner of southwest abutment of iron bridge over small creek; aluminum tablet stamped " 771 Toledo"

\section*{FLUSHING QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by J. H. Wetzel in 1901 and B. J. Green in 1902. From Bannock west along Cleveland, Lorain \& Wheeling Ry. to Piedmont. \({ }^{i}\)
Laferty, 0.5 mile west of, on north end of west abutment of bridge 162 ; bronze tablet stamped " 1032 Steubenville" 1, 031.892

\footnotetext{
\({ }^{1}\) Corrected to accord with Baltimore \& Ohio Railroad precise-level line, adjusted.
\(45281^{\circ}\)-Bull. 651-17-10
}

\title{
Flushing, south side of Main Street, in north foundation wall of Dr. Barricklow's dwelling; aluminum tablet stamped "1319 Steubenville" \\ \(\qquad\) 1, 319. 380 \\ Piedmont, just east of railroad crossing at station, on bridge seat at northwest corner of county bridge; bronze tablet stamped " 889 Steubenville"
}

\section*{At Belmont.}

Belmont, on water tank at south side of Belmont National Bank
Building; aluminum tablet stamped " 1188 Steubenville".......- 1, 187. 45:

\section*{From Fairview east to Hendrysburg, thence south to Barnesville.}

Fairview, on south side of Main Street, on horse block in front of U. P. Church; aluminum tablet stamped " 1237 Steubenville"\(1,237.273\)
Fairview, 2.3 miles east of, 1 mile west of Hendrysburg, on top of coping of south side near west end of crooked bridge; chiseled square
Hendrysburg, 1.4 miles east of, at forks of National road and pike to Barnesville, on top of stone across abutment at south end of small bridge; chiseled square

From Piedmont northeast along county roads via Elk Run to Brushy Fork road near Minkville.

Piedmont, 4.8 miles northeast of, 0.25 mile south of Estep, north end of Beatty Carrother's barn, at center of wing wall to right; aluminum tablet stamped " 1264 Steubenville" 1, 264. 097

\section*{From Elk Run to Barretts Bridge.}

Cassville, porch on front of store building and former post office to north of road, on stone at southeast corner ; chiseled square

From Cadiz south along road to Flushing.
Cadiz, 1.3 miles south of, 400 feet south of barn west of road, on bridge 25 ; chiseled square

\section*{FORT RECOVERY QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\). ]
Primary leveling by E. C. Bibbee in 1914.
From point 1 mile west of Padua south along Ohio-Indiana State line 9 miles, thence east to Goulder schoolhouse.
T. 6 S., R. 1 E., 20 feet east and 25 feet south of west corners of secs. 19 and 30 , on Ohio-Indiana State line; iron post stamped "Prim. Trav. Sta. No. 24, 898 "
T. 6 S., R. 1 E., near northwest corner of sec. 31, on east side of road on Ohio-Indiana State line, in root of walnut tree 20 inches in diameter ; copper nail
T. 6 S., R. 1 E., 6 feet east of fence corner at southwest corner of sec. 31 , on fence line, on rock; chiseled square
908. 49
T. \(7 \mathrm{~S} ., \mathrm{R} .1 \mathrm{E}\). , near southwest corner of sec. 6 , on Ohio-Indiana State
line, in center of concrete header at northwest corner of T road
west; chiseled square
T. 7 S., R. 1 E., near southwest corner of northwest quarter of sec. 18, on Ohio-Indiana State line, on east side of road, 1 foot west of fence, 20 feet south of lane leading to David Jones's residence; iron post stamped " 974 Ohio"

Feet. 974.014

Fort Recovery, 1.25 miles west of, 195 feet south of Erie Railroad, on Ohio-Indiana State line, in center of wing wall at northeast corner of concrete bridge; chiseled square
Fort Recovery, 1.5 miles southwest of, on Ohio-Indiana State line, at northeast corner of crossroads, on east end of steel drain; highest point \(\qquad\)
T. 15 N., R. 1 E., near southwest corner of northwest quarter of sec. 20, on Ohio-Indiana State line, on center of east header to concrete culvert; chiseled square \(\qquad\)
T. 15 N., R. 1 E., 200 feet south of northwest corner of sec. 29, on Ohio-Indiana State line, on north end of east header to concrete culvert; chiseled square \(\qquad\)
T. 15 N., R. 1 E., 25 feet north and 20 feet east of stone at west corner of secs. 29 and \(32,3.5\) miles south and 1.2 miles west of Fort Recovery, in center of T road east; iron post stamped " Prim. Trav. Sta. No. 43, Ohio, 1910999 " \(\qquad\) 998. 630
T. 15 N., R. 1 E., 0.25 mile east of southwest corner of sec. \(28,3.5\) miles south of Fort Recovery, at northeast corner of crossroads, on north end of steel drain; highest point
T. 15 N., R. 1 E., at northeast corner of sec. 33 , in center of road at T road south, on corner stone; highest point

1,030. 72
From point 3 miles southwest of Fort Recovery south along Ohio-Indiana State line.
T. 14 N., R. 1 E., 60 feet south of northwest corner of sec. 6, on Ohio-Indiana State line, on north end of east concrete girder to concrete bridge; chiseled square_
T. 14 N., R. 1 E., 500 feet north of southwest corner of sec. 6, on Ohio-Indiana State line, at southeast corner of concrete bridge; chiseled square

1, 049.81
T. 14 N., R. 1 E., 500 feet south of southwest corner of sec. T, on Ohio-Indiana State line, in center of parapet, on east end of concrete culvert; chiseled square
T. 14 N., R. 1 E., 25 feet north by 25 feet east of southwest corner of sec. 18, on Ohio-Indiana State iine, at northeast corner of \(T\) road east; iron post stamped " 1061 Ohio"
T. 14 N., R. 1 E., 25 feet north by 37 feet east of southwest corner of sec. 19, 10 feet east of northeast corner fence post, on fence line, on large flat rock; chiseled square
T. 14 N., R. 1 E., 15 feet south by 25 feet east from northwest corner of sec. 31, on Ohio-Indiana State line, at southeast corner of \(\mathbf{T}\) road east, at south end of steel drain pipe; top of flange_

1, 019.10
From point 6 miles west of Rossburg west to Ohio-Indiana State line.
T. 14 N., R. 1 E., 25 feet south by 35 feet east of northwest corner or sec. 33 , in root of maple tree; copper nail
T. 14 N., R. 1 E., near southwest corner of sec. 29 , directly in front of brick schoolhouse, 20 feet north of fence, in root of buckeye tree ; copper nail
T. 14 N., R. 1 E., 15 feet south by 25 feet east from northwest corner of sec. 31, on Ohio-Indiana State line, at southeast corner of T Feet. road east, at south end of steel drain under road; top of flange_--- 1, 019.10
T. 14 N., R. 1 E., 30 feet west by 30 feet north of southwest corner of sec. 31, on Ohio-Indiana State line, on northwest corner of crossroads, in root of black-oak tree 3 feet in diameter ; copper nail

1, 028.38
Union City, 3.9 miles north of, on Ohio-Indiana State line, 150 feet south of \(T\) road east, on northeast corner of east end of concrete walk leading to George Nelzley's residence; chiseled square 1, 043.31

\section*{FOSTORIA QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Bascom northwest along Baltimore \& Ohio R. R. to point 2.5 miles west of Fostoria.
Bascom, Seneca County, about 2 miles east of, on Baltimore \& Ohio R. R. right of way, 492 feet west of milepost 243 , north end of west abutment of bridge 68 over Wolf Creek; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. Vs)
764. 762

Bascom, about 1 mile east of, 296 feet west of milepost 242,82 feet south of Baltimore \& Ohio R. R. tracks, on farm of Joseph Leonard, disk at northeast corner of junction of roads; red-metal cap on iron post (C. \& G. S. b. m. Ws)
778.241

Bascom, near Crumm's store, at northwest corner of crossroads, in bottom of round hole in stone used for crossing; cross marked " 776 Bascom" \(\qquad\)
Bascom, 0.2 mile south of, south of cemetery, in southwest abutment of an iron highway bridge over creek; aluminum tablet stamped " 766 Tol"
757.305

Bascom, about 2 miles west of, on Baltimore \& Ohio R. R. right of way, road crossing, at milepost \(239,16.4\) feet north of track, on top step of east side of a sandstone culvert; red-metal disk (C. \& G. S. b. m. \(\mathrm{X}_{5}\) )
776.527

Fostoria, about 3 miles east of, on Baltimore \& Ohio R. R. right of way, in north end of west abutment of a steel-girder bridge over Raccoon Creek; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. \(\mathrm{Y}_{5}\) )
767.703

Fostoria, about 2 miles east of, on Baltimore \& Ohio R. R. right of way, on north side of track; copper bolt in center of capstone of culvert (C. \& G. S. b. m. Z \({ }_{5}\) )
768. 261

Fostoria, northwest corner of Jones and Main streets ; top surface of check valve of city water plug, marked " 778 Fostoria " \(\qquad\)
Fostoria, corner of Main and Center streets, in southwest corner of First National Bank Building, east side of Center Street entrance, in vertical surface of water table; red-metal disk (C. \& G. S. b. \(\mathrm{m} . \mathrm{A}_{6}\) )
781.072

Fostoria, at southeast corner of Tiffin and Union streets, 1 meter from curb, in top of stone post ; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. B \({ }_{6}\) )
782.877

Primary leveling by J. A. Belford and Duncan Hannegan in 1901. Near Longley. \({ }^{1}\)
Longley, 0.8 miles south of, in southeast abutment of bridge over creek; aluminum tablet stamped " 736 Toledo"
737.027

\footnotetext{
\({ }^{1}\) On double-rodded line to Fostoria.
}

\section*{From point near Longley east 10 miles and north to point near Kansas.}

Bascom, 5.3 miles north of, in sonthwest abutment of iron bridge over Plum River; aluminum tablet stamped " 725 Toledo" \(\qquad\)
Kansas, 1 mile south of, at southwest corner of road fork, in stone abutment; chiseled cross

Feet.
725.910
730.85
728.87

From Bascom south 5.2 miles, thence west 6.2 miles, thence northwest to Fostoria.

Bascom, 0.3 mile south of, south of cemetery in southwest abutment of iron bridge over creek; aluminum tablet stamped " 766 Toledo"Bascom, 5.3 miles south of, 100 yards west of schoolhouse at crossroads, in northwest abutment of stone culvert over creek; aluminum tablet stamped " 805 Toledo"
767.305
805.389
826. 30

\section*{Near Alvada.}

Alvada, 1 mile north of, at crossroads, in step of schoolhouse ; chiseled cross_
837.68

Alvada, 2 miles south of, in stone at northwest abutment of iron bridge over creek; aluminum tablet stamped " 815 Toledo"
815.503

FRAZEYSBURG QUADRANGLE.
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by W. H. Monahan in 1907 and C. H. Semper in 1908.
From Trinway south 5 miles.
Trinway crossing of the Pennsylvania line and the Cincinnati \& Muskingum. Valley R. R.; top of rail
730.1

Trinway, at southwest corner of Pennsylvania I. R. station, in top of stone curb around cellar window ; aluminum tablet stamped " 731 "

Dresden, 1 mile north of, east of track in front of milepost " \(\mathbf{T}-1\);" top of rail set vertically in ground, marked "B. M.-735"
731. 160
735. 40

Dresden, 30 feet east of Cincinnati \& Muskingum Valley R. R., near northwest corner of public-school grounds; iron post stamped "Prim. Trav. Sta. No. 54-740" \(\qquad\)
Dresden, in front of station; top of rail
740.254
739.3
745.21
752.42
723. 75

\section*{From Hanover east along Pennsylvania R. R. to Trinway.}

Hanover, 2.4 miles east of, in stone abutment used as a culvert on north side of rock drive under railroad; aluminum tablet stamped " 813 "

Feet.
813. 260

Black Run, 530 feet south of, in west side of north abutment of iron bridge over Black Run; aluminum tablet stamped " 766 "
766. 129

Frazeysburg, 0.5 mile north of Pennsylvania R. R. station, in second of east doorsteps of city building; aluminum tablet stamped " 757 "-
Frazeysburg, 3 miles east of, 60 feet south of south track, in base rock of highway bridge over Pennsylvania R. R.; aluminum tablet stamped " 768 "
757. 237
768. 458

From Trinway north along Cleveland, Akron \& Columbus Ry, to Cooperdale,
thence west : nd scuth along highways to Black Run.
Trinway, 0.5 mile north of, 50 feet north of wagon road, in east side of north abutment of Cleveland, Akron \& Columbus R. R. bridge over canal; aluminum tablet stamped " 737 "
737. 286

Wakatomika, 0.13 mile northwest of station, in north side of east abutment of covered bridge; aluminum tablet stamped " 756 "----
Cooperdale, 0.2 mile north of, in west side of south abutment of railroad bridge; aluminum tablet stamped " 775 "
756.014

West Carlisle, 123 feet north of northwest corner of Presbyterian Church, in southwest corner of lot of H. M. Robinson; iron post stamped "Prim. Trav. Sta. No. 55 " \(\qquad\) 1,057. 260
West Carlisle, 800 feet west of, in west side of foundation of Methodist Episcopal Church, 5 feet from southwest corner; aluminum tablet stamped " 1040 "

1, 039. 813
West Carlisle, 3.4 miles west of, in west side of south abutment of iron bridge over Wakatomika Creek; aluminum tablet stamped " 822 "
822.103

Perryton, 3 miles north of, 30 feet from wagon road, on north end of east side in foundation of Wright schoolhouse; aluminum tablet stamped " 801 "
801. 442

Perryton, in north side, northeast corner of foundation of schoolhouse; aluminum tablet stamiped " 800 "
800.246

From Dillon northwest along Baltimore \& Ohio R. R. to Toboso.
Dillon, 3.6 miles west of, in northeast abutment of railroad bridge
over creek; aluminum tablet stamped " 726 "---------
Nashport, in front of station; top of rail at road crossing- \(\qquad\)
Nashport, 0.01 mile west of, south of track, in south abutment of concrete culvert; aluminum tablet stamped " 758 "
758.2
757. 453

Toboso, in southeast corner of station platform; aluminum tablet stamped " 780 "
780.020

Toboso, in front of station; top of rail
778.7

From Nashport southwest to Cottagehill.
Cottagehill, 0.2 mile south of, in south abutment east side of small bridge; aluminum tablet stamped " 877 "

FREDERICKTOWN QUADRANGLE.

> [Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime} ;\) longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\). ]
> Primary leveling by R. C. Seitz in 1907.
> From Croton east via Lock to Homer.
L.ock, 1.62 miles west of, at county line, in north end of bridge seat, at west abutment of covered bridge over creek; aluminum tablet stamped " 1118 "


Lock, 2.04 miles east of, 200 feet west of crossroads, in coping at south end of culvert; aluminum tablet stamped " 1067 "

1, 066.944
Homer, in northwest part of public-school grounds, 78 feet north of
northwest corner of schoolhouse; iron post stamped "Prim. Trav.
Sta. No. 38 "
Primary leveling by E. C. Bibbee and C. W. Howell in 1911.
From point near Fredericktown south along Baltimore \& Ohio R. R. to point near Mount Vernon.

Fredericktown, 0.8 miles north of, on top of concrete bridge over Owl Creek, north end, east side ; chiseled square
Fredericktown, in northwest corner of city fire building lot, 65 feet southwest of standpipe; iron post stamped " 1133 Ohio".

1, 132. 272
Fredericktown, 1 mile south of, at private crossing; spike in base of telephone pole

1, 062. 72
Fredericktown, 1.8 miles south of, 35 feet north of public-road cross-
ing, on east side of railroad; spike in base of telegraph pole_----_ 1, 052.89
Fredericktown, 3.2 miles south of, 3.6 miles north of Mount Vernon, at southwest corner of crossroads, 35 feet west of tracks; iron post stamped " 1041 Ohio"

1, 040.304
Mount Vernon, 2.4 miles north of, 17 feet west of railroad, in public
road at crossing; spike in base of telephone pole_-_-_-_-1, 018.34
Mount Vernon, 1.8 miles north of, 60 feet west of public road, on
south abutment east side of bridge 573 ; chiseled square_-_-_1,010.64
From Fredericktown south and west along highways to Penlan.
Fredericktown, 1.9 miles southwest of, at northwest corner of cross-
roads; spike in base of telephone pole, painted " 1071 "
Fredericktown, 3.2 miles southwest of, at head of \(T\) road north; spike
in base of telephone pole, painted " 1086.5 "--.-.-.-.-. \(1,086.32\)
Fredericktown, 3.6 miles southwest of, at southeast corner of \(T\) road south; spike in base of corner post, painted "T. B. M. 1080.365 "-- 1, 080.15
Fredericktown, 4 miles west by 1 mile south of, at northwest corner of \(T\) road; spike in base of telephone pole, painted " 1089.6 "

1, 089. 46
Lucern, at head of T road south; iron post stamped "1088 Ohio "-.-. 1, 087. 967
Fredericktown, 6 miles west of, at southeast corner of T road south; spike in base of telephone pole, painted " 1129.2 "
\(1,129.12\)
Lucern, 0.25 mile south by 2.3 miles west of, at southwest corner of \(T\)
road; spike in base of post, marked " 1104.1 "-----------1, 103.98
Lucern, 0.25 mile south by 2.9 miles west of, at southwest corner of crossroads; iron post stamped " 1136 Ohio"
\(1,136.082\)
Chesterville, 2 miles southwest of, at northeast corner of crossroads,
near Chester Church; spike in base of telephone pole, painted
"1191.5"


\section*{From Mount Vernon west along old Delaware road to point 3.5 miles north of Marengo.}

Mount Vernon, 1 mile west of, iron bridge over Owl Creek, on southwest wing of west abutment of bridge; chiseled circle, painted "997.4"

Feet. 997. 15

Mount Vernon, 2.3 miles west of, at northwest corner of T road north; spike in base of telephone pole, painted "T. B. M. 1054.3"
\(1,054.05\)
Mount Vernon, 3.5 miles west of, at southwest corner of lane south; iron post stamped " 1087 Ohio" 1,087. 151
Mount Vernon, \(\dot{4} .2\) miles west of, at northeast corner of crossroads; spike in base of telephone pole, painted " 1126.6 " \(1,126.40\)
Mount Vernon, 4.6 miles west of, at head of T road south ; copper nail in root of maple tree, painted " 1188.0 "
Mount Vernon, 5.3 miles west of, at head of \(T\) road north; spike in base of telephone pole brace, painted " 1250.9 "
Mount Vernon, 6.8 miles west of at northeast corner of crossroads ; iron post stamped " 1280 Ohio"
\(1,279.938\)
Mount Vernon, 7.9 miles west of, at southwest corner of crossroads, 0.5 mile east of Morrow-Knox county line ; iron post stamped "Prim. Trav. Sta. No. 71, 1910, 1224 " \(\qquad\) \(1,223.382\)
Mount Vernon, 8.9 miles west of, at northeast corner of crossroads, 200 feet southeast of Hedding M. E. Church ; spike in base of telephone pole, painted " 1288.5 "

1, 288.37
Mount Vernon, \(\mathbf{1 0 . 5}\) miles west of, \(\mathbf{1 . 2}\) miles northeast of Sparta, at northwest corner of crossroads; iron post stamped " 1303 Ohio"-
\(1,302.708\)
Mount Vernon, 11.6 miles west of, 1 mile northwest of Sparta, at northeast corner of crossroads; spike in base of telephone pole, painted " 1303.0 "
\(1,302.90\)
Mount Vernon, 12.6 miles west of, 1.7 miles northwest of Sparta, at - northwest corner of T road north; spike in base of fence post, painted "1299.7"

1, 299.69
From Mount Vernon southwest along Cleveland, Akron \& Cincinnati Ry, to Condit.

Mount Vernon, 1 mile south of, at northwest corner of road crossing; spike in base of telephone pole, painted " 1006.9 "
Mount Vernon, 2 miles southwest of, 50 feet north of road crossing, east side of railroad; spike in base of telegraph pole, painted "1035.2"
Mount Vernon, 3.1 miles southwest of, south abutment on west side
of railroad bridge 89 ; chiseled square, painted " 1062.4 "
Bangs, 100 feet north of station, on railroad right of way; iron post stamped " 1101 Ohio"
\(1,100.695\)
Bangs, 1 mile west of, 3.1 miles east of Mount Liberty, 30 feet south-
east of road crossing; spike in base of telephone pole, painted
" 1124.5 "-
Mount Liberty, 120 feet east of station, on railroad right of way; iron
post stamped " 1210 "
Mount Liberty, 1 mile southwest of, 30 feet southeast of railroad crossing; spike in base of telephone pole, painted " 1246.7 "

1, 246. 54
Mount Liberty, 2.3 miles southwest of, 140 feet southwest of railroad crossing; spike in telephone pole, painted " 1278.1 "
\(1,277.88\)
Feet.
Centerburg, at center of station lot 30 ; iron post stamped " 1209 " \(-\ldots\) 1, 208.926
Centerburg, 0.5 mile southwest of, 30 feet southeast of crossing; spike in base of telegraph pole, painted " 1196.2 "
1, 196. 01
Centerburg, 1 mile southwest of, 40 feet southeast of road crossing; spike in base of telegraph pole \(98-\mathrm{C}\), painted " 1180.9 "
1, 180. 70
Centerburg, 2.2 miles south of, 30 feet east of road crossing, east side of railroad; spike in base of telegraph pole, painted " 1167.5 " \(\qquad\) 1, 167. 33

\section*{Near Penlan.}
Penlan, 0.8 mile south of, at south end of T road; spike in telephone
pole deadman, marked "1256.2"-----------254.79
Penlan, 1 mile north of, at southeast corner of crossroads; spike in \(1,191.19\)
Penlan, at northeast corner of crossroads ; iron post stamped " 1247 "- 1, 246. 448

\section*{Near Marengo.}

Marengo, 3.25 miles east by 0.8 mile north of, at southwest corner of crossroads ; iron post stamped " 1268 Ohio"
\(1,267.442\)

\section*{From Brandon south and west along highways to Centerburg.}

Brandon, at southwest corner of crossroads, 6 feet east of northeast corner stone; chiseled square on concrete walk, painted "1075.8"-1,075. 52
Brandon, 0.6 mile south of, at head of lane west; spike in base of telephone pole, painted " 1112.24 "
\(1,111.97\)
Brandon, 1.5 miles south of, at head of \(T\) road west ; spike in base of telephone pole, painted "1065.0"

1, 064. 70
Brandon, 2.1 miles south of, at head of \(T\) road west; iron post stamped " 1042 Ohio"

1, 041.800
Brandon, 2.1 miles south by 1.6 miles west of, at northeast corner of T road east; spike in base of fence post, painted " 1070.6 "
\(1,070.31\)
Brandon, 1.5 miles south by 1.6 miles west of, at southeast corner of crossroads; spike in base of corner fence post, painted " 1093 A "--- \(1,093.09\)
Brandon, 1.5 miles south by 3.2 miles west of, at southeast corner of crossroads, at Mink Street schoolhouse ; iron post stamped " 1128 "- 1, 127. 840
Brandon, 1.5 miles south by 4 miles west of, at southeast corner of \(T\) road east; spike in base of corner fence post, painted " 1147.7 "- \(\qquad\) \(1,147.38\)
Lock, 1.3 miles east by 1.2 miles north of, at southwest corner of \(T\) road west; spike in base of telephone pole, painted " 1140.0 "

1, 139. 71
Lock, 1 mile north by 0.4 mile east of, at head of \(T\) road east, at Beach Knob schoolhouse; spike in base of telephone pole, painted " 1168.5 "
\(1,168.25\)
Lock, 0.8 mile west by 1 mile north of, at iron bridge; chiseled square on northwest corner of bridge abutment, painted " 1157.7 "
Centerburg, 4 miles east of, 300 feet south of Myers schoolhouse, at southeast corner of crossroads ; iron post stamped " 1190 "
\(1,190.047\)
Centerburg, 3 miles east of, at northeast corner of \(\boldsymbol{T}\) road north; spike in base of telephone pole, painted " 1206.1 "

1, 205. 82
Centerburg, 1.9 miles east of, at northwest corner of crossroads; spike in base of telephone pole, painted " 1214.4 "
\(1,214.12\)
Centerburg, 0.6 mile southeast of, at center of T road east, at cemetery; spike in base of telephone pole, painted " 1197.03 "

1, 196. 72

\section*{FREMONT QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by D. C. Witherspoon and A. C. Freundburg in 1901.
From Muddy Creek east along highway and railroad to Clyde (double-rodded line).

Helena, 5.5 miles east of, southwest corner of iron bridge over Muskellunge Creek, on abutment, 4 inches south of iron beam; chiseled cross

Feet.
640.82

Fremont, in south face of jail wall, near southeast corner of building, 5 feet above ground; aluminum tablet stamped " 636 Toledo"-
636. 318

Clyde, 2.5 miles west of, sec. 9, T. 4 N., R. 16 E., in northeast abutment of bridge over creek, at Maumee pike; aluminum tablet stamped " 637 Toledo"
637. 206

\section*{From Fremont north to Kingsway (double-rodded line).}

Kingsway, 1.5 miles east of, 0.3 mile west of quarter corner at east side of sec. 3, T. 5 N., R. 15 E., at crossroads, in foundation of north wall at northeast corner of Methodist Church ; aluminum tablet stamped " 588 Toledo"

\section*{GAMBIER QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\). ]
Primary leveling by E. C. Bibbee and Philip Flitman in 1911-12.
From point near Mount Vernon south along Baltimore \& Ohio R. R. to point near Utica.

Mount Vernon, at northwest corner of courthouse ; iron post stamped " 1053 Ohio". \(\qquad\)
\[
1,052.789
\]

Mount Vernon, 0.4 mile south of station, 630 feet north of railroad crossing, on south retaining wall on east side of bridge 570 ; chiseled square
Mount Vernon, 1.6 miles south of, on west side of railroad at crossing; spike in base of telephone pole
\(1,013.99\)
Mount Vernon, 3 miles south of, 1,190 feet south of milepost marked "N 22 S 94 "; spike in base of telegraph pole

1, 019.28
Mount Vernon, 4.1 miles south of, 0.7 mile north of Hunt, on east retaining wall on south side of stone-arch bridge 567 ; chiseled square \(\qquad\) 1, 021.67
Hunt, 25 feet west by 30 feet north of public-road crossing, on railroad right of way; iron post stamped " 1042 Ohio"

1, 041.533
Hunt, 0.9 mile south of, on concrete culvert under railroad, on east side of tracks at telegraph pole \(18 / 15\); chiseled square

1, 035.25
Hunt, 1.6 miles south of, 40 feet north of public road at crossing, on east side of railroad; spike in base of telegraph pole \(\qquad\) \(1,018.38\)
Hunt, 2.3 miles south of, 3.9 miles north of Utica, 100 feet west of railroad, at southeast corner of \(T\) road east; iron post stamped " 996 Ohio"

\section*{Near Hunt station.}

From point near Utica east along highways via Martinsburg to point near Bladensburg.

Utica, 3.1 miles northeast of, 3.4 miles northwest of Martinsburg, at northeast corner of crossroads ; iron post stamped " 1039 Ohio "--
Martinsburg, 2.2 miles southwest of, 80 feet west of public road, on north side of lane to residence of C. Clutter; spike in top of 42inch white-oak stump \(1,064.20\)
Martinsburg, 1.4 miles west of, on large rock on north end of small
stone bridge; chiseled square
Martinsburg, northeast corner of city building lot; iron post stamped "1167 Ohio" \(1,167.104\)
Martinsburg, 1 mile east of, at T road north, on south property line;
nail in root of white-oak tree 24 inches in diameter-1, 176. 11
Martinsburg, 2.1 miles east of, southwest corner of \(\mathbf{T}\) road south; chiseled square on granite rock \(1,136.27\)

Bladensburg, 0.3 mile west of, on north end of small rock culvert at water trough and \(T\) road north; chiseled square
997.97

Bladensburg, in southeast corner of schoolhouse yard; iron post
stamped " 977 Ohio"
Bladensburg, 1 mile north of, at T road east, on section corner stone in center of public road; chiseled square
998.43

From Danville west along Cleveland, Akron \& Cincinnati Ry, to Mount Vernon. \({ }^{1}\)
Danville, 1 mile southwest of, northwest corner of north bridge seat of girder bridge 72 ; top surface
948. 42

Danville, 1.8 miles southwest of, at southwest corner of road crossing;
iron post stamped ' 939 Ohio "
Danville, 2.5 miles southwest of, at northwest corner of southwest end of concrete culvert ; top of masonry
922. 85

Howard, 100 feet in front of station ; iron post stamped " 892 Ohio"891. 807

Howard, 1 mile southwest of, at northwest corner of bridge 81 ; top of bolt in north end of wooden guard rail
907.

Howard, 2 miles southwest of, at northwest corner of road crossing; iron post stamped " 934 Ohio"
Gambier, 1.5 miles east of, near road crossing; top of northwest corner of south abutment of small girder bridge
925. 54

Gambier, 100 feet west of station; iron post stamped " 967 Ohio"-- 966.321
Mount Vernon, 2 miles south by 1 mile east of, at end of southeast wing of girder bridge 85 ; top of top step.
975.53

Mount Vernon, switch yard, at northeast pillar of coal chute; top of stone foundation at northeast corner
984.72

Mount Vernon, 200 feet north of station, on Main street, over center arch of east edge of stone bridge over Kokoshing River
Mount Vernon, 2 miles south by 2 miles east of, 0.5 mile west of railroad bridge 84, on north side of road; iron post stamped "Ohio\(976 "\) (set on a single unchecked spur line)

Feet. 975.989
From point near Amity south along highway via Amity to Martinsburg.
Amity, 1.7 miles north of, at north end of stone bridge; top of
parapet
Amity, 1 mile north of, southwest wing of small bridge; top of south end
\(1,143.66\)
Amity, in front of Baptist Church; iron post stamped "1159 Ohio" 1, 158. 165
Amity, 1 mile south of, at northwest corner of stone culvert; top of parapet
\(1,057.52\)
Amity, 2 miles south of, northeast wing of truss bridge; top of north-
\(\begin{array}{ll}\text { Amity, } 2.7 \text { miles south of, at northwest corner of stone bridge; top of } \\ \text { parapet_-- } & 997.81\end{array}\)
Amity, 3.5 miles south of, at west end of stone culvert; top of
parapet
\(\begin{aligned} & \text { Amity, } 4.5 \text { miles south of, at northwest corner of } T \text { road; iron post } \\ & \text { stamped " } 997 \text { Ohio" }\end{aligned}\)
Howard, 3 miles west of, at southwest corner or \(T\) road, southwest
wing of small bridge; top of southwest corner------
Howard, 2.5 miles west by 1 mile south of, at south end of stone
culvert; top of southwest end of parapet,
Gambier, 2.5 miles east of, at jog road, at pump in school yard, on
concrete foundation; top of southeast corner_---1,009. 86
Gqmbier, 2.5 miles east by 1 mile south of, cast-iron pipe culvert 12 inches in diameter; top of upper end
\(1,097.87\)


Martinsburg, 4 miles north of; spike in telephone pole_-................... 1, 113.97
Gambier, 2.5 miles east of, at jog road, in school yard; iron post stamped "Prim. Trav. Sta. No. 69, 1910, Ohio 1014 " (set on unchecked spur line)
1, 013. 447
Martinsburg, 3 miles north of, at south end of \(T\) road; iron post
stamped " 1045 Ohio "-
Martinsburg, 2.5 miles north of, at northeast corner of small iron
bridge; top of bolt in floor.---.-. 000.76
Martinsburg, 1.8 miles north of, at northeast corner of small iron
bridge; top of angle-bar beam at north end of banister_............... 1, 28
Martinsburg, 1 mile north of, at southwest corner of concrete bridge;

Martinsburg, at northeast corner of city-hall property; iron post stamped " 1167 Ohio"
\(1,167,104\)

From Danville via Millwood to Bladensburg.
Danville, at county bridge, west of station; top of northwest corner of
southwest wing

Millwood, 1.5 miles north of, at northeast corner of crossroads; spike Feet.in root of maple tree-1, 021.44
Millwood, in front of church; iron post stamped " 941 " ..... 941.108
Millwood, 1.5 miles south of, on Martinsburg road, at southeast cor- ner of \(T\) road; spike in root of blazed oak tree ..... \(1,101.98\)
Millwood, 2 miles south by 1 mile west of ; spike in root of 24 -inch elm tree ..... \(1,157.98\)
Millwood, 3 miles south by 1 mile west of, at southwest corner ofE. G. Smith's house ; top of concrete step\(1,148.85\)
Millwood, 4 miles south by 1 mile west of, on east-west road, 4.3 miles north of Bladensburg; spike in root of 9 -inch blazed elm tree ..... \(1,104.10\)
Bladensburg, 4 miles north of, at northeast corner of crossroads; iron post stamped " 1151 Ohio" ..... \(1,150.582\)
Bladensburg, 3.25 miles north of, in front of John Nether's house; top of stone step ..... \(1,115.82\)
Bladensburg, 2.5 miles north of, in front of T. S. Parker's house; top of lowest stone step ..... 1, 130.6
Bladensburg, 2 miles north of, at west end of T road; spike in root of oak tree ..... \(1,113.18\)
Bladensburg, 1 mile north of ; chiseled square on section corner stone, marked " 998.1 " ..... 998.43
Near Bladensburg.
Bladensburg, 2.3 miles east of, 170 feet west of Front Royal school- house, at south side of road, on granite rock under fence; chiseled square ..... 1, 029.88
Near Utica.
Utica, 1.9 miles north of, on east side of railroad, 25 feet north of pri- vate crossing, 150 feet south of milepost "N 13 S 101 "; spike in base of telegraph pole ..... 974.359
From Danville north along highway 3.5 miles.
Danville, 1.8 miles southwest of, on south side of railroad at crossing ; iron post stamped " 939 " ..... 938. 600
Danville, 1.8 miles west of, on east abutment north side of bridge over Jelloway Creek; chiseled square, painted " 934.4 " ..... 934.44
Danville, 1.8 miles northwest of, on northwest corner of west abut- ment of iron bridge over Jelloway Creek; chiseled square_ ..... 944.75
Danville, 1.8 miles northwest of, at southwest corner of \(T\) road southeast, in root of white-oak tree; copper nail ..... \(1,025.18\)
Danville, 3.1 miles northwest of, on north side of road at \(T\) road south, 400 feet north of T. J. Losh's residence, on large granite rock ; chiseled square ..... 990. 24GARRETTSVILE QUADRANGLE.
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by R. C. Seitz in 1905.
From Huntsburg south along highway to Middlefleld, thence west to Burton, thence north to Clarion.
Middlefield, in northwest corner of foundation of town hall; alumi- num tablet stamped "1141 Adj 1903" ..... \(1,141.330\)
Burton, in southeast corner of foundation of town hall; aluminum tablet stamped "1338 Adj 1903" ..... \(1,337.833\)

\title{
From Burton west along Eastern Ohio R. R. to Lake Punderson, thence to Fowlers Mill.
}
Punderson Lake station, 0.5 mile north of ; 430 feet east of railroad, in culvert stone north side of road; aluminum tablet stamped "1148 Feet. Adj 1903"
From West Farmington west along highway to Parkman, thence south to Windham.
Parkman, 1.5 miles northeast of, crossroads at center of township, east of road, in culvert stone; aluminum tablet stamped "1143 Adj 1903" ..... \(1,143.435\)
Nelson, in town hall, southeast corner of foundation; aluminum tablet stamped "1068 Adj 1903" ..... 1, 068.498
From Freedom north along highway to Troy Center (Welshfield post office), thence east to Parkman.
Hiram, in northwest corner of foundation to brick store building, opposite Y. M. C. A. ; aluminum tablet stamped "1270 Adj 1903"--Troy Center (Welshfield post office), in northwest corner of founda-tion of schoolhouse; aluminum tablet stamped "1227 Adj 1903".1,227. 204
From Shalersville north along highway to Auburn.
Mantua Center, in northwest corner of foundation of schoolhouse; aluminum tablet stamped "1180 Adj 1903" ..... 1, 180. 161
Auburn Center, Grange Hall, in southeast corner of foundation;aluminum tablet stamped "1231 Adj 1903"1, 231.332
GARRISON QUADRANGLE.
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by C. H. Shaw, J. W. Janssen, and C. E. Mills in 1910.
From Portsmouth along Ohio River to McGaw.
Portsmouth, sotheast corner of post-office building, in first courseof foundation, 1 foot above ground; chiseled square (U. S. ArmyEngineers' bench mark 354 A)535. 129
Portsmouth, 3.2 miles southwest of, at northwest corner of \(T\) road north, about 100 feet west of stone-arch bridge over Carys Run; iron post stamped " 516 " ..... 516.102
Dennis, northeast corner of road forks, near telephone pole and fence; iron post stamped " 529 " ..... 529.07
Pondrun, southwest corner of T road northwest, 40 feet west of center of T road; iron post stamped "Prim. Trav. Sta. No. 8, 1910, 522 " ..... 522. 461
Pondrun, 2.1 miles west of, north side of road, 40 feet from center of lane to south; iron post stamped " 528 " ..... 527. 652
Pondrun, 6 miles west of, about 3 miles east of Buena Vista, on south side of road near telephone pole, at Elm Tree schoolhouse; iron post stamped " 566 " ..... 566. 250
From county infirmary at Alexandria north along road.
Alexandria, T road at Scioto County Infirmary; iron post stamped " 516 "516.102

Carys Run schoolhouse, on stone abutment of culvert; chiseled square painted " 608.451 ".

Feet.
608. 42

Carys Run, about 200 feet south of residence of Charles L. Simon, east of highway; iron post stamped " 692 "

\section*{From Turkey Creek along road to Friendship.}

Union Church, northeast corner of ; iron post stamped " 659 " 658.929

\section*{From Pink along road to McGaw.}

Pink, 5 miles southeast of, road forks at mouth of Brushy Fork, east of road, 20 feet northwest of apple tree; iron post stamped " 882 "-
Pink, 6 miles southeast of, east of road on creek bank, in root of sycamore tree 1 foot in diameter" head of spike painted " 828.2 " \(\qquad\)
McGaw, 3.2 miles northwest of, west of road, on top of stone; chisel mark painted " 718.0 " \(\qquad\)
McGaw, 3.2 miles northwest of, on upper Twin Creek, in front of Clay Cooper's residence, west of road, 20 feet north of lane; iron post stamped " 721 " \(\qquad\)
McGaw, 1.1 miles north of, east of road, 150 feet north of bend in road, in front of John Hodge's residence, on large stone; chiseled cross painted " 573.4 "
882.095
828.23
717.98
720.726
573.35

GLENWOOD QUADRANGLE.
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by R. S. Blinn in 1904.
From Thivener southwest to Angel.
Yellowtown (Thivener post office), 500 feet west of blacksmith shop, on outcrop sandstone south of road; aluminum tablet stamped " 568 Adj 1903"
567.509

GRANVILLE QUADRANGLE.
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ}, 45^{\prime}\).]
Primary leveling by W. H. Monahan, R. C. Seitz, and I. M. Flocker in 1907.
From Central City northwest along Toledo \& Ohio Central Ry, to Croton.
Granville, 0.4 mile east of, 60 feet east of milepost " T 18-T 130," on end of vertical rail in center of track; cross
907.76

Granville, in retaining wall at window at northeast corner of Doane Academy ; aluminum tablet stamped " 1083 "

1,082. 332
Granville, on north side of second floor of Science Hall, in window
sill; aluminum tablet stamped " 1102 "------------101.440
Granville, in front of station; top of rail
910.5

Clemons, in front of station; top of rail
924.5

Clemons, 80 feet east of, 2.82 miles northwest of Granville, in base stone at southwest corner of water tank; aluminum tablet stamped "925"
924. 331

Alexandria, in front of station; top of rail
956.6

Alexandria, 0.4 mile northwest of, about 200 feet south of railroad, at west end of south abutment of small iron bridge at highway crossing; aluminum tablet stamped "959".

Johnstown, city hall, in water table, 4 feet west of main entrance; Feet. aluminum tablet stamped " 1160 " \(1,159.621\)
Croton, 2.01 miles south of, 1,360 feet west of Toledo \& Ohio Central Ry., at southwest corner of crossroads, in concrete fence post ; aluminum tablet stamped " 1185 " 1.185. 131

Croton, 500 feet northeast of public square, in coping stone on west end of arch of masonry culvert; aluminum tablet stamped " 1139 "-1, 139. 197

\section*{From Granville north along highway to Homer.}

Granville, 2.8 miles north of, in top of northwest wing wall of concrete culvert across highway ; aluminum tablet stamped "1061"- 1, 060. 374
Granville, 6.7 miles north of, in southwest abutment of iron bridge across highway; aluminum tablet stamped " 1110 "
\(1,110.207\)
Granville, 8.7 miles north of, 250 feet south of a house on left of highway, in top of west wing wall of concrete culvert; aluminum tablet stamped " 1171 "
\(1,170.912\)
Granville, 11.8 miles north of, near forks of road, in top of northwest abutment of iron bridge over creek; aluminum tablet stamped "1012"

1,011. 407
From Newway east to Fredonia.
Fredonia, in west part of schoolhouse yard, 122.6 feet northwest of northwest corner of schoolhouse; iron post stamped "Prim. Trav. Sta. 37" \(1,247.000\)

Near Union station.
Union station, 0.75 mile south of, at crossroads, in southeast corner of Ira Shoneman's field; iron post stamped "Prim. Trav. Sta. 36"
949.167

\section*{From Pataskala north along highway to Johnstown.}

Pataskala, 2.8 miles north of, in top of southeast abutment of iron bridge over creek; aluminum tablet stamped " 1050 "

1, 049.988
Jersey, 0.7 mile northwest of, in southwest corner of abutment of highway bridge at forks of road; aluminum tablet stamped "1101"- 1, 100. 356
Jersey, 4.1 miles northwest of, in northwest corner of stone culvert across highway; aluminum tablet stamped " 1188 "
\(1,187.907\)

\section*{GREENFIELD QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
Near Lyndon.
Lyndon, about 1 mile east of, on east abutment of railroad bridge; chiseled square marked "B M" (C. \& G. S. b. m. LVIII)

Primary leveling by J. J. McNulta in 1911 and R. G. Clinite in 1914.
Revised elevations for McNulta's line along east border of quadrangle. (See Roxabell quadrangle for other elevations.)
Austin, 4 miles northwest of, on Dogtown Pike, in northeast corner of Rowe School yard (district 10, Concord township) ; iron post stamped "Prim. Trav. Sta. No. 69 "
833.441

Austin, 2.75 miles southeast of, district 9 , Concord township, on northwest corner of step of main entrance to Youngs School ; square cut_
864.68

Austin, 4 miles southwest of, at \(T\) road running south, on northwest corner of large stone over road culvert; square cut
969. 79

Austin, 5 miles southwest of, on Austin and Harper station pike,
southeast corner of pike and \(T\) road running east about 200 feet

Feet. 1,017. 535
Austin, 6.5 miles southwest of, on Austin and Harper station pike, southwest corner of pike and \(T\) road running southwest in south side of fence post; copper nail and washer
Harper station, 0.5 mile south of, in northwest corner of Greenfield and Lattaville pike and \(T\) road running north to Harper station; square cut
963.62

Harper station, 0.5 mile south of Greenfield and Lattaville pike, in southwest corner of pike and \(\mathbf{T}\) road running south, opposite district 6 (Buckskin township) schoolhouse; iron post, stamped "Prim. Trav. Sta. No. 68"
955. 399

Harper station, crossing of Baltimore \& Ohio Southwestern R. R. at road 0.75 mile west of ; top of north rail
931.99

Lyndon, 1 mile east of, on east abutment of railroad bridge over Buckskin Creek; square cut (U. S. C. E. \& G. S. b. m. described in Bull. 476, p. 59. \({ }^{1}\) )
912.690

Lattaville, 1.5 miles west and 4 miles south of, on Steiner Hill road, in root of small beech tree; copper nail and washer

1, 113. 47
Lattaville, 1.5 miles west of, and 5.5 miles south of, top of Steiner Hill road, about 500 feet north of house of W. Ross, in apple tree; copper nail and washer
\(1,220.58\)
Bcurneville, 6.75 miles west of, on upper twin pike, south of pike and T road running north, in top of fence post ; copper nail and washer-
869. 49

From point 3.8 miles south of Glendon east along highway to point 2.2 miles east of Good Hope, thence north to point 6 miles southeast of Washington Courthouse.
Staunton, 0.5 mile west of, in northeast angle of road forks, at base of corner post, on top of rock ; chiseled circle
996. 61

Staunton, 0.80 mile east of, 13 feet north of stone at center of road forks, at fence corner ; iron post stamped " Ohio 983 "
983.127

Staunton, 1.5 miles east by 0.3 mile south of, on south side of road, 100 feet northeast of brick foundation of abandoned dwelling at crest of hill, in root of 6 -inch double walnut tree ; copper nail in washer

Sugar Grove church. 400 feet northwest of, in northwest angle of road forks, in north end of plank drain ; copper nail in washer- \(\qquad\)
Washington Courthouse, 5 miles south of, on the Greenfield Pike, in northwest angle of crossroarls, 5 feet east of telephone pole, at north end of tile culvert, in top of limestone rock; bottom of chiseled square
Sturgeon's mill, 200 feet east of, 20 feet north of north bank of Paint Creek, 25 feet west of large, hollow sycamore tree, in top of double locust stump; copper nail in washer
915. 00

Water elevation at above point, April 18, 1914, \(8.15 \mathrm{a} . \mathrm{m}\).
909.9

Rock Mills, 100 feet north of highway bridge, 60 feet east of store; iron post stamped " Ohio 913 "
912. 895

Water elevation under highway bridge, April 18, 1914, 11.30 a. m
Rock Mills, 1.3 miles northeast of, 1.6 miles west of Good Hope, 35 feet east of center of road forks, in top of south end of plank culvert; copper nail.

Good Hope, 0.4 mile northwest of, in southwest angle of Washington Courthouse and Rock Mills Roads, 10 feet west of corner post, in root of 6 -inch walnut tree ; copper nail in washer

Feet. 937.32

Good Hope, in front of Detroit, Toledo \& Ironton R. R. station; top of rail
911.8

Good Hope, near center of village, on north side of concrete well platform; bottom of chiseled square
926.62

Good Hope, 1.6 miles east of, 50 feet north of center of road forks, 6 feet east of fence corner ; iron post stamped " Ohio 935 "
934.714

Good Hope, 2.2 miles east of, in northwest angle of road forks, 10 feet northwest of corner post, in root of 14 -inch walnut tree; copper nail in washer \(\qquad\)
Good Hope, 2.2 miles east by 1 mile north of, on west side of highway, 110 feet north of gate to Fairview Farm, in root of 40 -inch oak tree; copper nail in washer
926. 51
927. 39

Fairview, about 0.45 mile southwest of, north side of Chillicothe pike, opposite T road south to Good Hope, 2 feet south of fence; iron post stamped " Ohio 892 "
891.417

Good Hope, about 3.5 miles northeast of, 35 feet west by 15 feet south of center of crossroads, Chillicothe pike and Good Hope road, in top of 3-inch osage stump; copper nail in washer \(\qquad\) 905. 65

From Fairview east along highway to point 4 milos northwest of Austin.
Plano, 0.3 mile west of, 50 feet east of center of road forks, on north side of road, in base of telephone pole; 11 -inch spike
From point 1.6 miles east of Good Hope south along highway to Lyndon, thence west along Baltimore \& Ohio R. R. to East Monroe, thence north to point 3.8 miles south of Glendon. (For part of this line see Sabina quadrangle.)

Good Hope, 3 miles southeast of, in northeast angle of Miami-Trace road and Lyndon-Good Hope pike, east end of tile drain, on flat rock; chiseled square
Stucky schoolhouse, in southwest angle of \(\mathbf{T}\) road west, in northeast angle of schoolyard, in root of 50 -inch oak tree; copper nail in washer
\(1,019.30\)
Greenfield, 5 miles northeast of, on the Austin-Greenfield road, opposite Pepples store, in southwest angle of road forks, 3 feet west of corner post; iron post stamped " Ohio 967 "
967. 020

Lyndon, 1.3 miles north of, 500 feet north of road forks, east end of south abutment of small steel highway bridge, on top course; bottom of chiseled square
915.17

Lyndon, 0.40 mile west of, at northeast angle of crossroads, at east end of small culvert, on top of rock; chiseled square
Lyndon, 1.4 miles west of, at private road crossing on Baltimore \& Ohio R. R., south side of right of way, on top of west end of tile drain; painted square

Lyndon, 2.4 miles west of, at private road crossing on Baltimore \& Ohio R. R., on south side of right of way, west end of tile drain, on top; painted square
922.23

Thrifton, 10 feet east of station, top of concrete wall of Baltimore \& Ohio viaduct over Detroit, Toledo \& Ironton R. R. ; painted square_
Greenfield, 0.6 mile east of, 40 feet east by 15 feet north of center of crossroads ; iron post stamped " Prim. Trav. Sta. No. 67, Ohio 1909, 863 "
884.0
863.075

Greenfield, on center of city, at northeast corner of municipal building, on top of concrete corner post, at corner of sidewalk, on top of post ; chiseled square

Feet.
910.67

Greenfield, 1.25 miles west of, 25 feet east of milepost " 0-73", in top of rail support; copper nail in washer
925.86

Greenfield, 2.25 miles west of, 50 feet east of milepost " \(0-72\) ", in northeast angle of railroad and highway crossing, on top of east end of tile drain; painted square
947. 86

Greenfield, 3 miles west of, in southwest angle of railroad and highway crossing, 2 feet north of right-of-way post; iron post stamped " Ohio 987 "
986. 750

Greenfield, 4.25 miles west of, 40 feet east of milepost " 0.70 ", in top of rail support ; copper nail in washer
942.68

Bridge over Walnut Creek; top of rail
919.7

Greenfield, 5.25 miles west of, 40 feet east of milepost " 0.69 ", in top of rail support ; copper nail in washer
941. 51

Greenfield, 6.2 miles west of, 0.2 mile east of East Monroe, at crossing, on west side of highway, on top of north right-of-way stone; chiseled square
\(\begin{array}{lll}\text { Last Monroe, north side of east abutment of highway bridge over } \\ \text { Rattlesnake Creek, in top course ; bottom of chiseled square_--.-- } & 920.80\end{array}\)
Buena Vista, 1.2 miles south of, 500 feet north of road forks, at east end, on top of top course of stone culvert; bottom of chiseled square
\(1,019.52\)
Buena Vista, at center of town, opposite T road east, 100 feet south of Theobalds store; iron post stamped "Ohio 1015"
\(1,014.818\)
Buena Vista, 1.2 miles north of, in southeast angle of road forks, south end of tile drain; on top, painted square
\(1,015.06\)

From point 5 miles south of Washington Courthouse south along highway to point 3 miles west of Greenfield, thence southeast 2.3 miles, thence southwest to point 1.7 miles west of New Petersburg.

Washington Courthouse, 6.25 miles south of, in the southeast angle of crossroads, New Martinsburg pike and the Miami-Trace road, at south end of drain, on rock; bottom of chiseled square \(\qquad\) 988.00

Cochran Church, 2.5 miles northeast of New Martinsburg, in northeast angle of crossroads, 10 feet north of corner post, in top of wooden peg; copper nail in washer
New Martinsburg, 1.5 miles east by 1 mile north of, in northeast angle of road forks, in top of east end of culvert; copper nail in washer

1,030. 36
New Martinsburg, 2 miles east of, opposite center of road to west, at road forks, 80 feet east of deserted \(\log\) house; iron post stamped "Ohio 1018"
\(1,017.870\)
Greenfield, 4 miles northwest of, in northeast angle of crossroads, inside of fence, on north side of Sabina and Greenfield pike, on concrete arain ; bottom of chiseled square
\(1,027.27\)
Greenfield, 3.2 miles northwest of, opposite center of \(\mathbf{T}\) road east, on north end of tile drain; painted square

1, 022.56
Greenfield, 2.5 miles northwest of, 150 feet south of Lamb School, in southeast angle of road forks, on top of stone culvert; bottom of chiseled square
Greenfield, 3 miles west of, in southwest angle of railroad and highway crossing, 2 feet north of right-of-way post; iron post stamped "Ohio 987"
Feet. 986. 750
Centerfield, 2.5 miles northeast of, in southwest angle of crossroads, in concrete base of corner post; bottom of chiseled square \(\qquad\)
Greenfield, 3 miles southwest of, on Greenfield and Hillsboro pike, in southwest angle of road forks, in stone at south end of drain; bottom of chiseled square
986. 33
937. 39
Greenfield, 3.7 miles southwest of, on Greenfield-Hillsboro pike, in northeast angle of road forks, in stump at base of corner post; spike driven through copper washer \(\qquad\)
Greenfield, 4.5 miles southwest of, on Greenfield-Hillsboro pike, opposite center of T road west, 600 feet north of schoolhouse; iron post stamped " Ohio 9601914 "

Greenfield, 5.8 miles southwest of, on west side of south abutment of highway bridge over Rattlesnake Creek, on top course; bottom of chiseled square
816.66
New Petersburg, 1.6 miles northwest of, on Greenfield-Hillsboro pike, in southeast angle of crossroads, in base of corner post; iron spike 10 inches long driven horizontally \(\qquad\)
New Petersburg, 1.8 miles west by 0.5 mile north of, opposite center of T road south, 200 feet east of John Duffield's residence; iron post stamped "Ohio 9981914 " \(\qquad\)
New Petersburg, 1.7 miles west of, at road forks, 100 feet south of highway bridge over Fall Creek; highest point of circle marked on stone
959.511
971.77
997.864
960.33
From point 2 miles north of Bainbridge northwest along highway to Fruitdale, thence northeast to Lyndon.
Bainbridge, 2 miles north of, east side north abutment Detroit. Toledo \& Ironton R. R. bridge over Buckskin Creek, in top course; bottom of chiseled square
755. 79
Bainbridge, 3 miles north of, 150 feet west of district 4 schoolhouse, in base of telegraph pole; rail spike \(\qquad\)
Humbolt, 5 feet east of southeast corner of township building; iron post stamped " Ohio 7981914 "
776. 57
Uumbolt, 1 mile north of, 1,700 feet west of district 7 schoolhouse, 100 feet south of center of highway, in base of telegraph pole ; rail spike \(\qquad\)
Fruitdale, 0.5 mile south of, on east side of south abutment of steel railway bridge over Buckskin Creek, on top course; bottom of chiseled square
797. 998
818.23
834.17
Fruitdale, 0.1 mile south of, 80 feet south of steel highway bridge over Buckskin Creek, on west side of pike; iron post stamped "Ohio 8361914 "
835.921
Fruitdale, 1.1 miles northeast of, 1,100 feet south of township line, 240 feet north of J. A. Moomaw's residence, on east side of road, in base of telephone pole; harrow tooth
861. 33
Fruitdale, 2.4 miles northeast of, 0.8 mile south of South Salem, in west end of plank drain; spike driven through copper washer.-.
South Salem, in southeast corner of school yard; iron post stamped "Ohio 9121914 "
884.29
Lyndon, 0.40 mile west of, at northeast angle of crossroads, at east end of small culvert, on top of rock; chiseled square
912.348
915. 05

From Lyndon east to point half a mile south of Harper station,
Lyndon, in front of station; top of rail
Feet.
911.9
915. 50
R. R. track, in top of rock supporting iron post ; chiseled square

Harper station, 1.5 miles west of, at highway crossing, in base of crossing post; rail spike
914.98

Harper station, 0.15 mile west of, 60 feet east of private crossing, in top of stump of telegraph pole; mail in copper washer \(\qquad\)
Harper station, 0.5 mile east of, north end of stone culvert under Baltimore \& Ohio Southwestern R. R.; chiseled square
Harper station, 1.5 miles east by 0.5 mile north of, on northeast corner of abutment of iron bridge over Little Creek; chiseled square_-

\section*{GREENUP QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Primary leveling by E. L. McNair in 1897-98.
From Sciotoville southeast to Wheelersburg.
Wheelersburg, in sandstone foundation under southwest corner of Baptist Church; bronze tablet stamped " 561 I"
562. 766

\section*{From Wheelersburg east toward Chaffins Mills.}

Wheelersburg, 3.2 miles east of, Porter Township, 90 feet in rear and in a line with side of district schoolhouse No. 7; copper bolt stamped " 584 I." Destroyed
586. 667

From Wheelersburg south to Haverhill.
Wheelersburg, 2 miles south of, at southwest corner of large iron bridge across Pine Creek, on freestone foundation; chiseled square with cross in it, thus: \(\Psi\)
Haverhill, 1.6 miles northwest of, 8 feet north of north gatepost entrance to Joshua Oakes \& Son's drain tile and red brick factory, in Green Township, Scioto County, 2.5 feet west of fence line on west of road; on top of iron post stamped "546 I" \(\qquad\) 548.726
621.130

\section*{From Haverhill southeast to Ironton.}

Haverhill, 1.6 miles southeast of, on stone monument Lawrence and Scioto counties, northeast side of road, about 300 feet southeast of brick house on southwest side of road; chiseled square \(\qquad\) Hanging Rock, 2.6 miles northwest of, brick Ohio Baptist Church, in front of front door, in southeast corner of top step of three stone steps; copper bolt stamped " 551 I "

\section*{From Haverhill eastward to old Ohio furnace.}

Haverhill, 3.2 miles northeast of, 500 feet back of brick store, 35 feet south of road, in sandstone ledge; copper bolt stamped " 619 I"--
5553. 086

\section*{Primary leveling by C. E. Mills in 1910.}

From Portsmouth north along Norfolk \& Western Ry.
Portsmouth, southwest corner of stone step, south side of Norfolk \& Western Ry. station; chiseled square
534. 69

Portsmouth, 1.7 miles northwest of, 360 feet northwest of Vera Tower, on east end of south abutment of Norfolk \& Western Ry. trestle approach to bridge over Scioto River; chiseled square

\section*{From Portsmouth east along Baltimore \& Ohio Southwestern R. R.}

Portsmouth, Norfolk \& Western Ry. and Baltimore \& Ohio Southwestern R. R. crossing; top of rail

Feet.
530.9
531.683
534.74

\section*{GREENVILLE QUADRANGLE. [Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]}

\section*{Primary leveling by H. W. Peabody in 1905.}

From Savona northwest along Big Four Route to Clark station, thence north to Nashville, thence east to New Harrison, thence south to point 2 miles east of Arcanum.
Clark station (Noggle post office), near center of west side of sec. 36, T. 11 N., R. 1 E., in north face of northwest corner of Noggle \& Son's elevator ; aluminum tablet stamped " 1095 Adj 1905 "
Palestine, near southwest corner of sec. 14, T. 11 N., R. 1 E., at east side of Christian Church, in base of chimney; aluminum tablet stamped " 1104 Adj 1905 "

1, 104. 122
Nashville, northeast corner of sec. 3, T. 11 N., R. 1 E., in foundation at center of nortn side of Pleasant Grove United Brethren Church; aluminum tablet stamped " 1093 Adj 1905 " 1, 093. 227
Nashville, 2 miles east of, near southwest corner sec. 31, T. 12 N., R. 2 E., 1,000 feet south of crossroads, in west face at northwest corner of Mount Pleasant Lutheran Church; aluminum tablet stamped " 1086 Adj 1905" \(\qquad\)
Greenville, center of sec. 35, T. 12 N., R. 2 E., at south corner of Broadway and Fourth Street, in west face at northwest corner of Darke County courthouse; aluminum tablet stamped " 1050 Adj 1905" \(\qquad\)
Greenville, 3 miles east of, near northwest corner of sec. 32, T. 10 N., R. 3 E., 3.5 miles west of New Harrison, at southeast corner of T road south, in west face at northwest corner of Zion Church; aluminum tablet stamped " 1049 Adj 1905 "
New Harrison, near southwest corner sec. 26, T. 10 N., R. 3 E., at northeast corner of Pennsylvania, R. R. bridge over Greenville Creek, in bridge seat ; aluminum tablet stamped " 987 Adj 1905 "--
Landis, 0.8 mile southwest of, near center of north line of sec. 23, T. 9 N., R. 3 E., at southwest corner of crossroads, in north face at northeast corner of Oakland schoolhouse (subdistrict 8) ; aluminum tablet stamped " 1029 Adj 1905 "
Arcanum, 3 miles northeast of, at center near south side of sec. 35 , T. 9 N., R. 3 E., 800 feet north of crossroads, in bridge seat at southwest corner of small iron bridge over Painters Creek; aluminum tablet stamped " 1028 Adj 1905"
\(1,027.635\)
From Nashville north along highway and east along Big Four Route to Versailles, thence south along highway to New Harrison.
Woodington, 3 miles west of, near southeast corner sec. 35 , T. 13 N., R. 1 E., 3.5 miles east by 1.5 miles south of Union City, Ind., on north side of road near \(T\) road to south, in large stone doorsill to schoolhouse; aluminum tablet stamped "1068 Adj 1905 "

Elroy station, near northeast corner sec. 25, T. 13 N., R. 1 E., at south side of public road, 300 feet north of track, in north face at north-
east corner of schoolhouse (district 12) ; aluminum tablet stamped " 1031 Adj 1905 "

Ansonia, near center of sec. 22 , T. 13 N., R. 2 E., in south face of water table at southwest corner of M. E. Church; aluminum tablet stamped " 1006 Adj 1905 " \(\qquad\) 1, 005.985
Dawn, south of center of sec. 20, T. 11 N., R. 3 E., 3 miles east of Ansonia, 4.5 miles west of Versailles, in west face at northwest corner of public building; aluminum tablet stamped " 1021 Adj 1905 "

1, 022.332
Versailles, 2.5 miles west of, SE. \(\frac{1}{4}\) NW. \(\frac{1}{4} \mathrm{sec} .22\), T. 11 N., R. 3 E., about half way between two road crossings, in west face of, small stone culvert 262 ; aluminum tablet stamped " 1002 Adj 1905 "

Feet. 1, 031. 233

1,002. 171
Versailles, 2.75 miles southwest of, near center sec. 36, T. 11 N., R. 3 E., on north-south road, in bridge seat at southwest corner of bridge over Stillwater River; aluminum tablet stamped " 964 Adj 1905 "
963.536

Near Nashville.
Nashville, at northeast corner of sec. 3, T. 11 N., R. 1 E., in foundation at center of north side of Pleasant Grove United Brethren Church; aluminum tablet stamped " 1093 "
\(1,093.227\)
Clark station (Noggle post office), near center of west side of sec. 36, T. 11 N., R. 1 E., in north face of northwest corner of Noggle \& Sons' elevator; aluminum tablet stamped " 1095 Ohio" \(\qquad\) T. 11 N., R. 1 E., at northwest corner of sec. 36, at southeast corner of crossroads, on east end of steel drain; highest point \(\qquad\) \(1,095.160\)
\(1,147.244\)
HALLS CORNERS QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by H. Clark and C. R. French in 1911.
From point 2 miles north of Antwerp along highways to point 5 miles northwest of Antwerp.
Antwerp, 2 miles north by 1 mile west of, at northwest corner of sec. 21, Carryall Township, at T road; iron post stamped " 739 "
739.237

Antwerp, 2 miles north by 2.5 miles west of, at road crossing, south side of sec. 18, Carryall Township; spike in base of telephone pole_
Antwerp, 2 miles north by 3 miles west of, at road crossing on State line; spike in base of telephone pole

Antwerp, 3 miles north by 3 miles west of, at southwest corner of sec. 7, Carryall Township, on State line; iron post stamped " 744 "-
Antwerp, 4 miles north by 3 miles west of, northwest corner of sec. 7, Carryall Township, at T road on State line; southwest corner of abutment of cement bridge
741.56
740.63
744.083
742.47

From Antwerp southwest along Wabash R. R. and highways to State line, thence along State line to point 1 mile south of Baldwin.
Antwerp, 1 mile west of, at railroad water tank ; circle on northwest corner of stone foundation, painted " 739.8 "
739.87

Antwerp, 2 miles southwest of, at road crossing; top of south rail of Wabash R. R., painted " 741.0 "
741. 07

Antwerp, 2.2 miles southwest of, at T road west, on concrete wall south end of culvert ; circle painted "T. B. M. 737.9 "
737.99

Antwerp, 2.4 miles southwest of, 40 feet south of crossroads; iron post stamped " 743 Ohio"

Antwerp, 3.4 miles southwest of, at crossroads on Indiana State line, on south bank of east-west canal, in fence post; spike painted " 743.0 "

Feet.
743.15

Antwerp, 4 miles southwest of, at State line road crossing; top of south rail of Wabash R. R., painted "T. B. M. 745.9 "
746. 05

Antwerp, 3.5 miles west by 3 miles south of, at northeast corner of T road east ; iron post stamped " 746 Ohio"
746. 232

Antwerp, 3.5 miles west by 4 miles south of, at northeast corner of T road east; spike in fence post, painted " 746.8 "
746.96

Antwerp, 3.5 miles west by 5 miles south of, at northeast corner of T road east; spike in telephone pole, painted " 750.8 " \(\qquad\)
Payne, 4 miles west by 1 mile north of, at T road east, 40 feet north of T on State line road; iron post stamped " 753 Ohio"
750.96

Payne, 4 miles west of, 10 feet east of center of road at railroad crossing; top of south rail, painted "T. B. M. 758.960 "-
753. 069 , 4 miles west by 1 mile south of, 100 feet north of T road east, on southwest wing wall of small bridge ; circle painted " 757.3 "
757.50

Payne, 4 miles west by 2 miles south of, at northeast corner of T road east; iron post stamped " 763 Ohio"
762.716

McGill, 1.5 miles west by 1 mile north of, 120 feet east of R. Hammer's residence, at southeast corner of \(T\) road east; spike in base of fence post, painted "T. B. M. 762.5 "
762.69

Baldwin, 1 mile south of, at northeast corner of \(T\) road east, 20 feet north by 15 feet east of west corner of secs. 30 and 31, T. 1 N., R. 1 E. ; iron post stamped " Prim. Trav. Sta. No. 19, 1909 Ohio 768 "
768. 543

\section*{HAMILTON QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Rockdale south along Cincinnati, Hamilton \& Dayton Ry. to Flockton.
Rockdale, 0.2 mile north of, on Cincinnati, Hamilton \& Dayton Ry., west end of stone culvert covered by roadbed, on coping stone, \(S\) inches from south face and 6 inches from west face; chiselerl square (C. \& G. S. b. m. U \({ }_{3}\) )
630. 346

Hamilton, 2.5 miles north of station, Cincinnati, Hamilton \& Dayton Ry. bridge 16 over Miami River, on retaining wall at north end of bridge seat, 4 inches from south and east faces; chiseled square (C. \& G. S. b. m. P \(\mathrm{P}_{3}\) )
597. 651

Woodsdale, 0.25 mile north of, on Cincinnati, Hamilton \& Dayton Ry., on south abutment of bridge over Campbells Creek, west end of bridge seat course, on large stone, 6 inches from north and west faces; highest point in circumscribed 1 -inch square (C. \& G. S. b. \(\mathrm{m} . \mathrm{T}_{3}\) )

Hamilton, Butler County, on Cincinnati, Hamilton \& Dayton Ry., 0.9 mile north of Union Station, at three-arched stone bridge over Old River, on east side, north end, on second step below coping of wing wall, 5 inches from both east and south faces; highest point in circumscribed square (C. \& G. S. b. m. Q3)

Hamilton, on foundation of courthouse, northeast corner, in reentrant angle, 15 inches east of east pilaster of basement door and 3 inches north of wall, being north half of west edge of surface inclosed in
2.5 -inch square lettered " Datum, city elevation \(100^{1 "}\) (C. \& G. S. b. m. Hamilton city)

Feet. 601.631
605.317
596.001

Hamilton, 2 miles south of, on east end of small stone culvert opposite telegraph pole 745, Pennsylvania R. R., being highest point on square 2.25 inches on a side (C. \& G. S. b. m. telegraph pole No. 745)
610.259

Hamilton, 2.2 miles south of, Cincinnati, Hamilton \& Dayton R. R. culvert 13 (cattle pass), north side, east end, on fifth step below bridge seat course, 5 inches from south and east faces; chiseled square (C. \& G. S., b. m. F4)
Flockton, 2 miles north of, on culvert 35a, east side, north end; highest point of square (C. \& G. S. b. m. Pennsylvania R. R. No. 24)
13. 166

Primary leveling by E. O. Garvin in 1903.

\section*{From Hamilton west along highway to St. Charles.}

Hamilton, at northeast corner of foundation of courthouse, north half west edge of inclosed surface, 15 inches east of east pilaster of basement door and 3 inches north of wall; 2.5-inch square cut in stone, lettered "Datum, City elevation 100 " (C. \& G. S. bench mark " Hamilton City ")
601. 631

Hamilton, west edge of, drawbridge over Miami River, in northwest abutment, in top of third stone from bridge; chiseled square
595.31

Millville, covered bridge over Indian Creek, at southeast corner, in top stone, 1.9 feet above ground; chiseled square
Selkirk (Auburn), in northwest corner of top stone, near brick wall of front entrance to brick schoolhouse (No. 7) ; chiseled square
St. Charles, 1.8 feet west of south foundation wall of St. Charles (Reily Township) joint district school, 2.9 feet above ground; aluminum tablet stamped " 921 Cinn"

From St. Charles north along highway to Woods thence northeast to Darrtown thence southeast to Overpeck.
Darrtown, 1.5 miles southwest of, on road northwest to Oxford, northwest end of small wooden bridge, in top stone of foundation; chiseled square
Darrtown, in north foundation wall of schoolhouse (subdistrict 5), at west door to north entrance; aluminum tablet stamped " 742 Cinn"
Darrtown, 2.25 miles south of, private road east to east-west section road passing through Sevenmile, on top stone of northeast abutment of red iron bridge; painted square
921.159
728. 70
627.01
803. 69
741. 799
678. 80

Sevenmile, center of north line of St. Clair Township, Sevenmile schoolhouse (special district), in north foundation wall of east
entrance, 2 feet above ground; aluminum tablet stamped " 652 Cinn"
Sevenmile, in front of station; top of rail (marked "643.4")
From St. Charles southeast along highway to Barnesburg thence northeast via New Burlington to Furmandale thence east to Jones.

Shandon, in north wall of foundation of schoolhouse (special district 7), 1.9 feet from west wall and 2.4 feet above ground; aluminum tablet stamped " 603 Cin " \(\qquad\)
New Baltimore (Slater), 2.6 miles northwest of, at road forks, in top of second stone from northwest end of abutment of white iron bridge; chiseled square \(\qquad\)
Dew Baltimore, 3 feet north of northwest truss of red iron bridge over Miami River, in top stone of northwest abutment, 3 feet above bridge floor; aluminum tablet stamped " 543 Cin" \(\qquad\)
New Burlington (Transit), in stone above cellar window in south wall under window of vestibule of schoolhouse (district 12), 4.5 feet from west wall, 2.6 feet above ground; bronze tablet stamped " \(828^{\circ}\) Cin"

Furmandate, NE. \(\frac{1}{4}\) sec. 34, 3 miles south of Hamilton, on Mill Creek Valley Electric R. R., in south foundation wall of schoolhouse (district 6) 0.4 foot from west wall, 1 foot above ground; aluminum tablet stamped " 606 Cinn" \(\qquad\)
Jones (Stockton) 1.5 miles north of, 4.5 miles southeast of Hamilton, on second stone step below bridge seat of Cincinnati, Hamilton \& Dayton Ry. bridge 11; chiseled square (C. \& G. S. benchmark "G*")

Feet.
651.802
643.0
603.232
540.67
542. 407
828. 295
606. 321
638.992

Primary leveling by E. O. Garvin in 1903.

\section*{Near Wood station.}

Wood station, 0.5 mile northwest of town, near southeast corner sec. 2, R. 1 E., T. 4 N., schoolhouse Sub. Dist. No. 1, in water table of foundation, east side, 4 feet north of door sill and 1.7 feet above ground; aluminum tablet stamped " 985 Cin." \(\qquad\)

\section*{HARRISON QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by E. C. Bibbee in 1915.
From point 4 miles west of Oxford along highways south along or near State line to Scipio, thence east to St. Charles.

College Corner, 5 miles south of, on south line of sec. 30, T. 5 N., R. 1 E., 50 feet west of covered bridge over Indian Creek, on south side of road, on fence line, about 0.5 mile east of Ohio-Indiana State line, in root of sycamore tree; copper nail, painted " 874 " on telephone pole near
Feoria, 4.66 miles northeast of, near south line of sec. 31, T. 5 N., R. 1 E ., on east side of road, at corner of field, 870 feet south of Charles Burgess's residence, on sandstone rock; chiseled square, painted " 857 " on corner fence post
985.069
856.93

Peoria, 3.63 miles north of, 0.8 mile east of Ohio-Indiana State line, on south side of road, in corner of cultivated field, 100 feet west of
L. Ware's residence, in top of locust stump; copper nail, painted " 931 ," on telephone pole

Feet. 932.01
951. 78 abutment on east side of new concrete bridge; chiseled square, painted " 952 ," on bridge
Peoria, 1.76 miles north of, on Ohio-Indiana State line, directly in front of C. B. Moore's residence, on west side of road, in root of maple tree opposite T road east; copper nail; painted "1018," on mail-box post
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1,018. 34

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Peoria, 1.13 miles north of, at northwest corner of sec. 18, T. 4 N., R. 1 E., on Ohio-Indiana State line; iron post stamped " 1021 Ohio"
Peoria, about 200 feet east of station, 15 feet south of railroad, at railroad crossing, on concrete base to iron post holding sign "OhioIndiana State line "; chiseled square, painted "1003," on iron post_ 1, 003.09
Peoria, 0.95 mile south of, on Ohio-Indiana State line, at T. C. Cowen's residence, on south end of east parapet at concrete bridge; chiseled square, painted " 950 ," on parapet
Scipio, 1.08 miles north of, 30 feet west of northwest corner of sec. 31, T. 4 N., R. 1 E., on Ohio-Indiana State line, at northwest corner of crossroads, 1 foot west by 1 foot south from corner fence post, on large granite rock; chiseled square, painted " 951 ," on hitching post near
951.21

Scipio, in southwest part of town, 20 feet east and 5 feet north to southwest corner of town hall, in town hall yard; iron post stamped "Prim. Trav. Sta. No. 35, 849 " \(\qquad\) 849.129

Scipio, 1.23 miles east of, 0.25 mile east of southwest corner of sec. 32, T. 4 N., R. 1 E., 150 feet east of crossroads, at southeast corner of Clem Inloe's yard, on concrete base to corner fence post; chiseled square, painted " 837 " on corner fence post
836.45

Scipio, 1.97 miles east of, near southwest corner of sec. 33, T. 4 N ., R. 1 E ., in root of elm tree 4 feet in diameter; copper nail, painted " 878 " on telephone pole opposite.
878.30

Scipio, 3.12 miles east of, near northwest corner of sec. 3, T. 3 N., R. 1 E., on south abutment of small concrete bridge; chiseled square, painted " 902 " on telephone post opposite
902. 41.

From Scipio south along highways along State line to Harrison.
Scipio, 1.06 miles south of, 50 feet south of right-angle turn in road, in pasture field, 300 feet east of Clinton Wright's residence, in root of locust tree 13 inches in diameter; copper nail, painted " 757 "-
Scipio, 1.5 miles south of, middle of west line of sec. 7, T. 3 N., R. 1 E ., on Ohio-Indiana State line, in center of road at right-angle turn, on corner-stone rock; chiseled square, painted " 813 " on fence corner
T. 3 N., R. 1 E., middle of west line of sec. \(18,2.5\) miles south of Scipio, on Ohio-Indiana State line, 130 feet south of corner stone in center of road, on large rock on west end of tile drain; chiseled square, painted " 898 " on fence
T. 3 N., R. 1 E., near center of west line of sec. 19, 5.5 miles north of Harrison, on Ohio-Indiana State line (by section line), 65 feet north of center of \(\mathbf{T}\) road east, on east fence line, in root of poplar tree; copper nail, painted "905" on fence opposite

Feet.
905.07
T. 3 N., R. 1 E., near west quarter corner of sec. \(30,4.5\) miles north of Harrison, on Ohio-Indiana State line, on fence line directly opposite \(T\) road west; iron post stamped " 869 Ohio " \(\qquad\)
Harrison, 3.87 miles northwest of, at right-angle turn in road, directly opposite Charles Snider's residence, on anchor stone to corner fence post; chiseled square, painted " 878 " on post
868.461
877. 81

Harrison, 2.5 miles north of, on Ohio-Indiana State line, on east side of road, at Fisher Shipp's mail box, in root of wild cherry tree, level with the surface of the ground; 60 -penny spike, painted " 889 " on tree
Harrison, 2.05 miles northwest of, on west side of \(Y\) road to north and northwest, 2 feet north of fence line, in top of oak stump 2 feet in diameter ; copper nail, painted " 762 " on fence post near_--
Harrison, 0.94 mile northwest of, on pike at southeast corner of bridge, 145 feet southeast of Y road, on abutment ; chiseled square, painted " 521 " on bridge \(\qquad\)
Harrison, at northeast corner of State and Harrison avenues, on Ohio-Indiana State line, on circular stone curb; chiseled square, " 525 " painted on telephone pole opposite \(\qquad\)
Harrison, 0.8 mile south of, on west side of Ohio-Indiana State line pike, at pike east, 15 feet east and 15 feet south to junction of pikes; iron post stamped "Prim. Trav. Sta. No. 33, 516 "' \(\qquad\)

\section*{HIGGINSPORT QUADRANGLE.}
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by C. E. Mills in 1910.

\section*{From Sardinia via Biehn, Russellville, and Red Oak to Ripley.}
ardinia, about 3 miles east of, 0.8 mile east of Five Points or Biehn post office, Norfolk \& Western Ry. milepost "C \(50+2467\) ft., south end of stone box culvert," on southwest corner of cover stone; cross cut
998.964

Sardinia, 2.5 miles east of, at Five Points -(Biehn post office), crossroads at ; iron post stamped " 1000 "
\(1,000.984\)
Carlisle, about 1.5 miles northwest of, on Armheim Pike, in northwest corner of T road north; iron post stamped " 1045 "
Russellville, east side of public square, 2 feet north of jail and voting house, 35 feet west of Ripley Pike; iron post stamped " 975 "
975.473

Russellville, 2.8 miles south of, northeast corner of crossroads, 25 feet from center of crossroads : iron post stamped " 927 "
928.002

Ripley, 2.9 miles northeast of, southeast corner of \(T\) road east, 10 feet north of east end of small wooden bridge; iron post stamped " 602 " \(\qquad\)
Ripley, 2 miles north of, T road west at schoolhouse, northwest corner of road forks, on large stone ; chiseled cross marked " 543.7 "
603. 039

Ripley, 1.3 miles north of, in center of road forks, on top of stone; chiseled cross marked " 536.0 "
544. 75
537.02

Primary leveling by C. E. Mills in 1911.
From Ripley northwest and north along the Ohio River \& Columbus Ry. through Levanna to point near Sardinia.
Ripley, southwest corner of Main and Second streets, 8 feet west of corner, on stone curbing; chiseled square
506. 42
Ripley, 0.8 mile northwest of, trestle over Cornicks Creek, in west endof south guard rail; copper nail marked " 509.9 "Ripley, 2 miles northwest of, trestle over creek, in east end of southguard rail ; copper nail marked " 507.683 "
\(\qquad\)
Feet.
506.90
507. 69
513. 726

Levanna, 1.25 miles northwest of, at Fishing Shore station, on southwest corner of stone foundation of wagon scales between public road and railroad, in front of Ohio Valley Summer Resort; chiseled square
505. 42
517. 529
504. 83
506. 80
526.52
635. 55
732. 488
923.76
935.420
957.98
958.20
957.214
957.03
957.36
966. 85
969.41
975.64
966. 755

Sardinia, 1.3 miles south of, on west side of track, in base of telephone pole 975 ; spike marked " 961.2 "

\section*{From point near Levanna west along highway to Higginsport, thence north to point near Georgetown.}

Higginsport, 3.5 miles east of, in northwest corner of small steel
bridge over creek at road forks; copper nail marked " 497.8 "
\(\begin{array}{ll}\text { Higginsport, } 2 \text { miles east of, northeast corner of T road north up Sink } & \\ \text { Creek, in base of telephone pole; spike marked " } 516.099 \text { " } & 516.10\end{array}\)
Higginsport, 0.8 mile east of, northeast corner of large steel bridge over White Oak Creek at road forks; copper nail marked " 496.9 "-
Higginsport, 0.5 mile northeast of, on south side of road, in base of telephone pole; spike marked " 500.930 "
496. 86
500.92

Higginsport, 1.6 miles northeast of, private road west at Boat Run, in northwest corner of small steel bridge across creek; copper nail marked " 508.35 "
508.34

Higginsport, 3 miles northeast of, southwest corner of T road west uphill, on southwest corner of stone drain; painted square marked "532.7"
532.67

Higginsport, 3.8 miles northeast of, on Georgetown pike, 4 miles southwest of Georgetown, 100 feet west of covered bridge over White Oak Creek, southeast corner of road forks; iron post stamped " 546 "
Georgetown, about 3.8 miles southwest of, at top of hill on dirt road, in base of post at north end of gate into field, at north end of barn; copper nail marked " 860.4 "
Georgetown, 2.5 miles southwest of, 200 feet northeast of schoolhouse; southwest corner of crossroads, in south end of drain; copper nail marked " 881.2 " \(\qquad\) Georgetown, 3.2 miles northwest of southwest corner of road forks, in base of telephone pole; nail marked " 930.0 " \(\qquad\)
Georgetown, 2.8 miles northwest of, northeast corner of road forks; iron post stamped " 881 "
881. 061

\section*{From Georgetown northwest along highway 3 miles.}

Georgetown, northeast corner of Main Street and Grant Avenue, 9 feet west of southwest corner of Lewis Hotel, on concrete curbing; chiseled square marked " 928.3 "
928.34

Georgetown, 1.6 miles west of, center of road forks, in base of telephone pole; spike marked " 702.8 "
702.93

From Higginsport west 2 miles, thence north to Hamersville.
Higginsport, southwest corner of Columbia and White Oak streets; iron post stamped " 507 "
507. 162

Higginsport, 1.3 miles southwest of, west of T road north up hill, in northeast corner of small steel bridge floor; copper nail marked " 502.7 "
502.71

Boudes Ferry, 3.5 miles northeast of, on large stone in center of road forks; painted square marked " 828.0 "
828.03

Feesburg, 1.3 miles west of, south side of road, in base of telephone pole; spike marked " 910.163 "
910.15

Hamersville, 1.2 miles south of, southwest corner of T road west, in base of fence post; spike marked " 957.6 "
957.61

Hamersville, northwest corner of Main and Orchard streets, 40 feet northwest of center of street crossing. on west side of Orchard Street; iron post stamped " 968 "
From Georgetown east along electric railroad to Russellville.
Georgetown, 0.9 mile east of, in base of pole 2335 ; spike marked

Feet." 942.921 " 943.01
878.31
840.81
888.91
928.81
919. 60
975.473
From point near Sardinia southeast along Norfolk \& Western Ry, to Five Points.
Sardinia, 1.7 miles east of, southeast corner of crossroads, in base of telephone pole; spike marked " 975.8 "
975.93
Five Points (Biehn), southwest corner of crossroads; iron post stamped " 1000 "
\(1,000.984\)

From point near Mount Orab south along highway to point near Hamersville.
Mount Orab, 2.1 miles south of, southwest corner of crossroads, in base of telephone pole; spike marked " 944.7 "
944.71

Mount Orab, 3.4 miles south of, northeast corner of road forks, in base of telephone pole; spike marked " 945.3 "
945.31

New Hope, at Philip Krum's store, 10 feet east of northeast corner, on west side of Georgetown pike ; iron post stamped " 889 "
888.574

New Hope, 0.9 mile south of, on west side of road at road forks, in base of brace to telephone pole; spike marked " 848.4 "
New Hope, 1.6 miles southwest of, southeast corner of road forks, in east end of wooden drain; spike head painted white, marked " 931.979 "
931.99

White Oak Valley, 1 mile north of, 200 feet west of one-story brick house, in southeast corner of small wooden bridge across creek; copper nail marked " 878.1 "
878.15

White Oak Valley, 200 feet north of covered bridge over White Oak Creek, southwest corner of road forks; iron post stamped " 799 "--
White Oak Valley, 0.7 mile west of, on north bank of creek, southwest corner of forks, on large stone at base of fence post; painted square marked " 850.0 "
850.01

White Oak Valley, 1.25 miles west of, northeast corner of crossroads on Unity Creek, on stone at fence post; painted square marked " 886.2 "
886. 22

White Oak Valley, 1.25 miles west by 0.5 mile southwest of, at east end of wooden drain at road forks; nailhead painted white, marked " 927.1 "
927. 12

Hamersville, 1.8 miles southeast of, southwest corner of crossroads, in base of telephone pole; spike marked " 966.832 "
Locust Ridge, 0.7 mile east of, southwest corner of \(T\) road south, in Feet.base of fence post; spike marked " 931.6 "931.68
Locust Ridge, 0.7 mile east by 0.7 mile south of, southwest corner of crossroads, at south end of stone drain; painted square, marked " 925.7 " ..... 925.72
Locust Ridge, 0.7 mile east by 1.5 miles south of, southwest corner of crossroads, in base of telephone pole; spike marked " 934.2 " ..... 934. 23
Hamersville, northwest corner of Main and Orchard streets, 40 feetnorthwest of center of street crosising, on west side of OrchardStreet; iron post stamped " 968 "967.767
Hamersville, 1.4 miles southeast of, southeast corner of crossroads at schoolhouse, in east end of wooden drain; copper nail marked " 978.069 " ..... 978.07
Hamersville, 1.8 miles southeast of, southwest corner of crossroads, in base of telephone pole; spike painted " 966.832 " ..... 966. 86
Hamersville, 3.2 miles southeast of, northeast corner of T road north, in base of telephone pole; spike marked " 946.0 " ..... 945.98Georgetown, 3 miles northwest of, northeast corner of road forks, insmall wooden bridge at southeast corner; copper nail marked" 895.0 "894.98Georgetown, 2.8 miles northwest of, northeast corner of road forks,100 feet west of small wooden bridge across pike; iron poststamped " 881 "
881.061

\section*{HILLSBORO QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by Howard Clark in 1910.
From Mayhill to Emerald.Mayhill, at road crossing; iron post stamped "Prim. Trav. Sta. No.82, Ohio 1909 "1, 013. 396Mayhill, 0.3 mile south of, east of pike, at road forks; nail in rootof poplar tree\(1,014.84\)Mayhill, 0.8 mile west of, on north side of highway at road crossing,about 40 feet north of large oak tree, on limestone rock; chiseledcircle846.93Mayhill, 3.4 miles west of ; spike in root of large oak tree at roadforks940.61Mayhill, 5.4 miles west of, at Buck Run, at T road about 100 feetsouth of H. N. Barrackman's house, east of highway ; iron poststamped " 932 "932.427

Emerald, 4.3 miles east of, at T road, in middle of highway, on limestone rock ; chiseled circle
949.01

Emerald, 2.8 miles northeast of, 10 feet south of highway east-west and 40 feet west of highway north-south, at road crossing, 300 feet north of Highland County line, on limestone rock; chiseled circle.-
Emerald, 0.6 mile east of, east of highway where road turns squarely to north; iron post stamped " Prim. Trav. Sta. No. 85, 977 "

\section*{Near Belfast.}

Belfast, 2.02 miles east of, at southeast corner of \(\boldsymbol{T}\) road south, on south end of 10 -inch steel drain pipe under pike; highest point marked " 860.2 "

\section*{Near Taylorsville station.}

Taylorsville station, 0.15 mile south of, 30 feet southeast of center of railroad crossing, in base on west side of crossing sign; railroad spike marked " 991.4 "

Feet.
991. 41

Primary leveling by F. L. Whaley and S. L. Parker in 1914.
From point south of New Vienna east along highway to Parrett school.
New Vienna, 5 miles south of, 6 miles northwest of Hillsboro, center of \(T\) road west, at north end of wooden culvert, on large white limestone rock; chiseled square marked "1127.3" (Sabina quadrangle)_ 1, 127. 26
New Vienna, 5.8 miles south of, 5.2 miles northwest of Hillsboro, south end of east entrance step to red-brick schoolhouse, 900 feet north of crossroads ; chiseled square marked " 1124.9 " \(\qquad\)
New Vienna, 6 miles south by 0.9 mile east of, 4 miles northwest of Hillsboro, north side of east and west dim road, on limestone ledge outcrop; chiseled square (not found 1914)

1, 124.90

New Vienna, 6 miles south by 1.7 miles east of, northeast corner of crossroads; iron post stamped " Prim. Trav. Sta. No. 63, 1909 Ohio 1092 "

1, 091.590
Hillsboro, 3 miles north of, 1.4 miles west of Samantha-Hillsboro road, 200 feet south of \(T\) road west, northeast corner of stone abutment of wooden bridge; chiseled square, marked " 965.3 "
965. 25

Hillsboro, 3.75 miles north of, 1.1 miles west of Samantha-Hillsboro road, 0.25 mile east of junction of pike and \(T\) road east, west abutment of bridge over Clear Creek; chiseled square marked " 960.4 "
960.37

Clear Creek, under bridge; water surface, June 29, 1914, 11 a. m__-
Hillsboro, 3 miles north of, 2.68 miles south of Samantha, east side of pike at \(\mathbf{T}\) road west, iron spike driven horizontally in butt of telephone pole; top of spike head marked " 1069.8 ". 948.8

Hillsboro, 3 miles north by 1.1 miles east of, at T road south, Old Anderson State road, on limestone rock outcrop; painted circle marked "1067.2" \(\qquad\)

Hillsboro, 3 miles north by 1.3 miles east of, west end of culvert on Old Anderson State road, near ford of Clear Creek, on sharp rock point; painted circle marked " 959.4 "
959.54

Hillsboro, 3 miles north by 3 miles east of, south side of high ridge, northeast corner \(T\) road east, top of white limestone outcrop; chiseled square marked " 1056.9 " \(\qquad\)
East Monroe, 8.8 miles southwest of, southwest corner of pike, junction near top of high ridge; iron post stamped " 1122 Ohio" (Sabina quadrangle)

1, 069.71

Hillsboro, 3 miles north by 4.1 miles east of, south side of road near Thomas Buntain's residence, in root of white-oak stump 3 feet in diameter; nail marked "1048.6" \(\qquad\)
Hillsboro, 3 miles north by 5.1 miles east of, southeast wing wall of bridge over open country ditch ; chiseled square marked " 999 "
999.15

Petersburg, 4 miles southwest of, north end of iron drain pipe at \(T\) road southeast; painted square marked " 1035.4 "

1, 035.59
From point 3 miles north of Hillsboro south along highway to Hillsboro, thence
east to Beechwood school.
Hillsboro, \(\mathbf{3 . 0 2}\) miles north of, 2.68 miles south of Samantha, east side of pike at \(\mathbf{T}\) road west; iron spike driven horizontally in base of telephone pole; top of spike head marked " 1069.8 "

1, 069.71

Hillsboro, 2.27 miles north of, 75 feet northwest of northwest corner of Hillsboro pumping station, on east side of Samantha and Hillsboro pike, on west end of sandstone retaining wall to driveway, chiseled square marked " 946.1 "

Feet. 946.14

Hillsboro, 0.76 mile north of courthouse square, at northeast corner of \(T\) road east, in base on west side of telephone pole; copper nail painted " 1033.8 "
Hillsboro, 30 feet north of southeast corner of courthouse square, on concrete curbstone ; chiseled square painted " 1129.8 "
Hillsboro, in northeast corner of courthouse yard, 10 feet south of southwest corner of Soldiers Monument; iron post stamped " 1132 Ohio"
\(1,131.778\)
Hillsboro, 0.44 mile east of courthouse, at road forks on north side of Hillsboro and Boston pike, on south side of concrete base for telephone pole; chiseled square painted " 1094.9 "
Hillsboro, 1.48 miles east of, 200 feet west of T road north, waterelm tree 18 inches in diameter, in root on south side; copper nail painted "1031.6" \(\qquad\)
Hillsboro, 2.44 miles east of, on Hillsboro and Boston pike, 150 feet west of \(T\) road south, on south side of pike, on southwest corner of concrete watering trough; chiseled square painted " 1047.3 " \(1,047.22\)
Hillsboro, 3.61 miles east of, on Hillsboro and Boston pike, 400 feet east of Clear Creek bridge, at northwest corner of \(T\) road north, on west end of stone culvert under pike; chiseled square painted " 897.6 " \(\qquad\)
Millsboro, 3.7 miles east of, 200 feet south of Houp schoolhouse, sour gum tree 18 inches in diameter, in root on east side; copper nail painted " 1039.0 "

1, 031.54

Hillsboro, about 4.7 miles east of, northeast corner of iron bridge over Clear Creek; bolthead painted " 881.9 " \(\qquad\) 881.77

Dallas Boston, about 1.8 miles southeast of, in Beechwood schoolhouse yard, 60 feet north of northwest corner of schoolhouse, beechnut tree 3 feet in diameter, in root on north side; copper nail painted " 1022.5 "
\(1,022.34\)
Dallas Boston, about 1.8 miles southeast of, at northeast corner of crossroads, 220 feet north of Beechwood schoolhouse; iron post stamped "1023 Ohio"

1, 023.250

From Hillsboro west along Baltimore \& Ohio Southwestern R. R. to point near Hoagland, thence north along highway to point 5.8 miles south of New Vienna.

Hillsboro, 30 feet north of southeast corner of courthouse square, on concrete curbstone ; chiseled square painted " 1129.8 "

\author{
1, 129. 77
}

Hillsboro, 0.31 mile west of courthouse square, at southwest corner of Maine and Elm streets, on south end of stone culvert over gutter; chiseled square painted "1088.9"
\(1,088.95\)
Hillsboro, 1.13 miles west of courthouse square, at Baltimore \& Ohio Southwestern R. R. crossing on Chillicothe and Milford pike, north side of road, in base of railroad crossing signpost; railroad spike painted "1043.1"

Hillsboro, \(\mathbf{1 . 6 7}\) miles west of, at junction of Baltimore \& Ohio Southwestern and Norfolk \& Western railroads, at point where Baltimore \& Ohio Southwestern crosses the Chillicothe and Milford pike, on north side of pike, in base of railroad crossing signpost; railroad spike painted " 1039.4 "

Feet.
Hillsboro, 2.62 miles west of, at Baltimore \& Ohio Southwestern R. R. crossing, highest point on west end of 10 -inch drain tile under pike; painted square painted " 1031.5 " \(\qquad\) \(1,031.57\)
Hoagland, 0.2 mile east of, 35 feet south of Cincinnati \& Columbus Traction car line, 35 feet north of Baltimore \& Ohio Southwestern R. R., 20 feet east of wagon road crossing both tracks, water-elm tree 18 inches in diameter, in root on west side; copper nail painted "1061.5"

1, 061.67
Hoagland, 0.2 mile east of, along Baltimore \& Ohio Southwestern R. R. and Cincinnati \& Columbus Traction line, on west side of road crossing both tracks, 10 feet south of property line of the electric line and 15 feet west from center of road; iron post stamped " 1063 "- 1, 063. 080
Hoagland, 0.7 mile north of, 4.1 miles west along Baltimore \& Ohio Southwestern R. R. by 0.74 mile north directly in center of \(T\) road west, top of sandstone bowlder 2 feet in diameter ; chiseled square painted " 1174.3 "
\(1,174.45\)
Hoagland, 2.5 miles north of, 4.9 miles northwest of, about 6 miles south of New Vienna, at southwest corner of T road west, in base of corner fence post; spike painted " 1133.3 " 1, 133.48

From Beechwood schoolhouse along highway south 3.6 miles, thence west to New Market, thence north to Hoagland.

Clear Creek, at ford about 2.7 miles southeast of Dallas Boston, water surface, October 5 , elevation painted " 858.0 "
Dallas Boston, 4.1 miles southeast of, about 0.2 mile over on Bainbridge quadrangle, at T road north, white-oak tree 4 feet in diameter on south side of road, in root on north side; copper nail painted " 974.7 "
Marshall, 1.4 miles northwest of, at southeast corner of crossroads, sycamore tree 15 inches in diameter, in root on west side; copper nail marked " 988.8 "
988. 70

Marshall, about 1 mile west of, in center of crossroads, on top of sandstone 10 inches in diameter, protruding 4 inches above roadbed; chiseled square painted " 1050.6 "
Marshall, 1.9 miles southwest of, at northwest corner of \(T\) road north, in base of corner fence post ; copper nail painted " 1074.8 "--
Marshall, 3.1 miles west of, on old Cincinnati and Chillicothe road, at northwest corner of \(T\) road north, in base of corner fence post; copper nail painted " 1081.2 "
Berrysville, 0.7 mile northwest of, 20 feet west of center of crossroads, on south end of sandstone culvert; chiseled square marked "1044.6"
Berrysville, 0.7 mile northwest of, 10 feet east of southeast corner of crossroads; iron post stamped " 1045 "

1, 044. 762
Berrysville, 0.7 mile northwest by 1.17 miles west of, 150 feet east of T road south, on north side of road, granite bowlder 2 feet in diameter, protruding 2 feet from the earth, around highest point of ; chiseled square painted " 1095.6 "

New Market, 3.76 miles east of, at crossroads on old Cincinnati and Chillicothe road, at southwest corner of road crossing, on
highest point on north end of 10 -inch earthen drain tile under driveway into field; painted square marked " 1122.3 " \(\qquad\)
Feet. \(1,122.23\)
New Market, 1.97 miles east of, at crossroads in northeast corner of Harrisburg schoolhouse yard (district 4, New Market Township) ; iron post stamped "Prim. Trav. Sta. No. 88, Ohio, 1909, 1113"

1, 112. 872
New Market, 1.49 miles east of, directly in center of T road south, on highest point on granite bowlder 1 foot in diameter; painted square marked " 1165 " \(\qquad\) \(1,164.93\)
New Market, 20 feet east of northeast corner of crossroads, 15 feet south of L. A. Purdy's general merchandise store, in root on east side of locust tree 18 inches in diameter; copper nail painted " 1142 "
New Market, 5 feet south of the southwest corner of crossroads, 100 feet southwest of the preceding temporary bench mark; iron post stamped "1137" \(\qquad\) \(1,137.069\)
New Market, 0.88 mile north of, 10 feet west if southwest corner of \(T\) road west, on south end of 10 -inch earthen drain tile under road; highest point painted " 1141.2 " \(1,141.12\)
New Market, 1.8 miles north of, at southwest corner of crossroads, on highest point of west end of 12 -inch earthen tile under road; painted square, painted "1119.1" \(1,118.98\)
Hillsboro, 5 miles southwest of, at Norfolk \& Western Ry. crossing; top of south rail, marked " 1080.9 "
Hillsboro, about 4.5 miles southwest of, on Hillsboro and Danville pike, 500 feet north of Norfolk \& Western Ry. crossing, at northwest corner of crossroads, on sandstone bowlder 1 foot in diameter; chiseled square painted " 1091.3 "

1,091. 24
Hoagland, 1.07 miles south of, on east side of road, on west end of 24 -inch drain tile under road; chiseled square painted " 1120.2 "-
\(1,120.12\)
Hoagland, 0.4 mile south of, 30 feet northeast of southwest corner of \(T\) road west, directly in center of road, on top of limestone bowlder 8 inches in diameter, protruding 2 inches above road bed; chiseled square painted " 1132.0 "

1, 131. 86
From Hoagland west along Cincinnati \& Columbus Traction R. R. to point 0.9 mile west of Fairview.

Hoagland, 0.2 mile east of, 35 feet south of Cincinnati \& Columbus Traction line, 35 feet north of Baltimore \& Ohio Southwestern R. R., 20 feet east of wagon road crossing, in root on west side of water-elm tree 18 inches in diameter; copper nail marked "1061.5" \(\square\) 1, 061.67
Hoagland station, 300 feet west of car stop, at Cincinnati \& Columbus Traction crossing; top of north rail painted " 1068.9 " \(\qquad\) 1,068. 7
Hoagland, 0.94 mile west of, 400 feet west of former residence of Henry Saum, on north side of pike, in base of telephone pole; copper nail marked " 1063.0 "-
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1,062.92

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Hoagland, 1.74 miles west of, 20 feet west of T road south, on northwest abutment of small wooden bridge; chiseled square painted " 1040.0 "

\footnotetext{
1, 039.94
}

\section*{Fairview, 550 feet west of Cincinnati \& Columbus Traction station, at northwest corner of crossroads, in base on south side of telephone pole; rail spike marked " 1026.2 " \\ Feet. \\ 1, 026.09}

From Fairview south along highway to point half a mile southwest of Danville.
Fairview, 1.13 miles south of, at northwest corner of T road west, on north end of stone culvert under road; chiseled square painted " 1052.1 "
\(1,052.00\)
Fairview, 1.42 miles south of, 20 feet west of southeast corner of T road east, on southwest concrete abutment of small wooden bridge; chiseled square marked " 1030.9 "

1, 030.81
Fairview, 2.34 miles south of, on east side of road directly opposite \(T\) road west, about 300 feet south of \(T\) road east, in base of telephone pole; copper nail marked " 1041.8 "
Fairview, 2.76 miles south of, on east side of road, directly east of southwest corner of \(T\) road west, on highest point of east end of 10 -inch steel drain pipe under road; painted square marked "1041.8"
Fairview, 3.09 miles'south of, at southeast corner of T road east, in base of corner fence post ; copper nail painted " 1043.9 "
Danville, about 0.30 mile west of, at northwest corner of \(\mathbf{T}\) road north, on west end of stone culvert under road; chiseled square painted " 1073.2 "1,073. 17

Danville, 0.5 mile southwest of, at road forks, 80 feet east of farm residence of Gus Caley, 40 feet west of point where road forks; iron post stamped " Prim. Trav. Sta. No. 871909 Ohio 1067 ".

1,066. 633

\section*{From point 2 miles south of Danville east along highway to New Market.}

Danville, 2 miles south by 0.20 mile southwest of, on north side of road, directly north of southeast corner of \(\mathbf{T}\) road south, on north end of sandstone culvert under road; chiseled square marked
" 1044.3 "

1,044. 27
East Danville, about 0.8 mile west of, at iron bridge crossing small creek, on northeast sandstone abutment; chiseled square painted " 1007.0 "
\(1,006.95\)
East Danville, 0.40 mile north of, at southeast corner of crossroads, on south end of concrete culvert under pike; chiseled square marked " 1036.4 "
East Danville, 0.40 mile north by 0.87 mile northeast of, road forks 0.20 mile southwest of Norfolk \& Western Ry. crossing, on south side of road, in root on east side of black locust tree 1 foot in diameter ; copper nail marked " 1087.0 " \(\qquad\) \(1,086.85\)
East Danville, 1.07 miles northeast of, at Norfolk \& Western Ry. crossing; top of east rail painted " 1096.0 "\(1,095.91\)

New Market, 1 mile west by 0.10 mile south of, at northwest corner of \(T\) road west, on north end of sandstone culvert under pike; chiseled square marked " 1076.5 "

1, 076. 29
New Market, 0.7 mile west of, at northeast corner of \(\mathbf{T}\) road north, on top of sandstone bowlder 2 feet in diameter; chiseled square marked " 1083.1 "

1,082. 86

New Market, 20 feet east of northeast corner of crossroads, 15 feet south of L. A. Purdy's general merchandise store, in root on east side of locust tree 18 inches in diameter; copper nail painted

\section*{Feet.} " 1142.0 " 1. 141.934

From point 2 miles south of Danville south along highway and Norfolk \& Westorn Ry. to Taylorsville.
Taylorsville station, 1.4 miles north of, at southwest corner of \(T\) road south, on highest point on west end of 12 -inch galvanizediron drain pipe under road; painted square marked " 1012.3 " 1,012. 29
Taylorsville station, 1.1 miles north of, at Norfolk \& Western Ry. crossing; top of west rail painted " 1018.3 " \(\qquad\) 1, 018.31
Taylorsville station, 0.54 mile north of, along Norfolk \& Western Ry., northwest corner of 200 -foot trestle over small creek, around iron bolthead; painted square marked " 993.4 "

\section*{From New Market south along highway to Emerald.}

New Market, 20 feet east of northeast corner of crossroads, 15 feet south of L. A. Purdy's general merchandise store, in root on east side of locust tree 18 inches in diameter; copper nail marked "1142.0"
New Market, 0.59 mile south of concrete bridge over small creek, west side of road, on southeast corner of west wing wall ; chiseled square marked "1061.4"
New Market, 1.36 miles south of, 120 feet east on T road east, on north side of road, in root on west side of walnut tree 2 feet in diameter ; copper nail, marked " 1123.3 "
Sugar Tree Ridge, 2.32 miles north of, on southeast abutment of wooden bridge over Sugar Run; chiseled square marked "1046.6"--
Sugar Tree Ridge, 1.15 miles north of, at crossroads 25 feet east of southeast corner along property line, in root on east side of softmaple tree 3 inches in diameter; copper nail marked " 1071.5 "
Sugar Tree Ridge, 0.19 mile north of, at southeast corner of crossroads, on south side of stone culvert under road; chiseled square marked "1071.5"
Sugar Tree Ridge, in Christian Church yard, 10 feet south of main front entrance; iron post stamped " 1113 "
Sugar Tree Ridge, 1.47 miles south of, 20 feet south of southeast corner of crossroads. on east end of stone culvert under pike; chiseled square marked "1035.2"
Sugar Tree Ridge, 2.54 miles south of, at northeast corner of T road east, in base of corner fence post; copper nail marked " 1003.8 "-
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1,003.74

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1,003.74

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Sugar Tree Ridge, 3.09 miles south of, 10 feet south of southwest corner of \(T\) road west, 200 feet southeast of Wesley Chapel, on south end of limestone culvert under pike; chiseled square marked "1011.2"
Sugar Tree Ridge, 3.87 miles south of, at \(Y\) road south, 30 feet north of point where the road forks, on west end of stone culvert under pike ; chiseled square marked " 948.5 "
948. 49

Emerald, 0.61 mile north of, at small frame schoolhouse, on top of first step above ground at main front entrance; chiseled square marked " 994.4 "
Emerald, at northeast corner of crossroads, in concrete base of corner iron fence post ; chiseled square marked "998.1"

\section*{Emerald, 0.6 mile east of, east of highway where road turns squarely}

Feet.
976.950

From point 3.4 miles west of Mayhill north along highway to point 3.8 miles east of New Market.

Mayhill, 3.4 miles west by 0.49 mile north of, at northwest corner of T road west, in base of corner fence post; iron bolt marked " 942.2 "-
Fairfax, at northwest corner of crossroads, on southwest corner of concrete porch floor of J. W. Ford's general merchandise store; chiseled square marked " 1128.6 "
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$1,128.57$

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Fairfax, 0.98 mile north of, at northeast corner of \(T\) road east, on top of property corner stone; chiseled square marked " 1098.8 "

1, 098.80
Fairfax, 1.78 miles north of, 1.61 miles south of Folsom, 60 feet north of the south branch of Brush Creek, 100 feet northeast of the north end of wooden bridge over creek, 1 foot west of property line in public highway; iron post stamped " 881 " \(\qquad\)
Folsom, 0.73 mile south of, at southeast corner of \(T\) road east, on south end of stone culvert under pike; chiseled square marked " 896.6 "
Folsom, at northwest corner of crossroads, 60 feet west of W. F. Shannon's general merchandise store, on top of sandstone slab 3 feet in diameter, set level with earth; chiseled square marked " 1083.1 "

1, 083. 11
Folsom, 0.62 mile north of, 50 feet west of southeast corner of \(\mathbf{T}\) road east, 3 feet west of property line on west side of road, in root on east side of ash tree 18 inches in diameter; copper nail marked " 973.9 "

\section*{From point near Belfast north along highway to point 1 mile west of Marshall.}

Belfast, 1.64 miles east of, at northwest corner of \(T\) road north, on top of sandstone slab 3 feet in diameter; chiseled square marked " 849.3 "
849.35

Belfast, at southeast corner of \(T\) road east, on south end of concrete culvert under pike; chiseled square marked " 847.4 "
847.55

Belfast, in southwest corner of schoolhouse yard; iron post stamped " 858 ".
858.19

Belfast, 1.84 miles northeast of, 400 feet northeast of iron bridge over Elm Run, 100 feet southwest of T road east, on east end of culvert under road; chiseled square marked " 821.7 "
821.93

Belfast, 2.55 miles northeast of, 10 feet south of southwest corner of \(T\) road west, on root of dead apple tree; copper nail marked " 988.7 "
988.88

Berrysville, 3.2 miles east by 1.47 miles south of, at northeast corner of crossroads; in root on west side of walnut tree 18 inches in diameter; copper nail marked " 1021.5 " \(\qquad\) 1, 021.76
Berrysville, about 3.2 miles east of, on north side of road, 5 feet south of property line, directly north of center of \(T\) road south; iron post stamped "Prim. Trav. Sta. No. 83, 1909 Ohio 993 "
992. 835

Rerrysville, about 3.2 miles east by 1 mile north of, 40 feet south of southeast corner of crossroads, in root on west side of white-oak tree 2.5 feet in diameter; copper nail marked " 1058.2 "

1, 058.53

\section*{IRONTON QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\). ]
Primary leveling by E. L. McNair in 1897-98 and Melville Gillett in 1898. From Ironton east to Rock Camp, thence northeast to Aid.
Ironton, northwest corner of Fourth and Railroad streets, in southeast corner of Memorial Hall and Public Library ; bronze tablet_-
Hecla, on northeast corner of head wall of concrete culvert, 200 feet east of Arabia road ; copper bolt \(\qquad\)

Feet.
546. 177
605.407
603. 383
623. 818
616. 332
689. 267
624.706
705. 481
600.638
705. 481
729. 663
701. 156

Primary leveling by C. E. Mills and C. B. Shaw in 1910 and E. L. McNair in 1897. From Beecher along Baltimore \& Ohio Southwestern R. R. to Hamden.
Beecher, 2.7 miles east of, north of Baltimore \& Ohio Southwestern R. R. track, 20 feet north and 75 feet west of bridge abutment, 50 feet east of road crossing, bridge \(115-25\); iron post stamped "611 Ohio"
Ray, 0.4 mile east of, about 20 feet north of railroad track, east side

Feet.
621. 503

Byer, in front of station; top of rail
Byer, 75 feet east of Cincinnati, Hamilton \& Dayton Ry. station, 50 feet north of track, on east side of road at road crossing ; iron post stamped " 640 Ohio"
639.686

Byer, junction of Baltimore \& Ohio Southwestern R. R. and Cincinnati, Hamilton \& Dayton Ry.; top of north rail

644
Richland, 75 feet southwest of station, south side of track and 25 feet east of road; iron post stamped " 701 Ohio" \(\qquad\) 701. 011

Summit, 75 feet south of track, 20 feet west of road near fence corner at road crossing; iron post stamped " 786 Ohio "
785. 496

Hamden, in front of Baltimore \& Ohio Southwestern R. R. station; top of rail

From Byer north via \(0 x\) to Allensville.
Byer, 0.3 mile north of, top of stone at road intersection ; paint mark " 644.596 "
644.47

Byer, 3.8 miles north of, 5 feet northwest of mail-box post, near walnut tree to southwest at northwest corner of road forks; iron post stamped " 826 Ohio" \(\qquad\) Ox, 0.3 mile north of, southwest corner of road forks, on top of stone; paint mark " 748.555 "
825.925
748.72

From Glade east along Detroit, Toledo \& Ironton R. R. to Jackson.
Glade, 435 feet south of station, east of road in wood lot; iron post stamped "Prim. Trav. Sta. No. 20, 687"
686. 862

Glade, road crossing at station; top of rail
689.6

Cove, rear of post office, 25 feet west of railroad; iron post stamped " 691 "
690. 581

Cove, 2.6 miles northeast of, Cochran switch, southeast side of track, 1 foot from right-of-way fence; iron post stamped " 674 "
674.269

Cove, 5.1 miles northeast of, northwest corner of Sunshine mine switch, 30 feet north of north main line of Detroit, Toledo \& Ironton R. R., and 500 feet west of switch stand; iron post stamped " 650 "
650. 284

Jackson, Detroit, Toledo \& Ironton R. R. station, northeast corner of platform, on stone curbing; chiseled mark painted " 649.63 " \(\qquad\) 649.668

Tackson, northeast corner of crossing of Main and Portsmouth streets, southwest corner of public square, southeast corner of county surveyor's office building; iron post stamped " 700 "
699.822

From Jackson north along Cincinnati, Hamilton \& Dayton Ry, to Byer.
Trekson, crossing of Detroit, Toledo \& Ironton R. R. and Hocking Valley Ry-
648. 60

Chapman, road crossing at station, north side of road, west side of railroad, in seutheast corner of yard; iron post stamped " 678 "
Coalton, 500 feet east of Cincinnati, Hamilton \& Dayton Ry. station, northeast corner of crossroads, at road crossing, near warning post; iron post stamped " 702 "
702.379

Coalton, in front of Cincinnati, Hamilton \& Dayton Ry. station; top of rail
Coalton, 2.5 miles northwest of, road crossing at Glenn Hall, 15 feet north of road and 20 feet west of railroad, 3 feet from warning post; iron post stamped " 667 "
Feet.
666. 555
Coalton, 3.9 miles northwest of, 30 feet south of road crossing, west side of track; bolt head in north end of bridge No. 152 ; painted " 653.4"
653. 41
From Sunshine mine switch north via Oakland Church and Leach to Ray.
Jackson, 2.9 miles west by 2.4 miles northwest of, road forks at Oakland Church and schoolhouse, northeast corner of forks, 5 feet from row of mail boxes; iron post stamped " 835 "
835.220
Leach, 1.3 miles southeast of, southeast corner of T road south, 15 feet south of Chillicothe-Jackson pike, on stone ; chisel mark
Leach, 0.8 mile southeast of, top, north end of west abutment of iron bridge over Salt Creek at T road northeast ; chiseled cross painted " 622.24 " \(\qquad\)
Leach, 0.3 mile southeast of, 300 feet west of iron bridge over Salt Creek, in center of road forks, on stone; chise? mark painted " 627.55 " \(\qquad\)
Leach, in front of George H. Greene's house, opposite store, 150 feet northwest of T road east; iron post stamped " 621 "
620.898
Ivy, 2.5 miles south of Ray, 200 feet west of store at southeast corner of \(T\) road northeast; iron post stamped " 958 Ohio"
957.636

\section*{JEFFERSON QUADRANGIE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by C. R. Harvey in 1904.
From Mill Creek south along highway to Jefferson, thence west to Cork, thence south to Windsor, thence east to Colebrook, thence north to Jefferson.
Jefferson, in stone floor of front entrance way to courthouse; aluminum tablet stamped " 968 Cleveland"
967.577

Eaglesville, 75 feet south of crossroads, flush in top of culvert; aluminum tablet stamped " 812 Cleveland"
811. 120

Cork, in northwest corner of brick schoolhouse, southeast corner of roads; bronze tablet stamped " 974 Cleveland"
973. 661

Trumbull, in northwest corner of stone foundation of town hall;
aluminum tablet stamped " 995 Cleveland"--.-- 994.531
Hartsgrove, in northeast corner of public school; bronze tablet stamped " 1033 Cleveland"

1, 031.874
Windsor, in northeasst corner of stone foundation of I. O. O. F. hall;
aluminum tablet stamped " 835 Cleveland"
Orwell, in northeast corner of Orwell Banking Company Building; aluminum tablet stamped " 903 Cleveland"
901. 705

Colebrook, 1 mile west of, in culvert stone; aluminum tablet stamped " 922 Cleveland"
921. 158

South New Lyme, in northeast corner of Presbyterian Church; aluminum tablet stamped " 968 Cleveland".
966. 728

Lenox, 2.5 miles south of; 75 feet south of crossroads, east side of north-south road, in top of stone culvert; aluminum tablet stamped " 946 Cleveland"
945.863

Lenox, 0.25 mile south of, west side of road, in abutment stone of culvert; aluminum table stamped " 932 Cleveland"
931.228

\section*{KENO QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Precise leveling by the Coast and Geodetic Survey.
Near Coolville.
Coolville, about 0.5 mile east of, on coping of abutment of a railroad Feet.bridge ; chiseled square marked B M (C. \& G. S. b. m. XLII)633.272
Primary leveling by F. W. Hughes in 1904.
From Pomeroy to Judson of Pomeroy list.
Rock Springs, 3 miles north of, in front of Wm. Rafford's house, in outcropping ledge; aluminum tablet stamped " 681 Adj 1903 " ..... 679. 240
From Spiller northeast to Portland.
Elden post office, 290 feet south of Allen's house, 392 feet north offork of road, in rock bluff 20 feet east from center of road; alumi-num tablet stamped " 663 Adj 1903"663. 065
From Coolville southwest along highway to Tuppers Plains, thence west to Burlingham.
Coolville, 400 feet south of station, in face of large rock, 100 feetsouth of small wooden bridge, northwest side of road; aluminumtablet stamped " 603 Columbus 1903 "602. 416
Coolville, in south side of bowlder on the main street; aluminum tablet stamped " 694 Adj 1903 " ..... 693. 800
Coolville, 2.9 miles southwest of, at Bethel schoolhouse, in southwest corner of foundation; aluminum tablet stamped " 791 Adj 1903 "-- ..... 791. 000
Tuppers Plains, in southeast corner of foundation of schoolhouse; aluminum tablet stamped " 760 Adj 1903 " ..... 749. 908
Tuppers Plains, 3.5 miles west of, at brick schoolhouse, in southeast corner of foundation; aluminum tablet stamped " 642 Adj 1903 "-- ..... 641.727
Alfred post office, 2.7 miles west of, 1.25 miles east of Flora, 400 feet northeast of road forks, in bluff of rock; aluminum tablet stamped " 665 Adj 1903 " ..... 664.892
KENT QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Precise leveling by D. H. Baldwin in 1902.
From Northfield south along Akron, Bedford \& Cleveland R. R. to Silver Lake Junction.
Chittenden, in front of station; top of rail ..... 1, 023.8
Seasons, in front of station; top of rail ..... 1, 011.1
Seasons, 0.27 mile south of ; southeast corner of girder bridge, on cop- ing stone of parapet wall; aluminum tablet stamped " 1002 Cleve- land 1902 " ..... 1,002. 426
Wyoga, in front of station; top of rail ..... 1, 000.8
Puttrell, in front of station; top of west rail ..... 995.0
Springdale, in front of station; top of rail ..... 993.2
Silver Lake Junction, in front of dispatcher's office; top of rail ..... 1, 023.1
From Silver Lake Junction west along Cleveland, Akron \& Columbus Ry. toEast Akron Junction.
Silver Lake Junction, southwest end of large stone-arch bridge overCuyahoga River, on end of coping stone of west side wall; alum1-num tablet stamped " 1012 Cleveland 1902 "1, 012.197
Cuyahoga Falls, in front of station; top of rail ..... 1, 011.4

From East Akron south along Cleveland Terminal \& Valley R. R. to Krumroy,
East Akron, in front of station; top of rail
981.5

East Akron, 520 feet south of station, north abutment of girder bridge, between tracks, on coping stone; aluminum tablet stamped " 983 Cleveland 1902 " 983. 434

Krumroy, in front of station; top of rail
Primary leveling by W. E. Earle and E. I. Shea in 1903.
From Silver Lake Junction east along Gaylor road to Munroe Falls, thence along Baltimore \& Ohio R. R. to Kent, thence along highway to Ravenna.

Munroe Falls, opposite post office, at southwest corner of crossroads, at northeast corner of schoolhouse, in face of foundation wall on north side; bronze tablet stamped " 1040 Cleveland 1903 " \(\qquad\) 1,039. 467
Kent, 2.5 miles west of, at milepost A. Jct. 8, top of T rail driven in ground crosscut (B. \& O. R. R. bench mark 431, elevation 1016.670)

Kent, 1.5 miles west of, at milepost A. Jct. 9, on top of T rail driven in ground; crosscut (B. \& O. R. R. bench marked 430, elevation 1016.577)
\(1,017.48\)
Kent, at head of stairway leading to railroad station, in stone bridge on south side; bronze tablet stamped " 1051 Cleveland 1903 "
\(1,051.822\)
Kent, 2.25 miles east of, at southwest corner of iron bridge over Breakneck Creek, at abutment ; chiseled square

1, 046. 39
From Ravenna northwest along highway to Streetsboro, thence west to Hudson.
Ravenna, 3 miles northwest of, at northwest corner of small bridge over ditch, in stone abutment; chiseled cross
\(1,065.00\)
Ravenna, 5 miles northwest of, Streetsboro Township, at northwest corner of girder bridge over Cuyahoga River, in top of stone abutment; bronze tablet stamped " 1054 Cleveland 1903 " 1, 054. 306
Streetsboro, Streetsboro Township, on north side at northwest corner of voting place, in stone foundation; bronze tablet stamped " 1136 Cleveland 1903 "
\(1,136.439\)
Hudson, 350 feet west of railroad station, on north stone abutment of Pennsylvania R. R. bridge over Peninsula road; bronze tablet stamped " 1049 Cleveland"

\section*{KENTON QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by E. C. Bibbee in 1912-13.
From point 4.5 miles east of Ada along highways south 4.7 miles, thence east to point 4 miles northeast of Grant.
Foraker, 5 miles north of, at northwest corner of crossroads near southeast corner of sec. 29, Washington Township, on west end of cast-iron drain under road; highest point
Foraker, 4 miles north of, 20 feet east of northeast corner of T-road north, in southwest corner of sec. 33, Washington Township; copper nail in root of 2 -foot elm tree

Foraker, 3 miles north of, at northeast corner of crossroads, near southwest corner of sec. 4, Cessna Township; copper nail in base of corner fence post

Feet.
Foraker, 3 miles north by 1 mile east of, at southwest corner of crossroads, 100 feet west of Brush College schoolhouse, near northeast corner of sec. 9 , Cessna Township; copper nail in top of fence post \(\qquad\) t
Foraker, 3 miles north by 2 miles east of, 20 feet east of northeast corner of crossroads near southwest corner of sec. 2, Cessna Township; iron post stamped " 1001 Ohio" \(1,000.602\)
Blanchard, 1 mile south by 1.5 miles west of, 7 feet south of entrance to Salem M. E. Church, 100 feet west of northeast corner of crossroads, in southwest corner of sec. 1, Cessna Township; chiseled square on first step of concrete porch on southeast corner_-_
Blanchard, 1 mile south by 0.5 mile west of, 60 feet south by 35 feet east of \(T\) road east, near northwest corner of sec. \(\mathbf{7}\), Pleasant Township; copper nail in root of 26 -inch red-oak tree \(\qquad\)
Grant, 3.5 miles west of, at T road north in southwest corner of sec. 5 , Pleasant Township; chiseled square on southeast corner of foundation of Beach Grove schoolhouse
979.99
965.92
935.10

Grant, 3 miles west of, at northwest corner of Walnut Grove U. B. Church, on Dunkirk and Kenton pike; iron post stamped " 927 Ohio"
927. 265

Grant, 2.5 miles west of, east end of cast-iron drain under road at northeast corner of \(T\) road north, near southwest corner of sec. 4, Pleasant Township, at residence of B. H. Oates_ 923. 33

Grant, 5 miles north by 1 mile west of, north side of small iron bridge in crossroads; chiseled square on wing wall of west abutment
916. 49

Grant, 0.5 mile northwest of, northeast corner of crossroads; nail head in top of mail-box post
933. 09

Grant, 0.5 mile northeast of, at southeast corner of Pleasant Grove schoolhouse, on Kenton and Forest pike; chiseled square on southeast corner of concrete cistern top-
934. 43

Grant, 1 mile northeast of, at northwest corner of crossroads on Kenton and Forest pike; iron post stamped " 935 Ohio"
935.217

Grant, 1 mile north by 1 mile east of, at southeast corner of \(T\) road east; copper nail in root of 5 -foot elm tree
930. 16

Grant, 1 mile north by 2.5 miles east of, 60 feet south of southwest corner of crossroads ; copper nail in roct of ash tree on property line_

From point 1.6 miles north of Pfeiffer along highways west and north to point 3 miles north of Foraker.
Kenton, 3.5 miles east of, 2 feet north of southwest corner of crossroads near residence of Charles Sam, near northeast corner of sec. 1, Buck Township; chiseled, square on limestone rock
982.74

Kenton, 3 miles east of, at southeast corner of T road south near residence of Elmer B. Overly, 0.25 mile east of northwest corner of sec. 1, Buck Township; iron post stamped " 970 " \(\qquad\) 970.344

Kenton, 2 miles east of, in forks of Y road; spike in base of telephone pole 5 inches above ground
\[
1,007.90
\]

Kenton, 1 mile east of, at southwest entrance to Grove Cemetery; chiseled square on large granite rock981. 08
Kenton, in southwest corner of courthouse yard; iron post stamped F'et."998 Ohio"998.170
Kenton, Big Four Route, in front of station; top of rail ..... 985.6
Kenton, \(0 . S\) mile west of, at \(T\) road north, near brick plant, on south side of road; highest point of gas main over end of box culvert.--- ..... 969. 54
Kenton, 1.6 miles west of, 150 feet west of bridge over Scioto River,20 feet west of Erie R. R., on south side of public road; highestpoint on south end of steel drain under pike957.43
Kenton, 2.6 miles west of, southwest corner of Scioto Valley school-house yard, near southwest corner of sec. 31, Pleasant Township;iron post stamped " 965 "965.233
Kenton, 3.1 miles west of, on east abutment of south side of iron bridge over Lick Run; chiseled square ..... 973.87
Kenton, 4 miles west of, opposite \(T\) road east, near residence of \(\mathrm{S} . \mathrm{H}\). Dulin ; copper nail in root of 3 -foot stump ..... 996. 62
Kenton, 5.1 miles west of, 500 feet east of J. W. Dulin's residence; highest point on north end of cast-iron drain ..... \(1,004.99\)
Foraker, 2.1 miles south of, near southwest corner of crossroads, in northwest corner of Flynn schoolhouse yard; iron post stamped "Prim. Trav. Sta. No. 89, 997 " ..... 996. 960
Foraker, 1 mile south of; spike in base of fence post at northwest corner of \(T\) road west ..... 977. 44
Foraker, southwest corner of \(T\) road west, opposite Foraker school- house ; highest point on west end of cast-iron drain under pike ..... 970.85
Foraker, in front of Erie station; top of rail ..... 970.3
Foraker, 0.8 mile north of, 100 feet north of bridge over Scinto River,at northwest corner of T road west; iron post stamped " 969 Ohio"969.012
Scioto River ; surface of water, May 13, 1913956Foraker, 2.1 miles north of, 30 feet north by 15 feet east of north-west corner of crossroads; copper nail in root of 2 -foot white-oaktree1, 005.91
From point 4 miles north of Mount Victory along highways west and north to point near Foraker.
Mount Victory, 4 miles north by 0.7 mile west of, at southeast corner of crossroads, 500 feet south of Kelley schoolhouse; copper nail in root of elm tree
Mount Victory, 4 miles north by 1.9 miles west of, at east end of east abutment of stone culvert; highest point on limestone rock
998.41
Silver Creek, 6.5 miles east of, on west end of west doorsill at entrance to White and Black schoolhouse, on Kenton and Mount Victorp pike; chiseled square
Silver Creek, 5.6 miles east of, 100 feet east of Toledo \& Ohio Central R. R., east abutment north side of iron bridge over Wolf Creek; chiseled square
Silver Creek, 4.8 miles east of, at northwest corner of crossroads, 1.25 miles north of Grassy Point, on Kenton and Ridgway pike; iron post stamped "1037 Ohio"\(1,037.468\)
Silver Creek, 3.6 miles east of, on east side of road about 2,000 feet east of G. H. Geost's residence; spike in base of gate post
1, 051.74
Silver Creek, 2.6 miles east of, 60 feet east of southeast corner of crossroads, on Taylor Creek pike; chiseled square on large rock...
1, 044.68
Silver Creek, 1.5 miles east of, in northeast corner of Kings Corner schoolhouse yard, at southwest corner of crossroads on Belle- Feet.
fontaine pike; iron post stamped " 1080 Ohio" ..... 1,080. 628
Silver Creek station, Big Four Route, north end of ; top of rail ..... 1,076.2
Silver Creek, northeast corner of concrete porch in front of GeneralStore of C. W. Robison ; chiseled square\(1,077.41\)
Silver Creek, 0.9 mile north of, in center of crossroads; highest pointon corner stone\(1,107.74\)
Silver Creek, 0.9 mile north by 1.25 miles west of, at southeast corner of crossroads; iron post stamped " 1090 Ohio" ..... 1, 089. 722
Foraker, 4.9 miles south of, 60 feet south of southwest corner of Gunn schoolhouse yard, 300 feet south of crossroads; on east end of steel drain under pike; highest point ..... 1,074.90
Foraker, 4.1 miles south of, on large granite bowlder on east side of road; highest point ..... 1, 045. 68
Foraker, 3.6 miles south of, west side of road at T road east, in base of telephone pole; spike ..... \(1,029.39\)
Foraker, 2.6 miles south of, at southwest corner of \(T\) road west, in base of telephone pole; spike ..... \(1,015.68\)
From Mount Victory west along railroad and highway to Bellecenter, thencenorth and east along highway to point near Silver Creek.
Mount Victory, 1 mile west of, on Big Four Route, 40 feet east of public road, 12 feet north of track, 2 feet north of railroad right of way, on granite bowlder ; chiseled square ..... 1, 053.64
Mount Victory, 1.7 miles west of, on railroad right of way, 50 feet north of railroad crossing, in base of corner fence post; railroad spike ..... 1, 050.57
Ridgeway, crossing of Big Four and Toledo \& Ohio Central rail- roads ; top of rail ..... \(1,054.1\)
Ridgeway, 50 feet west of public road, 100 feet west of Big Four station, on right of way ; iron post stamped " 1059 Ohio " ..... 1, 058. 749
Ridgeway, 0.8 mile west of ; highest point on concrete milepost marked " Clev 126 " ..... 1, 072.82
Ridgeway, 1.5 miles west of, 40 feet west of railroad crossing, 25 feet south of railroad, 1 foot above ground, in base of telegraph pole; spike ..... 1, 079.36
Ridgeway, 1.5 miles west of, in southeast corner of Beech Dale schoolhouse yard; iron post stamped "Prim. Trav. Sta. No. 87 1083 ". ..... 1,082. 623
Ridgeway, 2.5 miles west of, on Big Four Route, 300 feet west of rail- road crossing, on north end of cast-iron drain at bridge mark 85 A ; highest point ..... 1, 090.61
Big Springs, 0.5 mile north of, at entrance to Big Springs schoolhouse, on northwest corner of doorstep; chiseled square ..... \(1,144.48\)
Big Springs, 1.2 miles north of, at northwest corner of \(\mathbf{T}\) road west, opposite residence of J. T. Titus, on granite rock; chiseled square_ ..... \(1,132.92\)
Big Springs, 1.2 miles north by 1 mile west of, at southeast corner of crossroads, in base of telephone pole; spike ..... \(1,146.83\)
Bellecenter, 3.9 miles east of, at northeast corner of crossroads; iron post stamped " 1136 " ..... \(1,136.574\)
Bellecenter, 3.4 miles east of, on south side of road at lane north- south, in base of telephone pole; spike ..... 1, 128. 86
Bellecenter, 3 miles east of, 15 feet east of northeast corner of crossroads, 150 feet north of White Town brick schoolhouse, in root of Feet. walnut tree ; spike 1, 096. 21
Bellecenter, 2 miles east of, 600 feet west of Ward Swetland's residence, in base of telephone pole; spike
Bellecenter, 1.1 miles east of, at southeast corner of \(T\) road south, at northwest corner of Fairview Cemetery ; iron post stamped "Prim. Trav. Sta. No. 88, 1055 "

Bellecenter, 0.5 mile east of, south side of iron bridge over Slow
 Ditch, on east abutment ; chiseled square
Rellecenter, 0.5 mile northeast of Big Four Route station, 60 feet south of railroad at crossing, in base of telephone pole; spike 1, 052.26
Bellecenter, Big Four Route crossing \(1,053.3\)
Bellecenter, 0.5 mile east by 1 mile north of, 1,700 feet south of Gray Stone schoolhouse, in root of wild cherry tree ; copper nail 1, 060, 20

\section*{Near Pfeiffer.}

Pfeiffer, 1.5 miles north by 1 mile west of, at southwest corner of crossroads, 4.5 miles due east of Kenton, near southwest corner of sec. 32, Goshen township, in top of fence post ; copper nail
Pfeiffer, 1 mile west of, south side of \(\mathbf{T}\) road north, 16 feet to center of T road; iron post stamped " Prim. Trav. Sta. No. 86 Ohio 1910, 970 "
969. 829

From point near Pfeiffer south along highway via Mount Victory to point 0.6 mile south of it.
Pfeiffer, 1.6 miles south of, at entrance to Scioto Valley schoolhouse (district 9), on south end of doorsill ; chiseled square
969. 91

Mount Victory, 4 miles north of, at southeast corner of crossroads, apposite Otterbine U. B. Church; iron post
975.272

Mount Victory, 3.4 miles north of, on east side of second step at entrance to Rheinehart M. E. Church; chiseled square
983.76

Mount Victory, 2.6 miles north of, 2 feet southwest of northeast corner of crossroads, on limestone rock; chiseled square
985. 47

Mount Victory, 1.6 miles north of, on east side of road, opposite residence of James Moran, on gate hinge about 1 foot above ground; highest point
East Mount Victory, 100 feet southwest of creamery (Butler and Richards), on northwest corner of bridge; chiseled square
\(1,028.58\)
Mount Victory, 500 feet west of schoolhouse, at forks of road; iron
post stamped " 1049 "
Meunt Victory, 0.6 mile south of, on west end of cast-iron drain under pike; highest point.

1, 040.64

\section*{KINSMAN QUADRANGLE.}

\section*{[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).] \\ Primary leveling by R. C. Seitz in 1905.}

From point near Triumph south along highway to point near Chadwick.
Kenilworth, house on north side of road at crossroads, in northeast
corner of foundation; aluminum tablet stamped " 951 Adj 1903 "--
951. 431

Kenilworth, 2 miles south of, in top of east wing of north abutment of bridge, 220 feet south of \(\mathbf{T}\) road east; aluminum tablet stamped " 922 Adj 1903 "
921.870

Mecca, 835 feet south of crossroads, in culvert stone on west side of road; aluminum tablet stamped " \(926 \mathrm{Adj} 1903 "\)
925.620

Mecca, 1.5 miles south of, at T road east; iron post stamped "Sta. No. 34 " " 936 Adj 1903 "
936. 350

Cortland, -1.25 miles southwest of, in west side of Erie Railroad culvert; aluminum tablet stamped " 917 Adj 1903 "

Feet.
916. 849

Cortland, 4.75 miles south of, in culvert stone, east side of road at \(T\) road northeast; aluminum tablet stamped " 916 Adj 1903"
915. 874

From Williamsfield south along highway via Kinsman to Vernon, thence west to Mecca.
Williamsfield, 2.54 miles south of, 610 feet south of crossroads and county line, in north end west guard culvert stone; aluminum tablet stamped " 1119 Adj 1903 "

1, 118. 859
Kinsman, south side of public square, in northwest corner of foundation of brick block; aluminum tablet stamped " 940 Adj 1903 "
939. 481

Vernon, in southwest corner of foundation of schoolhouse; aluminum tablet stamped " 947 Adj 1903 "
946. 460

Vernon, 2.5 miles west of, in culvert stone, south side of road; aluminum tablet stamped " 1006 Adj 1903 "

1,005. 498
Johnstonville, house in northeast corner of crossroads, southwest corner of foundation; aluminum tablet stamped " 1081 Adj 1903 "-

1, 081.305

\section*{From Vernon south along highway to Brookfield.}

Burghill, 1.75 miles south of, 670 feet south of T road east, in northwest corner of foundation of house; aluminum tablet stamped " 1153 Adj 1903 "
\(1,152.893\)
Brockway, 2.5 miles south of Hartford, bridge over Yankee Creek, in southwest wing of south abutment; aluminum tablet stamped " 965 Adj 1903 "
964. 716

From Brockway west along highway to point near Chadwick.
Tyrrell, crossroads, in support of porch of store; aluminum tablet stamped " 1133 Adj 1903 "

\section*{LANCASTER QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).]
Primary leveling by C. H. Burns in 1907.
From point near Pleasantville southwest along highway to Lancaster, thence northwest along Hocking Valley R. R. to Carroll.

Pleasantville, 5.41 miles southwest of, 60 feet from road fork west, on west side of road, in sandstone foundation of Bushy schoolhouse; aluminum tablet stamper " 985 ,
984. 433

Lancaster, in sandstone coping to stoop on west side of city postoflice: aluminum tablet stamped " 845 "
844. 269

Hooker, 350 feet northwest of station, on north side of road near southeast corner of field of Mike Vase, 29 feet southwest of southwest corner of house ; iron post stamped " Prim. Trav. Sta. No. 48 "
Hooker, 3 miles west of, west of crossroads, near apple tree on top of steep bank in east part of field owned by Jacob Bookmon; iron post stamped "Prim. Trav. Sta. No. 49 "
836. 376

From Lancaster east along Cincinnati \& Muskingum Valley R. R. to North Berne.
Lancaster, 3.3 miles east of, 30 feet from track at crossing, in sandstone abutment of small wooden culvert on north side of railroad; aluminum tablet stamped " 832 "

\section*{From Lancaster southeast along Hocking Valley Ry, to Enterprise.}

Lancaster, 4.22 miles south of, in sandstone abutment at northeast Feet. corner of railroad bridge; aluminum tablet stamped " 791 "........
Sugar Grove, 0.19 mile south of, in sandstone abutment at northeast corner of brilge; aluminum tablet stamped " 767 " \(\qquad\) 790.782

Rockbridge, in stone stonp of schoolhouse; aluminum tablet stamped
" 753 ".
766.637

From Lancaster southwest along Cincinnati \& Muskingum Valley R. R. to Amanda.
Lancaster, 3.58 miles southwest of, in sandstone abutment at northwest corner of bridge; aluminum tablet stamped " 958 "
957.372

Lancaster, 6.42 miles southwest of, 600 feet northeast of road crossing, north side of track, in top of stone culvert ; aluminum tablet stamped " 995 "
995. 548

Lancaster, 8.23 miles southwest of, on north side of railroad, on sandstone abutment; chisel mark
918. 537

Amanda, in front of station; top of rail
916.4

Amanda, 0.75 mile east of, on east side of pike at fork to west, south of culvert; iron post stamped "Prim. Trav. Sta. No. 7 "
941. 064

From Enterprise west along highway to point 3.8 miles west of Buena Vista, thence north to Amanda.
Enterprise, 5.6 miles west of, 60 feet from road fork south, on south side of road, in sandstone foundation of large barn; aluminum tablet stamped " 1070 " \(\qquad\)
Enterprise, 8.6 miles west of, road fork on north, in sandstone foundation of abutment at northeast corner of small wooden bridge; aluminum tablet stamped " 834 "
833. 702

Enterprise, 11.72 miles west of, 2,020 feet north of road forks, on west side of road, in sandstone abutment of iron bridge; aluminum tablet stamped " 812 "
811.873

Middle Fork, in sandstone wing wall of iron bridge; aluminum tablet stamped " 887 "
886.862

Middle Fork, 3.8 miles west of by 3 miles north of, 220 feet west of road on east, in sandstone foundation of house of Samuel Harvey ; aluminum tablet stamped "1099"

1, 098. 760
Amanda, 2.69 miles southeast of, at road fork on southwest, in abutment at northwest corner of small bridge ; aluminum tablet stamped " 860 "

\section*{Near Middle Fork.}

Middle Fork, 3.8 miles west of by 0.7 mile south of, in sandstone abutment of small wooden bridge over mouth of small run on west; aluminum tablet stamped " 888 ""

\section*{Near South Perry.}

South Perry, 2.8 miles northeast of, in front of Mound Crossing schoolhouse, 40 feet north of center of crossroads; iron post stamped "Prim. Trav. Sta. No. 8, 848, 1906"

\section*{LARUE QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by E. C. Bibbee in 1912.
From point 3.7 miles southeast of Forest south along highway to Pfeiffer.
Forest, 4.7 miles south of, at southwest corner of crossroads, near line between Wyandot and Hardin counties, in root of maple tree; copper nail

\section*{Forest, 5.7 miles south of, at southwest corner of road opposite large Feet.}
 912.62

Forest, 6.2 miles south of, northeast corner of crossroads, on Wyan-dot-Hardin county line; iron post stamped " 918 Ohio "
919.997

Forest, 7.3 miles south of, on west end of cast-iron drain under road at \(T\) road east; highest point
923. 48

Forest, 7.8 miles south of, on line between Wyandot and Hardin counties, on south abutment on east side of bridge over Little Tymochtee Creek; chiseled square
920.68

Forest, 8.8 miles south of, at five points on Kenton-Marseilles pike, 200 feet east of Hopewell U. B. Church; iron post stamped " 927 Ohio "
926. 986

Forest, 9.8 miles south of, on property line, 25 feet south of southeast corner of crossroads, 700 feet north of residence of John Pfeiffer, at northwest corner of sec, 28, Goshen Township, in top of maple stump ; copper nail
942.31

Pfeiffer, 2.5 miles north of, 60 feet north of northeast corner of T road, 150 feet west of Pfeiffer schoolhouse, on east side of road, in root of ash tree; copper nail
949.03

Pfeiffer, 1.5 miles north of, 7 feet northeast of southwest corner of crossroads, on large granite rock; chiseled square
968. 33

\section*{Near Pfeiffer.}

Pfeiffer, first bridge west of, on northeast corner of abutment; paint spot, painted " 949.4 "
949.77

Pfeiffer, on southeast corner of first step leading to M. J. Robison's residence; chiseled square
954. 48

Pfeiffer, 0.5 mile south of, in root of black-oak tree in forks of road; copper nail
957.50

Southeast of Moun : Victory.
Mount Victory, 1.7 miles south of, southeast corner of lane east leading to A. B. James's residence; in root of white-oak tree; copper nail
Mount Victory, 2.7 miles south of, on southwest corner of south abutment of bridge over Rush Creek; chiseled square

1, 028.66
From point 7.7 miles southeast of Mount Victory east along highway 6 miles to schoolhouse district 6.
Mount Victory, 8.8 miles southeast of, 30 feet northeast of center of T road south, 800 feet northwest of Henry Greenberry's residence; iron post stamped " 994 Ohio"
994. 564

Mount Victory, 9.8 miles southeast of, at Stahl schoolhouse (district 11, Jackson Township), on west end of door step at entrance; chiseled square
993. 56

Mount Victory, 10.6 miles southeast of, at east end of Youkum road, on large rock in center of Widowmac pike at Marion-Huron county line; chiseled square \(\qquad\)
Essex, 2 miles north by 1.5 miles west of, at northwest corner of \(T\) road north, 0.3 mile south of Union-Marion county line, 35 feet west by 15 feet north of center of \(T\) road; iron post stamped "Prim. Trav. Sta. No. 84 Ohio 1910, 981 "-
981. 890

Essex, 2.9 miles northwest of, 1,000 feet southwest of residence of C. W. Patterson, on large rock on north side of road; chiseled square
973. 26

Essex, 1.8 miles northwest of, 1,000 feet north of Jackson Township schoolhouse (district 6), on northeast corner of bridge abutment; chiseled square

Feet. 934.58

From point 3 miles west of Green Camp north along highway to point near Upper Sandusky.
Green Camp, 4 miles west of, at northeast corner of \(\mathbf{T}\) road north, opposite Mourt Olive Church; iron post stamped " 951 Ohio "
951. 305

Agosta, 5.2 miles south of, at southeast corner of \(T\) road east, in top of fence post ; copper nail
937. 02

Agosta, 4.7 miles south of, 600 feet south of Frank Wilson's residence, on large rock at southwest corner of T road west ; chiseled square_-
Agosta, 3.6 miles south of, at southeast corner of \(\mathbf{T}\) road south, 0.25 mile north of Green Camp Township (district 5) schoolhouse; iron post stamped " 926 Ohio",
926. 256

Agosta, 2.8 miles south of, on south end of west side of box culvert, at \(\mathbf{T}\) road north; chiseled square
926. 59

Agosta, 2 miles south of, northwest corner of T road east, on base of concrete fence post ; chiseled square
915. 70

Agosta, 1.5 miles south of, at southwest corner of iron bridge over Scioto River, on retaining wall; chiseled square
919.84

Agosta, 1 mile south of, 60 feet southwest of center of crossroads, on northeast corner of concrete walk; chiseled square
918. 69

Agosta, at-southeast corner of city building; iron post stamped " 944 Ohio"
944.982

Agosta, 1.2 miles north of, on southeast corner of east end of concrete walk in front of E. B. Drake's residence; chiseled square
944. 59

Meeker, 2.5 miles south of, near northeast corner of \(\mathbf{T}\) road east; north end of cast-iron drain pipe
936. 88

Meeker, 1.5 miles south of, 300 feet south of W. Cookston's residence, on north end of doorsill at entrance to brick schoolhouse; chiseled square
917. 18

Meeker, 0.6 mile south of , on retaining wall at northeast corner of iron bridge; chiseled square \(\qquad\)
Meeker, 75 feet northwest of J. F. Pfeiffer's blacksmith shop, near northwest corner of crossroads, on west end of iron interlocking drain pipe ; highest point
Meeker, 0.5 mile east of, 26 feet west of northwest corner of crossroads, on north end of cast-iron drain pipe; highest point \(\qquad\)
Meeker, 0.5 mile east by 1 mile north of, at southeast corner of crossroads, opposite Rhoades schoolhouse; iron post stamped " 896 "Ohio"

Meeker, 2.6 miles north of, 400 feet north of Abriam Smith's residence, on southwest corner of abutment to iron bridge over Thompson's ditch ; chiseled square
Meeker, 3.6 miles north of, at southeast corner of crossroads, on east end of cast-iron drain pipe; highest point
Meeker, 4 miles north of, at northwest corner of T road west, near southeast corner of Geo. Swavel's farm, 60 feet north of Carroll ditch; iron post
Meeker, 5 miles north of, near southwest corner of \(T\) road west, on south end of cast-iron drain; highest point
Meeker, 6.2 miles north of, 15 feet west of northwest corner of \(T\) road north, in top of Osage stump on property line ; copper nail_...
894.36
886. 26
883.93
882.367
888.62
894.07
896.13
896. 006
897. 39

Upper Sandusky, 7.1 miles south of, at northeast corner of crossroads, 300 feet south of Bowser schoolhouse ; iron post stamped "905 Ohio"

Feet.
905.095

From point 7 miles south of Upper Sandusky west along highway to point 6.2 miles south of Forest.

Brownstown, 2.3 miles east of, at northwest corner of crossroads, 150 feet west of Pleasant Grove schoolhouse, in base of telephone pole; spike
888.89

Brownstown, 0.8 mile east of, 50 feet west of T road north at residence of C. C. McClear, in base of telephone pole; spike.
893. 43

Brownstown, in northeast corner of schoolhouse yard, 150 feet east of crossroads ; iron post stamped " 898 Ohio "
898. 393

Brownstown, 1.5 miles west of, on south side of west abutment of large iron bridge over Tymochtee Creek; chiseled square \(\qquad\)
Brownstown, 2.6 miles west of, on northeast corner of porch in front of York Street Christian Church; chiseled square \(\qquad\)
Brownstown, 3.2 miles west of, at southeast corner of crossroads, 400 feet east of York Street schoolhouse; iron post stamped " 892 Ohio "
892.662

Brownstown, 4.6 miles west of, at \(T\) road east, on east abutment north side of small concrete bridge ; chiseled square
906. 57

Brownstown, 5.6 miles west of, 500 feet west of H. Young's residence, on west abutment south side of iron bridge over Tymochtee Creek; chiseled square
901. 41

Brownstown, 6.3 miles west of, at southwest corner of crossroads, in front of Tymochtee schoolhouse (subdistrict 5), Jackson Township, in base of telephone pole; spike
912. 75

Forest, 6.2 miles south of, on line between Wyandot and Hardin counties, at northeast corner of crossroads; iron post
919.997

From point 10 miles south of Forest east along highway to point 2.6 miles north of Meeker.

Forest, 9.8 miles south of, 25 feet south of southeast corner of crossroads, 700 feet north of residence of John Pfeiffer, in top of maple stump on property line ; copper nail
942.31

Marseilles, 5.2 miles southwest of, at southwest corner of crossroads, at residence of \(B\). Heilman, on limestone rock; chiseled square
939. 42

Marseilles, 4.4 miles southwest of, at southwest corner of crossroads, 800 feet west of H. H. Kneisley's residence, on large rock; chiseled square
937.02

Marseilles, 3.5 miles southwest of, at northeast corner of \(T\) road northwest, on large rock ; chiseled square
932. 85

Marseilles, 2.1 miles southwest of, at northwest corner of White Baptist Church ; iron post
923.814

Marseilles, 0.5 mile southwest of, on Marseilles-Kenton pike, northeast corner of \(T\) road northeast, in base of fence post; spike
890.70

Marseilles, 1.4 miles southeast of, on southeast corner of \(T\) road south, 200 feet west of T. F. Fehl's residence, in root of 8 -inch hickory tree ; copper b. m. nail
889.70

Marseilles, 2 miles southeast of, at southeast corner of crossroads, 1,000 feet west of J. W. Bloomingdale's residence, in top of fence post ; copper nail
Marseilles, 3 miles southeast of, at southeast corner of crossroads,
 Marseilles, 4 miles southeast of, northeast corner of crossroads, 200 feet west of B. P. Peter's residence, in base of telephone pole; spike_
Meeker, 1 mile west by 2 miles north of, 200 feet west of Zion schoolhouse, at northeast corner of crossroads, in base of fence post ; spike
Feet.
886.356
882. 28
Meeker, 2.6 miles north of, 400 feet north of A. Smith's residence, on southwest corner of abutment of iron bridge over Thompson's ditch ; chiseled square
885.81
886. 26
From Pfeiffer east along highway to point 1.5 miles south of Meeker.
Hepburn, in front of M. E. Church, at southwest corner of T road south, on concrete wheel stone; chiseled square
959.02
Hepburn, 0.6 mile east of, at southwest corner of crossroads; iron post stamped " 952 Ohio"
Hepburn, 1.5 miles east of, near northeast corner of crossroads, 300 feet east of D. D Ward's residence, on large stone on east end of culvert ; chiseled square

Hepburn, 2.5 miles east of, southwest corner of crossroads, near line between Hardin and Marion counties, in top of fence post; copper nail
969.64
992. 69
Hepburn, 3.6 miles east of, at southwest corner of T road north, 300 feet west of Orley Johnson's residence, on stone; chiseled square_-
Hepburn, 4.6 miles east of, 3.5 miles north of Larue, at southeast corner of crossroads; iron post stamped " 928 Ohio"
956.38
928. 251
Hepburn, 5.5 miles east of, near northeast corner of crossroads, on north end of cast-iron drain pipe ; highest point
925. 85
Meeker, 1.5 miles south by 2 miles west of, southwest corner of crossroads, 300 feet west to W. L. Morral's residence, in top of fence post; spikè
930.97
Meeker, 1.5 miles south by 1 mile west of, at southeast corner of crossroads ; iron post
918.213
From point 1.5 miles south of Agosta west along highway to point 2.6 miles north of Mount Victory.
Agosta, 3 miles southwest of, at northwest corner of T road north, 300 feet west of S. P. Trumbo's residence; iron post stamped " 919 - Ohio" \(\qquad\)
Larue, 2.8 miles southeast of, southwest corner of \(\mathbf{T}\) road west, at residence of Marshall Waikee, in top of fence post ; copper nail_-_-
Larue, 2.3 miles southeast of, near center of \(T\) road south, on south end of stone culvert under pike; chiseled square \(\qquad\)
Larue, 1.1 miles south of, near northeast corner of \(\mathbf{T}\) road east, on east end of stone culvert ; chiseled square \(\qquad\) 920.103
922. 22
920.09
Larue, at southwest corner of schoolhouse; iron post stamped "926 Ohio"
928. 70
Larue, 0.8 mile west of, in center of first crossroads west, on cornerstone rock; chiseled square
926. 800
Larue, 1.4 miles west of, on west end of doorstep at entrance to Bowling Green Township schoolhouse (district 3); chiseled square
956. 04
Larue, 2.1 miles west of, on southwest corner of \(T\) road south, at residence of W. B. Norris, on large limestone rock; chiseled square..-
Larue, 4 miles west of, at northeast corner of T road east, 0.25 mile

Feet.west of Earl Ballinger's residence ; iron post stamped " 966 "
966. 732
Larue, 4.9 miles west of, on west side of road at T road east, on concrete retaining wall to Wild Cut Run; chiseled square_--....--
Larue, 6.3 miles west of, 100 feet east of crossroads, on north end of cast-iron drain ; highest point
962.50
979.24

\section*{LAURELVILLE QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).]
Primary leveling by H. W. Peabody in 1906.
From Cox north along highway to Adelphi.
Cox, 1.5 miles east of, 0.5 mile east of Pike Run bridge, about 0.2 mile east of road fork to north, at southwest corner of iron bridge over Salt Creek, in bridge seat; aluminum tablet stamped " 6311906 "
630.636

Pikerun, northeast corner of small iron bridge over Pike Run, in top abutment stone; aluminum tablet stamped " 668-1906"
668. 198

Pikerun, 3 miles north of, at northeast corner of Thomas Pritchard's yard, in stone post; aluminum tablet stamped "Prim. Trav. Sta. No. 10 791-1906"
791. 422

Feightner, in south face at southwest corner of United Brethren Church; aluminum tablet stamped " 11401906 "

1, 139. 895
Adelphi, northeast corner of I. O. O. F. and post-office building, on main street, in water table; aluminum tablet stamped " 838 "
837.780

Primary leveling by C. E. Mills, C. B. Shaw, and H. Clark in 1910.
From Adelphi east via South Perry to Gibisonville, thence south to Mooley Chapel.
Laurelville, 2 miles northeast of, southeast corner of T road east; iron post stamped " 772 Ohio"
772.070

Laurelville, 2 miles northeast by 0.6 mile east of, 60 feet west of road forks, at \(T\) road northwest, in top of east abutment, southwing wall, of small iron bridge; chiseled square
772. 70

South Perry, 0.8 mile west of, south side of road at \(T\) road north, in base of small maple tree; spike

South Perry, 0.5 mile west of, south side of road, on east end of lower step of Baptist Church; painted square
784.46

South Perry, west edge of town, top of east abutment, south wing, of iron bridge over Toad Run, west side of crossroads; painted square
794. 46

South Perry, southeast corner of Jesse Cave's residence; iron post stamped " 804 Ohio"
South Perry, 0.4 mile east of, north side of T road south, on top of stone; square
804.067

South Perry, 1.4 miles east of, 60 feet west of T road west, on top of west-wing wall of east abutment to steel bridge ; painted square_
802.29

Rock House, 0.4 mile south and east of, about 250 feet west of bend in road to northeast, in top of stone under fence on north side of road; chiseled square
\(1,114.26\)

Gibisonville, 1 mile west of, north side of road at T road south; spike in root of small elm tree
\(1,133.33\)
Gibisonville, northeast corner of Methodist Church; iron post stamped "1114 Ohio"
\(1,113.646\)
Gibisonville, 1.5 miles south of, in center of road forks at \(T\) road Feet.southeast, in top of stone ; chiseled square\(1,075.52\)
Gibisonville, 1.5 miles south by 0.8 mile southeast of, in front of Scheik's residence, in center of road, in top of stone; chiseled square ..... 1, 071.38
Gibisonville, 1.5 miles south by 1.6 miles southeast of, west of road south, 100 feet south of road forks and 30 feet south of southwest corner of steel highway bridge over Pine Creek; iron post stamped " 762 " ..... 761. 419
Gibisonville, 1.5 miles south by 2.3 miles southeast of, on east side of road at top of hill ; spike in base of tree ..... 1, 060. 14
Cedar Grove Church, 350 feet southwest of, southwest corner of T road south; iron post stamped " 897 " ..... 897.084
Wesley Chapel, about 1 mile east of, on south side of east abutment of small iron bridge; chiseled square ..... 829.78
South Bloomingville, 3.8 miles east of, 0.2 mile north of Wesley Chapel, west of road at forks; iron post stamped ' 1066 " ..... 1,066. 013
From Laurelville along Columbus \& Southern Ry. to South Bloomingville, thence by public road to Wesley Chapel.
Laurelville, northwest corner of public square, on top of concrete curbing at corner; painted square ..... 739. 58
Laurelville, 2.3 miles southeast of, 400 feet southeast of Karshner schoolhouse, 500 feet east of railroad, northwest corner of private road west; iron post stamped " 733 " ..... 733. 272
Haynes, southeast corner of T road northeast, 60 feet east of road forks ; iron post stamped " 694 " ..... 694.020
Reeds, northwest corner of road crossing, 75 feet north of railroad, in southwest corner of yard; iron post stamped " 682 " ..... 682.076
South Bloomingville, road crossing at station ; top of rail ..... 690. 7
South Bloomingville, 1.6 miles northeast of, south side of road at T road north; painted square on root of stump of tree ..... 1, 020.51
South Bloomingville, 3.1 miles east of, in southeast corner of \(T\) road south ; chisel mark on stone ..... 1, 050.23
From Cox via Eagle Mills, Walnut Grove Church, Royal, Stella, and Hue to Wesley Chapel.
Cox, 1 mile east of, south side of road at T road north, on stone;chiseled square630.71
Cox, 1.25 miles east by northeast, west end of culvert at northwest corner of road forks; chiseled square painted " 636.17 " ..... 636. 11
Eagle Mills, 0.1 mile north of post office, southeast corner of road forks, inside of fence, south side of wooden bridge and about 10 feet from road; iron posi stamped " 648 Ohio " ..... 647.945
Fagle Mills, 2.9 miles east of, 3 feet north of telephone pole, about50 feet south of creek, west of Vander school ; iron post stamped" 678 Ohio"677. 804
Vander school, 0.5 mile southeast of, Ural post office, at southwest corner of road forks, about 75 feet from intersection; spike in root of oak tree painted " 740.585 " ..... 740.47
Royal, 60 feet east of covered bridge, at road forks; iron post stamped " 726 " ..... 725. 527
Royal, 3.4 miles northeast of, Low Gap, northwest corner of cross-roads; spike in root of oak tree painted " \(994.0 \overline{2} 2\) "993. 85Stella, outside southeast corner of cemetery fence, about 10 feet northof telephone pole and 100 feet south of church at northwest cornerof crossroads; iron post stamped " 1056 Ohio"\(1,055.412\)

Stella, 2.6 miles northeast of, at northeast corner of road forks, spike in root of hickory tree; painted " 1045.109 "
Stella, 3.4 miles northeast of, about 0.8 mile southwest of Hue, at southwest corner of road forks, spike in root of tree; painted "1036.381"

Hue, about 0.8 mile west of, in northwest corner of H. S. Honnold's yard, outside fence at road forks; iron post stamped "Prim. Trav. Sta. 1906, 865 Ohio " \(\qquad\)
From Allensville to Royal.
Allensville, \(7 \overline{5}\) feet west of Darby's store, south of road, inside hitch rack; iron post stamped " 682 Ohio"

\section*{LAWRENCEBURG QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).]
Primary leveling by E. C. Bibbee in 1915.
From Harrison southeast along highways to point 1.7 miles northeast of Elizabethtown. thence southwest to State line.
White Water River; bridge over
White Water River; surface of water, April 30, 1915
Harrison, 1.58 miles southeast of, on Harrison-Elizabethtown pike 635 feet northwest of C! H. Fox's residence, on east side of pike, on concrete header to small culvert; chiseled square, " 511 " painted on culvert
T. 2 N., R. 1 E., near where pike crosses the south line of sec. 32 , 2.83 miles southeast of Harrison, on Harrison-Elizabethtown pike, under lane leading to H. H. Rodebush's residence, on south end of tile; highest point, " 523 " painted on fence near \(\qquad\)
T. 1 N., R. 1 E., 350 feet south of point where pike crosses the north line of sec. \(5,3.86\) miles southeast of Harrison, on Harrison-Elizabethtown pike, on west stone header to tile calvert; chiseled square, " 503 " painted on black stump near
503.46

Harrison, 5.17 miles southeast of, on Harrison-Elizabethtown pike, 200 feet south of Henry Newhouse's residence, on north abutment on east side of iron bridge ; chiseled square, " 491 " painted on bridge
Elizabethtown, 1.71 miles northeast of, on Harrison-Elizabethtown pike, in stump fir post; nail
491. 23

Elizabethtown, 0.82 mile northeast of, on Harrison-Elizabethtown pike, at northwest corner of concrete-arch bridge, on abutment; chiseled square, " 477 " painted on bridge parapet

Elizabethtown, 1.1 miles southwest of, at northeast corner of T pike north, at Ohio-Indiana State line, 4 feet north of large stone monument, 35 feet north by 20 feet east of center of T pike; iron post stamped "Prim. Trav. Sta. No. 32491 "

496.42
490.845

From point near Fioovan west along highways to point 1.7 miles northeast of Elizabethtown,
Hoovan, 0.67 mile northeast of, on Miami-Elizabethtown pike, 270 feet south of Paul Roessler's residence, in center of east concrete header over tile culvert; chiseled square, " 497 " painted on header_
Hoovan, on south end of west side of concrete walk leading to Berea School (special district 2) ; chiseled square, " 530 " painted on tree opposite
Valley Junction, at white Water railroad crossing; top of rail
Feet.
497. 58
529.95

Valley Junction, 130 feet north of station, 120 feet northwest of electric and steam railroad crossing, on west end of north header of concrete culvert; chiseled square, " 497 " painted on telephone pole near
Valley Junction, 0.92 mile north of, on electric railroad, at stop 300, on east side of road, on concrete base to telephone; chiseled square, " 492 " painted on pole \(\qquad\)
White Water River, suspension bridge over; floor

Elizabethtown, 1.71 miles northeast of, on Elizabethtown-Harrison pike, 300 feet north of T road leading east over suspension bridge over White Water River, at northwest corner of T road west; iron post stamped " 485 Ohio"

From State line southwest along Cleveland, Cincinnati, Chicago \& St. Louis Ry. to Lawrenceburg, Ind.
Iawrenceburg Junction, Ind., 0.9 mile northeast of, on Cleveland, Cincinnati, Chicago \& St. Louis Ry., 550 feet southwest of stop 70 on electric railroad, on concrete base to telephone booth; chiseled square, " 492 " painted on north side of concrete base
492. 16

Lawrenceburg Junction, opposite station; top of rail, " 498 " painted on station curb
Lawrenceburg Junction, 670 feet southwest of, on Cleveland, Cincinnati, Chicago \& St. Louis Ry. to Lawrenceburg, 10 feet south of railroad, on top of concrete signal pier 3 feet by 3 feet; chiseled square, " 500 " painted on pier
500.39

Lawrenceburg Junction, 0.97 mile southwest of, on Cleveland, Cincinnati, Chicago \& St. Louis Ry. to Lawrenceburg, 200 feet east of T road west, in base of telegraph pole; 60 -penny spike, " 490 " painted on telegraph pole

Lawrenceburg, Ind., 5 feet west of railroad, 100 feet south of north crossing, at entrance to fair ground, on concrete base to signal tower ; chiseled square, " 487 " painted on concrete base \(\qquad\)
Lawrenceburg, in front of courthouse, under center of second window from east corner, on water table; chiseled mark and "1879 U. S. C. \& G. S. b. m. U." (1912 adjustment)
485.941

\section*{LIMA QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Lima south along Cincinnati, Familton \& Dayton Ry, to Pushada Township.
Lima, Allen County, Cincinnati, Hamilton \& Dayton Ry. station, east side of building, in angle south of main structure, on west end of doorsill stone ; chiseled square at time of leveling, entrance to train dispatcher's office (C. \& G. S. b. m., U \(\mathrm{U}_{1}\) )

Lima, southeast corner of High and Elizabeth streets, northeast corner of post-office building, in water table, east face, 315 feet south of the north corner and 4.2 feet above the flagging; horizontal cut in center of a 1 -inch square cut, one-fourth inch deep, marked "U. S. C. \& G. S." (C. \& G. S. b. m. V 1 )

Feet.
877. 449

Lima, southwest corner of High and Main streets; top of north fireplug of city hydrant (C. \& G. S. b. m., Lima City)
872.705

Cridersville, 1.2 miles north of, on Cincinnati, Hamilton \& Dayton Ry., on northwest quarter of abutment of bridge 46, over Little Haw Creek, on west end of bridge-seat course, 9 inches north of south face; highest point on square with rounded corners 1.8 inches on a side and lettered " U. S. C. \& G. S." (C. \& G. S. b. m., W1) _--
Cridersville, Auglaize County, on Cincinnati, Hamilton \& Dayton Ry., 66 feet west from main track and 45 feet north of north side of Main Street; in stone window sill of the Hover Bros.' block; brass bolt marked with horizontal line (C. \& G. S. b. m., X \({ }_{1}\) ) \(\qquad\)
Wapakoneta, 0.25 mile north of, on Cincinnati, Hamilton \& Dayton Ry., in northeast quarter of bridge 45 over Auglaize River, in bridge-seat course on east part of receding angle, 1.9 meters below top of retaining wall; chiseled square (C. \& G. S. b. m., Y \({ }_{1}\) )
Wapakoneta, east face of county courthouse building, 17 feet from northeast corner of north pillar between basement windows, 3 feet above ground and 16 inches south of the north edge of pillar; brass bolt marked with horizontal line (C. \& G. S. b. m., Z \(\mathrm{Z}_{1}\) )
868.942
892. 389
866.109
898.519

Pushada Township, on Cincinnati, Hamilton \& Dayton Ry., 2 miles south of Wapakoneta, on southeast quarter of bridge 44 over Pushada Creek, on bridge-seat course, 2 feet west of east end of shelf, 7 inches back from edge; elevated point circumscribed by square cut in stone lettered " U. S. C. \& G. S." (C. \& G. S. b. m., \(\mathrm{A}_{2}\) )

Primary leveling by C. W. Marvin and R. G. De Frees in 1903.
From Lima west along railroad to Kempton, thence south along highway to point near Wapakoneta, thence east to point near Santa \(F e\), thence north to Erie R. R. 4 miles east of Lima.
Lima, southwest corner of courthouse; aluminum tablet stamped " 884 Col"
884.451

Lima, office building of Erie R. R., 1 foot east of northwest corner ; chiseled square
881. 904

Kempton, NW. \(\frac{1}{4} \mathrm{sec} .6\), T. 4 S., R. 6 E., 500 feet north of Erie R. R. crossing, 3 feet north of southwest corner of brick schoolhouse; aluminum tablet stamped " 836 Col "
835.769

Hume, SE. \(\frac{1}{4}\) sec. 30, T. 4 S., R. 6 W., railroad bridge over Twomile Creek, at southwest corner of back wall of east abutment; bronze tablet stamped " 845 Col " \(\qquad\)
Wapakoneta, SW. \(\frac{1}{4}\) sec. 29, T. 5 S., R. 6 E., iron bridge over Auglaize River, at east end of north abutment, at southwest corner; aluminum tablet stamped " 885 Col " \(\qquad\) 885. 791

Wapakoneta, 20 feet south of northeast corner of courthouse; copper bolt (U. S. C. \& G. S. bench mark " \(\mathrm{Z}_{1}\) ")
898.519

Wapakoneta, 2 miles southwest of, on quarter line north of center sec. 1, T. 6 S., R. 5 E., small iron bridge over Owl Creek, at northwest corner bridge seat on south abutment; square
879.76

Wapakoneta, 3 miles southwest of, near center of Washington Township, sec. 12, T. 6 S., R. 5 E., at T road to east, north side of stone doorsill of schoolhouse (subdistrict 6) ; aluminum tablet stamped " \(908 \mathrm{Col} "\)

Feet. 908. 327

Wapakoneta, 4 miles south of, SE. \(\frac{1}{4}\) sec. 20, T. 6 S., R. 6 E., at small girder bridge of Western Ohio Ry. 1,000 feet north of highway, on northwest corner of south abutment; aluminum tablet stamped " 973 Col "
973.535

Gutman, 2 miles northeast of, SE. \(\frac{1}{2}\) sec. 2, T. 6 S., R. 7 E., at crossroads, north end of stone doorsill of Lusk schoolhouse; aluminum tablet stamped " 1019 Col "

1, 019. 464
Wesley Chapel, NE. \(\frac{1}{4} \sec .27\), T. 5 S., R. 7 E., 1,000 feet south of crossroads, at north end of stone doorsill of M. E. Church ; aluminum tablet stamped " 1085 Col "
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$1,085.611$

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South Warsaw, 2 miles southeast of, NW. \(\frac{1}{4}\) sec. 12, T. 5 S., R. 7 E., at southeast corner of crossroads, on stone doorsill at west side of Shamon schoolhouse; aluminum tablet stamped " 1005 Col"
South Warsaw, 0.5 mile north of, SW. \(\frac{1}{4}\) sec. 26 , T. 4 S., R. 7 E., at iron bridge over Auglaize River, in southwest corner of southeast wing wall ; aluminum tablet stamped " 922 Col "-
921. 996

Lima, 4 miles east of, SW. \(\frac{1}{4}\) sec. 2, T. 4 S., R. 7 E., on west abutment of small iron bridge 50 feet east of crossing, at northeast corner of bridge seat; aluminum tablet stamped " 942 Col "
941. 603

From Lima south along Cincinnati, Hamilton \& Dayton Ry. and highways via Cridersville to point near Fryburg.

Cridersville, NW. \(\frac{1}{4}\) sec. 35, T. 4 S., R. 6 E., Blackburn \& Fisher brick hardware building west of railroad, north side of Main Street, in stone doorsill at east end ; aluminum tablet stamped " 891 Columbus 1903 "
891.332

Uniopolis, 2 miles west of, NE. \(\frac{1}{4}\) sec. 23 , T. 5 S., R. 6 E., at road forks, in stone doorsill at east door of Parlette schoolhouse; aluminum tablet stamped " 919 Columbus 1903 "
Fryburg, 1.5 miles southeast of, near east line of sec. 23, T. 6 S., R. 6 E., in stone doorsill at north side of Weingarten School ; aluminum tablet stamped " 1016 Col "
- 1,016. 006

\section*{At Wapakoneta.}

Primary leveling by H. B. Hoel in 1909.
Wapakoneta, in front of Toledo \& Ohio Central Ry. station; top of rail

\section*{LISBON QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]

\section*{Precise leveling by the Coast and Geodetic Survey.}

Near Berlin Center, Mahoning County.
Berlin Center, about 2.5 miles south of, on Pennsylvania R. R. right of way, five telegraph poles north of milepost 20 ; middle of west end of north concrete abutment of bridge 26 (C. \& G. S. b. m. T6 ) _- 1, 089.090
Berlin Center, about 2 miles south of, 17 telegraph poles south of milepost 24, at southwest corner of Western Reserve line crossing, 15 meters west of track; red-metal cap on iron post (C. \& G. S. b. \(\mathrm{m} . \mathrm{U}_{\mathrm{B}}\) )

\section*{Primary leveling by H. W. Peabody in 1906 and R. C. Seitz in 1907.}

\section*{From Canfield south along highway to Leetonia.}

Calla station, 0.5 mile east of, 4 miles south of Canfield, at southeast corner of crossroads, northwest corner sec. 12, T. 16 N., R. 3 W ., in west face of northwest corner of brick schoolhouse; aluminum Feet. tablet stamped " 1185 1906" 1, 184. 873
Locust Grove, northeast corner sec. 23, T. 16 N., R. 3 W., 1.5 miles east of Greenford, 6 miles south of Canfield, southwest corner of crossroads, in east face of northeast corner of schoolhouse ; aluminum tablet stamped " 12361906 " 1, 236. 151

\section*{From Berlin Center southwest to Snodes.}

Snodes, 1 mile north of northeast corner of sec. 11, T. 18 N., R. 5 W., in east face of northeast corner of Peru schoolhouse; aluminum tablet stamped "1112 1906 "

\section*{From Snodes east to Calla.}

Patmos crossroads, 0.5 mile west of, at center of south side of sec. 4, T. 17 N., R. 4 W., in south face of southeast corner of Patmos schoolhouse; aluminum tablet stamped " 12271906 "
Hickory Corners, northwest corner of sec. 7, T. 16 N., R. 3 W., at southeast corner of crossroads, in west face of northwest corner of Concord Church; aluminum tablet stamped " 10831906 " \(\qquad\) 1, 082. 561

\section*{From Leetonia south along highway and Erie R. R. to Lisbon.}

Franklin Square, 2.5 miles southwest of Leetonia, northeast corner of sec. 22, T. 15 N., R. 3 W., 400 feet east of crossroads, in north face of northeast corner of M. E. Church ; aluminum tablet stamped "1066 1906 "
Teegarden, northeast of center of sec. 32 , T. 15 N., R. 3 W., in bridge seat at southwest corner of small iron bridge over branch near covered bridge; aluminum tablet stamped " 991 1906"
Coleman station, 0.5 mile south of southwest corner of sec. 9, T. 14 N., R. 3 W ., at southeast corner of bridge seat; aluminum tablet stamped " 9651906 "
964.719

Lisbon, in north face of northeast corner of courthouse; bronze tablet stamped " 968 Steubenville"
967. 499

Lisbon, south of center of sec. 14, T. 14 N., R. 3 W., diagonally opposite courthouse; iron post stamped "Prim. Trav. Sta. No. 45 "

\section*{From Franklin Square west along highway to Westville, thence north to Snodes.}

Salem, northeast corner of sec. 1., T. 16 N., R. 4 W., 200 feet east of Pennsylvania R. R. on south side of Main Street, in south face of southeast corner of Salem Water Co.'s pump house; aluminum tablet stamped " 11691906 "
\(1,168.967\)
Salem, 3 miles west of, near northwest corner of sec. 3, T. 16 N., R. \(4 \mathrm{~W} ., 2\) miles east of Damascus, south side of road, in west face of northwest corner of L. K. Lightfoot's yellow brick house; aluminum tablet stamped " 12471906 "
Damascus, near southwest corner of sec. 32 , T. 17 N., R. 4 W., 2 squares northwest of main crossroads, in west face of southwest corner of school building; aluminum tablet stamped " 12201906 "- 1, 219.064
Westville, 2 miles west of Damascus, southwest corner of sec. 36; T. 18 N., R. 5 W., 150 feet north of crossroads and on east side of road; iron post stamped " Prim. Trav. Sta. No. 49 "
Beloit, 0.5 mile east of, northwest corner of cover stone on box cul- Feet. vert; P., Ft. W. \& C. R. R. bench mark ..... \(1,143.530\)
Beloit, 1.5 miles north of, 1.25 miles south of Snodes station, west line NW. \(\frac{1}{4}\) sec. 24 , T. 18 N., R. 5 W., in west face of northwest corner of Beech Ridge schoolhouse; aluminum tablet stamped " 1165 1906 " ..... 1, 163. 884
From Coleman station west along highway to New Alexander, thence north topoint near North Georgetown.
Guilford, 8 miles south of Salem, near center of sec. 12, 'T. 15 N., R. 4 W ., at west edge of village, in bridge seat at southeast corner of iron bridge over stream; aluminum tablet stamped " 11161906 "- ..... \(1,114.912\)
New Garden, north of center of sec. 9, T. 15 N., R. 4 W., 700 feet west of main crossroads and on south side of road, in west face of north- west corner of Christian Church; aluminum tablet stamped " 1271 1906 " ..... 1,270. 614
New Alexander, near southeast corner of sec. 11, T. 16 N., R. 5 W., 500 feet west by 400 feet south of main crossroads, in west face of northwest corner of Bible Christian Church; aluminum tablet stamped " 1326 1906" ..... \(1,324.808\)
Bridgewater, near northwest corner of sec. 36, T. 17 N., R. 5 W.,1 mile south of North Georgetown, 200 feet south of crossroads, inbridge seat at northwest corner of small iron bridge; aluminumtablet stamped " 11321906 "\(1,130.937\)
Mill school, southeast corner of sec. 14, T. 17 N., R. 5 W., east face of southeast corner of schoolhouse; aluminum tablet stamped " 1110 1906 " ..... 1, 109. 426
LOGAN QUADRANGLE.[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by W. H. Monahan and C. H. Burns in 1907.
From Rushville south along Toledo \& Ohio Central Ry. to Bremen, thence eastalong Cincinnati \& Muskingum Valley R. R. to Junction City, thence northalong Baltimore \& Ohio R. R. to Carthon.
Rushville, 3.14 miles south of, west side of railroad, in stone abutment of culvert; aluminum tablet stamped " 821 " ..... 821.071
Bremen, in north side of front doorstep of schoolhouse, 5 feet from tread of steps; aluminum tablet stamped " 800 " ..... 800.151
Bremen, in front of Cincinnati \& Muskingum Valley R. R. station; top of rail ..... 799.6
Bremen, 3.95 miles east of, north side of railroad, in north abutment of stone culvert; aluminum tablet stamped " 813 " ..... 812. 461
Junction City, 150 feet northwest of station, 20 feet east of street near Cincinnati \& Muskingum Valley R. R. right of way; iron post stamped " Prim. Trav. Sta. No. 66, 829 " ..... 828. 493
Junction City, in front of Baltimore \& Ohio R. R. station; top of rail ..... 827.6
McElroy, in front of station; top of rail827.9
McElroy, 0.73 mile north of, 50 feet east of railroad, in northeastabutment of iron bridge at crossroads; aluminum tablet stamped" 830 "
"
From Bremen west along railroad to North Berne.

Bremen, 1.8 miles west of, road crossing 100 feet east of bridge, in sandstone abutment at northeast corner of railroad bridge; aluminum tablet stamped, " 803 ".
From Bremen south along highway and Hocking Valley R. R. to Logan.Bremen, 2.96 miles south of, 281 feet north of forks of road, in stonefoundation of Joseph Boch's stable; aluminum tablet stamped" 991 "

Feet. 991.047
Bremen, 6.65 miles south of, in stone foundation of Christ. Kunkler's stable; aluminum tablet stamped " 1038 "
Bremen, 8.93 miles south of, in stone foundation at southeast corner of bridge ; aluminum tablet stamped " 838 "
837.327
Logan, 2.5 miles north of, at forks of road, in stone at southwest corner of foundation of bridge; aluminum tablet stamped " 743 "--
Logan, in water table near end of portico at northwest corner of courthouse, 1 foot from front face; aluminum tablet stamped " 741 "
742. 796
740.345
From Bristol south along Baltimore \& Ohio R. R. and highway to Bairds Furnace, thence west along Hocking Valley R. R. to Webb Summit.
Dixie, in front of station; top of rail
854.4
Dixie, 0.03 mile south of, in stone foundation on south side of the Upson Coal Mining Co.'s store; aluminum tablet stamped " 861 "--
Dixie, 4.2 miles south of, in stone abutment at northeast corner of iron bridge; aluminum tablet stamped " 749 "
Bairds Furnace, in front of station; top of rail
Gore, road crossing at station ; top of rail
\(\qquad\)
Gore, 200 feet north of station, 100 feet east of forks of road, in stone foundation at southeast corner of iron bridge; aluminum tablet stamped " 768 " \(\qquad\)
Gore, 3.65 miles west of, 135 feet north of track, at road crossing, in southwest abutment of iron bridge; aluminum tablet stamped " 760 " \(\qquad\)
860.834
748. 711
730.6
761.6
768. 033
759. 492
Webb Summit, in front of station; top of rail
788.4
From Bairds Furnace south along Hocking Valley R. R. and highway to a point 6.4 miles southeast of Logan
Kachelmacher, 730 feet east of, in north side of west abutment of iron bridge; aluminum tablet stamped " 704 "
703.905
Kachelmacher, 2.31 miles southwest of, in stone doorstep of schoolhouse; aluminum tablet stamped " 792 "
791.154
From Enterprise southeast along Hocking Valley R. R. to Haydenville.
Enterprise, at station, 50 feet west of track, in sandstone platform of large store; aluminum tablet stamped " 749 "
748. 644
Logan, in front of station; top of rail
727. 3
Logan, 4.5 miles southeast of, 165 feet north of railroad, in flat top of southeast wing of concrete slab bridge over Threemile Creek on Logan-Athens road; aluminum tablet stamped " 718 "
713. 355

\section*{LONDON QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by F. W. Hughes in 1904 and A. J. Ogle in 1905.
From Range north along highway to London.
Range, 2.2 miles north of, in brick wall of doorway of Concord schoolhouse, aluminum tablet stamped "1042 Adj 1903 "
Newport (near Walnut Run), 3.5 miles south of London, in south end of west wall of schoolhouse; aluminum tablet stamped " 1071 Adj 1903 "

\section*{From London northeast along highway to Gillivan, thence southeast to West Jefferson.}

Lafayette, at southeast corner of brick wall of town hall; aluminum Feet.
 tablet stamped " 1013 Adj 1903 "
 1, 013. 482

\section*{Gillivan, in brick wall at north side of M. E. Church; aluminum tablet stamped " 977 Adj 1903 " \\ 977. 504}

From county corner east of Big Plain west along highwey to London.

Big Plain, in top stone of foundation of M. E. Church, 1 foot south of northwest corner ; aluminum tablet stamped " 985 Adj 1903"
Big Plain, 3 miles west of, in parapet stone of bridge over Deer Creek, 3 feet north of northeast corner; aluminum tablet stamped " 940 Adj 1903 "
940. 460

London, 4 miles southeast of, on Big Plain road, 450 feet west of fork of Mount Sterling pike to south, in south end of small stone culvert; aluminum tablet stamped "1009 Adj 1903 "

1,009. 400
From London northeast along highway near Pittsburgh, Cincinnati, Chicago \& St. Louis Ry, to point near West Jefferson.
London, in stone on south side of courthouse entrance steps on High Street; aluminum tablet stamped " 1054 Adj 1903 " \(\qquad\) 1, 054.233
London, 3.5 miles northeast of, at Deer Creek bridge on London-West Jefferson pike, in south side of northwest parapet stone; aluminum tablet stamped " 986 Adj 1903 ".
London, 6.4 miles northeast of, at T road north, on top stone of doorstep at left entrance to Glade schoolhouse; aluminum tablet stamped " 977 Adj 1903 " \(\qquad\)
West Jefferson, 0.2 mile east of city hall, 2 feet east of southeast corner of bridge over Little Darby Creek, in parapet stone; aluminum tablet stamped " 898 Adj 1903 " =

\section*{LORAMIE QUADRANGIE,}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).]
Primary leveling by H. W. Peabody in 1905.
From point 2 miles northwest of Chickasaw east along highway to Botkins.
Chickasaw, 2 miles north by 0.75 mile east of, in concrete bridge seat at northwest corner of small iron bridge; aluminum tablet stamped " 899 Adj 1905"
898. 712

New Bremen, 3 miles north of, sec. 34, T. 6 S., R. 4 E., on traction line, at southeast corner of crossroads, in west face at northwest corner of brick schoolhouse; aluminum tablet stamped " 902 Adj 1905 ".--
New Knoxville, 2 miles southwest of, north of center of sec. 36, T. 6 S., R. 4 E., in north face of northeast corner of Berghorn schoolhouse (subdistrict 2) ; aluminum tablet stamped " 918 Adj 1905 ".-.
Botkins, 5 miles west of, southeast corner sec. 33 , T. 6 S., R. 5 E., at northwest corner of diagonal road to northwest, east side at southeast corner of schoolhouse, in stone under window; aluminum tablet stamped " 944 Adj 1905 "
901. 558
917. 561

Botkins, 3 miles west of, at southwest corner sec. 36, T. 6 S., R. 5 E., at northeast corner of T road to north, east face at southeast corner of schoolhouse, in stone under window; aluminum tablet stamped " 965 Adj 1905 ".
986.712
976. 975
898.336

4to
(
943. 731
964.303

From Chickasaw south along Cincinnati, Hamilton \& Dayton Ry, to Yorkshire.
Chickasaw, southwest corner sec. 11, T. 7 S., R. 3 E., in southeast corner of store and dwelling of \(H\). Gast, in south face in water table; aluminum tablet stamped " 947 Adj 1905 "
Maria Stein, northwest corner sec. 26, T. 7 S., R. 3 E., in west face,about 10 feet from northwest corner of Myers \& Patty's grain ele-vator; aluminum tablet stamped " 974 Adj 1905 "
Feet.
973.710
987. 208

\section*{Primary leveling by H. B. Hoel in 1909.}
From point 2.5 miles south of St. Marys south via Minster and Loramie to Hoffman schoolhouse.
New Bremen, southeast corner of Zion (Reformed) Church, midway between steps leading to south and west door of church; iron post stamped " 941 " \(\qquad\)
Minster, in yard in rear of Sommer Hotel, 15 feet south of south face of building and 4 feet west of sidewalk, inside fence; iron post stamped " 968 "
941. 103
Loramie, at north end of west abutment of iron bridge over canal and 60 feet southeast of V. Gaier's store; iron post stamped " 959 " Newport 1.5 miles north of, on east side of north-south road, at T road west, 100 feet northwest of brick schoolhouse, district 4 ; iron post stamped " 1006 "
1
Newport, 1.25 miles south of, at southeast corner of diagonal road southeast; iron post stamped " 953 "
967.718
958.894

From point 5 miles west of Swanders west via Loramie to Yorkshire.
Loramie, 0.5 mile south by 4.5 miles east of, 50 feet south of and in front of residence of John Roman; iron post stamped " 1000 " \(\qquad\) of 1
Loramie, 0.5 mile south by 2 miles east of, at southeast corner of crossroads; iron post stamped " 972 "
972. 299

Loramie, 3 miles west of, at Darke-Shelby county line, northeast corner of crossroads; iron post stamped " 955 "
955.110

\section*{East of New Knoxville.}

New Knoxville, 3 miles east by 1 mile south of, on Shelby-Auglaize county line, at southwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 6, 928 "

928,344
From North Houston along Cleveland, Cincinnati, Chicago \& St. Louis Ry. to Hardin.
Houston, in front of station; top of rail \(\qquad\)
Dawson, at station, in southwest corner of yard of residence of E. J. Griffis, 15 feet north of railroad and 40 feet west of station, at railroad crossing; iron post stamped " 943 " \(\qquad\)
Hardin station, 1.5 miles east of, 30 feet south of railroad and 25 feet west of road, at railroad crossing, on right of way ; iron post stamped " 989 "
88. 874

\section*{From point 2 miles south of Kettlersville west to Minster.}

Minster, 1 mile north by 4 miles east of, north side of east-west road at \(T\) road south; iron post stamped " 974 "

LOUDONVILLE QUADRANGLE.
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by E. C. Bibbee in 1910 and 1912.
From Killbuck north along railroad to Shreve.
Killbuck, 2.5 miles northwest of, 7 feet east of center of road, in center on large sandstone rock; chiseled square with cross painted " 882.4 "

Kiilbuck, 2.9 miles northwest of, 1.1 miles south of Welcome, on Kill-
buck-Shreve road, at southwest corner of crossroads; iron post stamped " 920 "

Feet. 920.071

Welcome, center of town, 15 feet east of crossroads, on northwest corner of bridge abutment; chiseled square painted " 930.5 "
930.45

Welcome, 0.9 mile north of, at guidepost marked "Paint Valley \(2 \frac{1}{2}\) miles, Shreve 9 miles, Welcome 1 mile," at northwest corner of T road; iron post stamped " 1001 "

1,000. 833
Welcome, 2.1 miles north of, in center of \(T\) road, on cornerstone rock; chiseled square painted "1102"
\(1,101.98\)
Shreve, 6.5 miles south of, at northwest corner of T road north; iron post stamped " 1029 "

1, 028.521
Shreve, 6.4 miles south of, at northwest corner of T road at guidepost, marked "Shreve 4 miles, Paint Valley 3 miles, Nashville 5 miles, Holmesville 6 miles ; iron post stamped " Prim. Trav. Sta. No. 23, 1187 "
\(1,187.003\)
Shreve, 3.4 miles south of, northwest corner of crossroads at guidepost marked "Holmesville 6, Welcome 8, Shreve \(3 \frac{1}{2}\);" iron post stamped " 1139 "
\(1,138.697\)
Shreve, 1 mile south of, northwest corner of \(T\) road north, on rock; chiseled square
918. 4

Shreve, under ticket-office window; southeast corner of water table_ 917.06

From point 1.2 miles west of Killbuck west along railroad to point 2 miles southwest of Glenmont.
Killbuck, 3.1 miles east of, on Cleveland, Akron \& Columbus Ry., 60 feet south of milepost marked "C 74 H 70 ," on northeast corner of stone culvert under railroad; chiseled square
Glenmont, 2 miles east of, 30 feet south of railroad, 25 feet west of wagon road, 1,000 feet east of milepost marked "C 73 H 71; " iron post stamped " 836 "
835. 748

Glenmont, 40 feet north of center of main track, in northeast corner of grass plat; iron post stamped " Prim. Trav. Sta. No. 17, 868 "---
Glenmont, 2 miles west of, 25 feet north of railroad, at private crossing 200 feet south of \(T\) road north, on sundstone rock; chiseled square

From Glenmont south along highway toward Warsaw.
Glenmont, 0.6 mile south of, west of road on top of hill, on large stone at gatepost; chiseled square
868. 268
988.09

From Loudonville north along highway to point near Hayesville.
Loudonville, 1,000 feet east of station, at overhead road crossing, at west end of bend north of track; southeast corner of stone foundation
977.59

Loudonville, 0.9 mile north of, on east side of road, on west end of concrete retainer at south end of tile; chiseled square \(\qquad\) 1, 062.23

Loudonville, 2 miles north of, on south end west side of concrete
 culvert under wagon road; chiseled square

1, 048,51

Loudonville, 3.1 miles north of, at southwest corner of crossroads;
iron post stamped " 1037 "-.-.-.-. \(1,036.640\)
McKay, 1 mile south of, 500 feet south of \(T\) road east, on north abutment east side of iron bridge ; chiseled square

1, 089.82
McKay, 0.3 mile north of, 400 feet south of T road west, on retaining wall of bridge, at north end east side; chiseled square

1, 161. 27
McKay, 1.2 miles north of, at southeast corner of crossroads, 600 Fect.feet southeast of W. H. Stauffer's residence; iron post1, 291.115
Hayesville, 3 miles southeast of, on east side of public road at \(Y\) road, in north end of box culvert under approach to large barn; copper nail ..... 1, 247.06
From point near McKay east along highway to Funk, thence south to Bigprairie.
Mohicanville, 1.6 miles west of, in center of crossroads, on corner stone rock; highest point ..... \(1,304.91\)
Mohicanville, 0.7 mile west of, on south end of culvert under wagon road at Y road, on large rock; chiseled square ..... 1, 275.34
Mohicanville, at southwest corner of crossroads, 75 feet north of hotel; iron post stamped "1091" ..... 1, 090.787
Mohicanville, 1 mile northeast of, 125 feet west of ridge schoolhouse, 75 feet south of T road, on large granite rock on west side of road; chiseled square ..... 1, 247.02
Mohicanville, 1.6 miles east of, on north side of public road, on large granite rock; chiseled square ..... \(1,224.07\)
Lake Fork, 12 feet south of southwest corner of general store, on- large stone near northeast corner of crossroads ; chiseled square_- 1, 021. 13(For bench mark at Funk, see West Salem quadrangle.)
Funk, 0.9 mile south of, on north end east side of small trestle; firstdrift-bolt head948. 51
Funk, 2.1 miles south of, in top of stringer at northwest corner of small trestle; spike ..... 948.74
Forest (flag stop), 600 feet southwest of, on east side of public road, 300 feet north of \(T\) road east; iron post stamped " 956 " ..... 955. 464
Craighton (flag station), 6 feet west of railroad, on north end of tile on west side of railroad at crossing; highest point ..... 957.39
Craighton, 1.4 miles south of, under railroad at crossing; north end of tile culvert ..... 958.99
Craighton, 2.4 miles south of, 30 feet east of railroad, on north end of \(T\) rail at northwest corner of iron bridge; highest point ..... 956.82
Custaloga, at station; top of north rail ..... 970.5
Bigprairie, 0.5 mile east of, on south side of railroad at crossing; west end of tile ..... 956. 47
Bigprairie, in center of sidewalk 1 inch below surface, 7 feet north- west of southwest corner of Monitor Bank Building ; iron post_-- ..... 952.715
Custaloga, 1,000 feet east of, arch bridge; northwest corner of top step of east wall of arch ..... 967. 90
Primary leveling by Philip Flitman in 1911.
From Plimpton along highway to Nashville.Lakeville, east abutment of bridge 129 ; top of northwest corner ofsecond step below track, marked with chisel "B. M."938. 330
Lakeville, 0.5 mile south by 0.5 mile east of, on Lakeville road; top of 1-ton bowlder, marked " 989.402 " ..... 989. 40
Lakeville, 1.25 miles south by 0.5 mile east of, 250 feet north of cross-roads; top of southeast corner of northwest wing of concretebridge, marked " 987.523 "987.53
Lakeville, 2 miles south of, at northwest corner of crossroads; iron post stamped "1043 Ohio" ..... 1, 042. 617Nashville, 1.5 miles north by 0.5 mile west of; top of southwestcorner of north abutment of small bridge, marked "1025.599"..... 1, 025.61
Nashville, 0.5 mile west by 1 mile north of ; top of southwest corner Feet.of north abutment of small bridge, marked " 1065.974 "1, 065.98
Nashville, 0.5 mile north by 0.5 mile west of ; top of southwest corner of north abutment of small bridge, marked "1114.615" ..... 1, 114. 63
Nashville, in schoolhouse yard; iron post stamped " 1214 Ohio" ..... 1, 214.327
From Glenmont via public road to Nashville.
Glenmont, at station; iron post stamped " 868 Ohio" ..... 868. 268
Glenmont, top of northwest corner of stone culvert at south end of Nashville road marked " 880.948 " ..... 880.95
Glenmont, 1 mile north by 0.5 mile west of ; top of masonry at north- west corner of northwest wing of small bridge, marked " 904.168 "- ..... 904.16
Nashville, 3 miles south of, at northeast corner of crossroads; iron post stamped "998 Ohio" ..... 998.292
Nashville, 1.25 miles south of ; top of masonry at southwest corner of north abutment of small bridge ..... 1, 207. 41
Nashville, 0.8 mile south of ; top of northwest corner of southwest wing of small bridge ..... 1, 127. 99
From Brinkhaven to Loudonville.
Brinkhaven, northwest corner of schoolhouse yard; iron post stamped " 896 Ohio" ..... 896.313
Brinkhaven, 1 mile north of, on south pillar of east row at water tank; southeast corner of lower base of stone foundation ..... 891. 54
Brinkhaven, 1.9 miles north of, under west rail of Mohican River bridge 23 ; top of south end of iron girder- ..... 880.94
Greer (Ediam), 1.5 miles south by 0.5 mile east of, at southeast corner of road crossing; iron post stamped " 899 Ohio" ..... 899.17
Greer, 0.8 mile south of, at south end of west guard rail (wooden) of trestle bridge; top of bolt ..... 906. 36
Greer, at station, southeast corner of concrete foundation of sema- phore ..... 920. 80
Greer, 1 mile north of, under west rail of Mohican River bridge 25; top of south end of iron girder ..... 896.07
Greer, 1.5 miles north of, at southeast corner of road crossing; iron post stamped "907 Ohio" ..... 907.108
Greer, 2.5 miles north of, at southwest corner of support of sema- phore; top of bolt ..... 901. 20
Greer, 3 miles north of, at south end of west guard rail (wooden) of Mohican River bridge 28 ; top of bolt ..... 807. 34
Greer, 4 miles north of ; top of upper end of cast-iron pipe culvert 3 feet in diameter ..... 909.21
Greer, 5.5 miles north of, at south end of east guard rail (wood) of Mohican River bridge 29 ; top of bolt  ..... 919.06
Spellacy, 40 feet east of track; iron post stamped " 918 Ohio"
918.177Spellacy, 1 mile north of ; top of lower end of vitrified pipe culvert 9
inches in diameterSpellacy, 2 miles north of, on culvert 30, near road crossing, top ofmasonry at east end of south abutment, marked "B. M." withchisel930.52
Loudonville, 1.7 miles south of, at road crossing, southeast end of stone culvert; top of parapet ..... 932. 89

Loudonville, 125 feet southeast of intersection of Market and Main streets, in city park; iron post stamped "Prim. Trav. Sta. Ohio 1907 978" \(\qquad\)
Loudonville, 0.5 mile east of, top of northwest corner of stone box culvert; chiseled square (Pittsburgh, Fort Wayne \& Chicago Ry. b. m.)

\section*{LYNN QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(84^{\circ} 4 \overline{5}^{\prime}-85^{\circ}\).] Primary leveling by H. W. Peabody in 1905.

Near east border of quadrangle.
Coletown, 2.5 miles west of, near southwest corner sec. 15, T. 12 N., R. 1 E., at northeast corner of T road to north, 300 feet west of \(T\) road to south, in south face of southwest corner of brick schooldhouse; aluminum tablet stamped " 1077 Adj 1905 "

1,076. 650
Elroy, 2.5 miles northwest of, near northeast corner sec. 22, T. 13 N., R. 1 E., 1.5 miles north by 3 miles east of Union City, Ind., in stone of doorsill to Thomas schoolhouse; aluminum tablet stamped " 1050 Adj 1905 "

1, 050.246
Primary leveling by E. C. Bibbee in 1914.
From point 3.9 miles north of Union City south near Ohio-Indiana State line to Nashville.

Union City, 3 miles north of, just south of crossroads at blacksmith shop, in northeast corner of concrete abutment of bridge; aluminum tablet stamped "Prim. Trav. Sta. No. 42 Ohio 1051 "
T. 13 N., R. 1 E., 525 feet south of northwest corner of SW. \(\frac{1}{4}\) sec. 17, on Ohio-Indiana State line, on south abutment on west side of small wooden bridge; chiseled square
Union City, 1.86 miles north of, on Ohio-Indiana State line, 60 feet south by 15 feet west of southeast corner of crossroads, in center of east parapet to concrete bridge ; chiseled square

1,072. 53
Union City, 0.47 mile north of, on Ohio-Indiana State line, at \(Y\) road forks, at extreme northeast corner of sidewalk, on east side of road; chiseled square

1,091. 88
Union City, in southwest corner of public schoolhouse yard; iron post stamped " 1105 Ohio" \(\qquad\) 1, 105. 112
Union City, on east side of South State Line Street, on curb at fire hydrant ; chiseled square

1, 098. 69
Union City, 1.28 miles south of, on Ohio-Indiana State line, on southwest corner of lane leading to Led Stack's residence, on large granite bowlder ; chiseled square
\(1,079.77\)
Union City, 2.06 miles south of, on Ohio-Indiana State line, 450 feet south of G. A. Strait's residence, on wing wall at northwest corner of bridge; chiseled square
\(1,088.73\)
Union City, 3.11 miles south of, on Ohio-Indiana State line, 1,000 feet south of Charles Welch's residence, at southwest corner of \(\mathbf{T}\) road west, on south end of steel flue used for culvert; highest point_ 1, 103. 12
T. 12 N., R. 1 E., 20 feet north by 20 feet east of west corners of secs. 7 and 18,3 miles south of Union City, at northeast corner of crossroads ; iron post stamped "Prim. Trav. Sta. No. 41 Ohio 1110 "

Feet.
T. 12 N., R. 1 E., 400 feet south of southwest corner of sec. 18, on Ohio-Indiana State line, in center of west concrete header to tile culvert under road; chiseled square
T. 12 N., R. 1 E., near the northeast corner of sec. 30,3 feet north of corner fence post, at the southeast corner of \(T\) road east, on large rock level with ground; chiseled square
T. 12 N., R. 1 E., at the northwest corner of sec. 31, on foundation on east side of concrete post said to be on Ohio-Indiana State line; chiseled square.
\(1,138.04\)
T. 12 N., R. 1 E., 0.25 mile east by 0.21 mile north of southwest corner of sec. 31, 450 feet north of O. Bass's residence, on west side of road, 2 feet east of fence, on large flat rock; chiseled square

1, 152. 42
T. 11 N., R. 1 E., 150 feet east of northeast corner of sec. 6 , about 0.5 mile east of Ohio-Indiana State line, at southeast corner of \(T\) road south; iron post stamped " 1152 Ohio"

1, 151. 610
T. 11 N., R. 1 E., near northeast corner of sec. 5 , in southeast corner of schoolhouse yard, on large granite rock; chiseled square 1,152. 28
Nashville, 1 mile west of, 15 feet north by 20 feet west of northeast corner of sec. 4, T. 11 N., R. 1 E., at northwest corner of lane leading to John Tharp's residence, on large granite rock ; chiseled square
\(1,134.18\)
From point near Long south near Ohio-Indiana State line to Glenkarn.
T. 11 N., R. 1 E., 150 feet east of northeast corner of sec. 6, about 0.5 mile east of Ohio-Indiana State line, at southeast corner of T road south; iron post stamped " 1152 Ohio "
\(1,151.610\)
Long, 0.5 mile east of Ohio-Indiana State line, in the southwest co;ner of A. M. E. Church yard, 10 feet east of corner fence post, on fence line, on large flat rock; chiseled square
\(1,172.88\)
T. 11 N., R. 1 E., at corner of secs. \(17,18,7\), and 8 , in center of crossroads, on rock; chiseled square
\(1,183.70\)
Tampico, at northwest corner of crossroads, 5 feet east of corner fence post, on large black rock level with ground; chiseled square_ 1, 164.95
Glenkarn, 1.82 miles northwest of, at southwest corner of \(T\) road west, on south end of cast-iron draimpipe; highest point
Glenkarn, 0.7 mile north of station, 0.8 mile east of Ohio-Indiana State line, 20 feet south and 20 feet west to center of crossroads, at southwest corner of schoolhouse yard; iron post stamped " Prim. Trav. Sta. No. 40 Ohio 19101160 "
From Clark station (Noggle post office) west to point 0.7 mile north of Glenkarn.
T. 11 N., R: 1 E., on north line of sec. 34, at east end of driveway to brick schoolhouse, directly opposite lane leading to Luther Oler's residence, 12 feet north of fence, on large rock; chiseled square

Glenkarn, 0.9 mile northeast of, at northwest corner of crossroads, in base of telephone pole; rail spike.

1, 163. 61
Glenkarn, 0.7 mile north of station, 0.8 mile east of Ohio-Indiana State line, 20 feet south and 20 feet west to center of crossroads, in southwest corner of schoolhouse yard ; iron post stamped "Prim. Trav. Sta. No. 40 Ohio 19101160 " \(\qquad\)
Feet. 1, 160.360
Glenkarn, 100 feet north of Big Four Route, on southeast corner of concrete sidewalk, at the southwest corner of W. H. Chenoweth's residence; chiseled square
\(1,152.18\)

\section*{MACKSBURG QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Primary leveling in 1903 by H. G. Lowe; the line from Fay to Sycamore by R. G. DeFrees.

\section*{From Fay north along highway to Sycamore Valley.}

Fifteen, in north face of foundation of post-office and store building; bronze tablet stamped " 704 Stbnvl"
Law triangulation station, 1 mile south of Lebanon, in sandstone monument on top of hill; bronze tablet stamped " 1180 Stbnvl"

1, 179. 679
Sycamore Valley, 1 mile west of, T. 5 N., R. 7 W., at southeast corner of Creighton Church, in top foundation stone, 1.5 feet above ground; bronze tablet stamped "1137 Stbnvl" 1, 136. 236

From Stanleyville north-northwest along Cleveland \& Marietta Ry, to Dudley.
Stanleyville, 3.1 miles north of, 370 feet east of railroad track, north of public highway, in face of ledge of rock; bronze tablet stamped " 677 Grafton 1902 "
676. 740

Whipple, at northwest corner of Smith Bros.' store, in top of cement
sidewalk; bronze tablet stamped " 639 Columbus "
Whipple, 2 miles north of, on top of railroad bench mark as milepost 16 ; cross
634.66

Whipple, 3 miles north of, at milepost 17 ; railroad bench mark_----
Warner, 100 feet west of station, at southeast corner of store of J. D. Smith, on east side of brick foundation, 2 feet above ground; aluminum tablet stamped " 679 Columbus"
643.14

Warner, 1.36 miles north of, at milepost 19 ; railroad bench mark
678.921

Warner, 3 miles north of, at milepost 20 ; railroad bench mark
647.86

Warner, 4 miles north of, at milepost 21 ; railroad bench mark
649.06
658. 62

Elba, high-truss iron bridge over West Fork Duck Creek, in top of abutment, at southwest corner; bronze tablet stamped " 664 Columbus"
663. 508

Elba, 1 mile north of, at milepost 22 ; railroad bench mark
Elba, 2 miles north of, at milepost 24 ; railroad bench mark
Coffee Hill triangulation station, 90 feet in direct line from dwelling of J. O. Coffee, in square top of 6 by 6 sandstone; bronze tablet stamped " 1141 Columbus"
\(1,140.930\)
Macksburg, at southwest corner of Longfellow Hotel, on west side, in face of brick support to porch; aluminum tablet stamped " 680 Columbus "
679.505

Macksburg, 2 miles north of, at milepost 27 ; railroad bench mark_
678. 85

Dexter City, at southeast corner of Valley Hotel, in south face of foundation wall; aluminum tablet stamped " 691 Columbus " \(\qquad\)
Dexter City, 1.25 miles north of, road crossing of Cleveland \& Marietta Railway, iron bridge over West Fork Duck Creek, in top of abutment wall at southwest corner ; cross cut
684.02

South Olive, at corner of North Street and Center Avenue, property of Wm. Kirkbrid, in top of stone at southwest corner; bronze tablet stamped " 694 Columbus"

Feet.
693. 500

South Olive, 1.25 miles north of, at milepost 30 ; railroad bench mark_
From Caldwell southeast along pike to Ashton, thence northeast via Fulda, Bern, and Jerles to Lewisville.
Ashton, at northwest corner of wood-truss bridge over creek, in top of sandstone in foundation wall; bronze tablet stamped " 785 Columbus "
784.077

Fulda, at west entrance of German Catholic Church, in top of northeast corner of sandstone doorsill; aluminum tablet stamped " 1171 Columbus "

1, 170.004
Fulda, 2 miles north of, at Fulda Hill triangulation station, in top of 6 by 6 sandstone on Bates Hill, T. 6 N., R. 8 W.; bronze tablet stamped " 1250 Columbus"
Bern (Carlisle), at northeast corner of high-truss iron bridge over East Fork Duck Creek, sec. 1, T. 6 N., R. 8 W.; bronze tablet stamped " 747 Columbus"
746. 448

Bern, 2 miles east of, sec. 28, T. 6 N., R. 7 W., southeast corner of iron-truss bridge over Elk Fork, at road south; cross cut in top of abutment stone \(\qquad\) 804.52

Jerles, T. 6 N., R. 7 W., in west face of foundation wall at northwest corner of T. F. Jerles's dwelling house; bronze tablet stamped " 1096 Columbus"
\(1,095.146\)

\section*{From Jerles south to Creighton Church.}

Stafford, T. 6 N., R. 7 W., at southeast corner of Main and Marietta streets, in face of foundation stone of J. K. Robinson's dry goods store; aluminum tablet stamped " 1081 Columbus"

1, 080.398
From Warner along pike northeast via Harriettsville to Stafford.
Lower Salem, Valley Hotel, second window from east end, in top of sandstone sill; aluminum tablet stamped " 654 Columbus"
653.359

Lower Salem, 2.5 miles northeast of, sec. 25, T. 4 N., R. 8 W., at crossroads, at northwest corner of iron bridge over East Fork Duck Creek, in southwest corner of abutment stone ; cross cut
654.42

Kilmer, sec. 23, T. 5 N., R. 8 W., in top of abutment at southwest corner of covered bridge over East Eork Duck Creek; bronze tablet stamped " 661 Columbus"
660. 207

Lower Salem, 4.75 mifes northeast of, sec. 24, T. 5 N., R 8 W., at T road north, at southeast corner, at south end of covered bridge, in top of abutment stone ; cross cut
658.51

Lower Salem, 6.5 miles northeast of, at T road north, south side of covered bridge over Middle Fork Duck Creek, in top stone of east approach ; cross cut
663. 59

Harriettsville, at corner of Front and Church streets, northwest corner of H. A. Warnecker's store, in north face of foundation wall; aluminum tablet stamped " 672 Columbus" 671. 436

Harriettsville, 2.5 miles northeast of, sec. 21, T. 5 N., R. 7 W., at T road northeast, at southeast corner of covered bridge over East Fork Duck Creek, on abutment stone; cross cut
690.041

Harriettsville, 4.5 miles northeast of, sec. 23, T. 5 N., R. 7. W., at mouth of Road Fork, covered bridge over East Fork Duck Creek, at southeast corner, in face of third stone from top of foundation wall; bronze tablet stamped " 694 Columbus"

Flag post office, sec. 24, T. 5 N., R. 7 W . ( 6 miles north-northeast of Harriettsville), at northwest corner of wooden-truss bridge over Flag Run, in top of abutment stone; bronze tablet stamped " 720 Columbus"

Feet.
719. 789
707. 462

From Ashton soutioast along highway to Harriettsville.
Middle Creek, sec. 26, T. 6 N., R. 8 W., south side of southwest corner of brick hotel of E. E. Lee, in top of first foundation stone; bronze tablet stamped " 713 Columbus"
711.960

\section*{At Klondyke.}

Klondyke, 0.13 mile west of, on south side of railroad, on top of concrete culvert; chiseled square, painted " 804.5 " (B. \& O. bench mark)
804.40

Klondyke, 0.1 mile east of, in south side of west abutment of iron bridge; aluminum tablet stamped " 808 "

\section*{McCLURE QUADRANGLE.}
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Precise leveling by the Coast and Geodetic Survey.
From Tontogany southwest aleng Cincinnati, Hamilton \& Dayton Ry, to Custar.
Weston, Wood County, very near south center of sec. 35, about 150 feet east of Cincinnati, Hamilton \& Dayton Ry. track, on south side of Main Street, at east side of east entrance on northeast corner of iron pedestal ; top of surface marked by a square cut with a cold chisel (C. \& G. S. b. m. D 1 )
Weston, in foundation of First Methodist Church, erected in 1895,
- in north face of foundation, 3 feet 10 inches west of west face of belfry tower, in second course of masonry below the water-table course, 2 feet above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. E \({ }_{1}\) )

Weston, about 100 feet east of Cincinnati, Hamilton \& Dayton Ry. track, north side of Main Street, northwest corner of the Citizens' Bank Building; top of corner stone just below brick (C. \& G. S. b. m. Weston Village)
682.029

Milton Center, east side of Railroad Street, at south side of east and west alley, in stone building of John Biverstock, on north end of base stone below window ; chiseled square (C. \& G. S. b. m. F \(\mathrm{F}_{1}\) ) \(\ldots \ldots\)
Custar, northwest corner of Superior and Linn streets, in northeast corner of foundation of public-school building, 1 foot 10 inches west of east face and 3 feet 8 inches above ground; brass bolt marked with a horizontal line (C. \& G. S. b. m. G \(\mathrm{G}_{1}\) )

Precise leveling by C. H. Semper in 1906.
From Liberty Center southeast via stone road to Grand Rapids, thence east to Tontogany.
Liberty Center, 3.42 miles east of, junction of roads to S. \& N. schoolhouse, front face; aluminum tablet stamped " 683 "
683. 364

Liberty Center, 5.90 miles east of, White's schoolhouse (district 1), north of road, front entrance; aluminum tablet stamped " 674 "---
Grand Rapids, bridge over Maumee River, east side of south abut-

Feet.
654. 666
669. 493

Grand Rapids, 2.72 miles east of, front entrance of schoolhouse north of road; aluminum tablet stamped " 670 "

> Primary leveling by W. H. Monahan in 1907 . From Grand Rapids north 6 miles to Wabash R. R.
Grand Rapids, 6.04 miles north of, 300 feet south of railroad, on top of east wing wall of concrete culvert; aluminum tablet stamped " 662 " ..... 662.512
From point near McClure south to point near Westhope, thence east to Haney. \({ }^{1}\)McClure, \(\mathbf{1 . 5 1}\) miles north by 2.88 miles west of, on wortheast abut-ment of bridge over Turkeyfoot Creek; aluminum tablet stamped" 658 "657.918
McClure, in southwest corner of foundation of schoolhouse; alumi- num tablet stamped " 678 " ..... 678. 526
McClure, 2.54 miles south of, at frame schoolhouse on northeast cor- ner of crossroads ; aluminum tablet stamped " 683 " ..... 683. 382
McClure, 4.34 miles south of, at southeast corner of brick schoolhouse on west side of road; aluminum tablet stamped " 691 " ..... 691. 148
Westhope, 3.05 miles south of, at German Lutheran Church on south- west corner of road crossing; aluminum tablet stamped " 702 "- ..... 702.460
Custar, 2.2 miles south by 1 mile east of, on concrete culvert at south side of crossroads; aluminum tablet stamped " 698 " ..... 698. 191
Haney, concrete culvert at west side of crossroads; aluminum tablet stamped " 697 " ..... 696.070
MCCONNELSVILLE QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ} .1\)
Primary leveling by E. C. Bibbee and H. B. Hoel in 1908.
From Eagleport south to Calvary.
Eagleport, 3.5 miles southwest of, up Island Run, on rock at \(T\) roadwest ; chiseled square, " 750.95 "750.96
Lagleport, 3.79 miles southwest of, 150 yards southwest of residence of Jacob Bush, in east side of north abutment of wooden bridge; aluminum tablet stamped " 755 "

\(\qquad\)
 755. 174
Triadelphia, in northwest corner at west side of foundation of Chris- tian Church; aluminum tablet stamped " 982 " ..... 981. 609
Triadelphia, 2.95 miles south of, at crossroad, in southeast corner at east side of foundation of residence of James Parkhill; aluminum tablet stamped " 844 " ..... 843. \(77 \%\)
Morgansville, in east side of foundation of residence of Andrew Scott ; aluminum tablet stamped " 883 ". ..... 883.475
Ringgold, 0.5 miles east of, on large rock at crossroads; chiseied square painted "891.47" ..... 891. 69
Ringgold, 0.31 mile east of, in south side of west abutment of bridge over small stream; aluminum tablet stamped " 871 " ..... 870.808
Ringgold, 2.78 miles south of, on rock at T road east; chiseled square painted "1062.75" ..... 1, 065.03
Shilling, 0.91 mile south of, in northwest side of foundation of resi-dence of M. H. Fitch ; aluminum tablet stamped " 1058 "\(1,058.367\)

\footnotetext{
\({ }^{1}\) Closures were made from this line north to Custar and to levels in Bowling Green and Deshler quadrangles.
}
Mountville, 40 feet north of T road, on large rock, at schoolhouse; Feet. chiseled square painted " 1012.87 ". 1, 013. 21
Mountville, in south wall of foundation of residence of John McLain; aluminum tablet stamped " 1026 "
Mountville, 0.84 mile south of, at T road east, on stone step at gate leading to residence of 0 . Lovell ; chiseled square painted " 977.39 "-
977. 75
Mountville, 1.78 miles south of, 30 feet south of crossroads east and west, on large rock ; chiseled square painted" 979.15 "
979.52

\section*{From Durant south via McConnelsville and Stockport to Chesterhill. \({ }^{1}\)}

Eagleport, 1.58 miles south of, in west abutment of small culvert
under railroad; aluminum tablet stamped " 690 ".-.--------- 690.102
Shawnee Junction, 0.12 mile north of, in east side of south abutment of small trestle; aluminum tablet stamped " 686 "
686. 370

Malta, northeast corner of intersection of Bell and Water streets, in concrete retaining wall ; aluminum tablet stamped " 666 "
666.041

McConnelsville, in southeast corner of veranda of Morgan County courthouse ; iron post stamped " Prim. Trav. Sta. No. 12, 701"
700.940

McConnelsville, on porch of Morgan County courthouse; chiseled square marked " 703.76 "
703. 44

Malta, 3.01 miles south of, on west side of Baltimore \& Ohio R. R., 300 feet south of railroad crossing, in coping stone of small culvert;
" aluminum tablet stamped " 664 "
664. 218

Hooksburg, 0.38 mile south of station, 60 feet east of railroad, in coping stone of stone-arch culvert under county-road crossing; aluminum tablet stamped " 651 "
650.755

Stockport, 700 feet west of railroad, in north side of west abutment of county bridge over Muskingum River; aluminum tablet stamped " 663 "

Destroyed.

Stockport, 3.41 miles west of, on south side of east abutment of iron bridge; chiseled square painted " 794 "
793. 83

Todds, 11 feet from center of road at intersection of Y road, on large flat stone; chiseled square painted " 988 "
988.07

Chesterhill, 1.28 miles northeast of, on coping stone of east abutment at north side of covered bridge over Wolf Creek, chiseled cross painted " 724.8 "
724. 69

\section*{From Stockport southeast to Roxbury.}

Roxbury, 450 feet north of ferry over Muskingum River, at triangle at junction of north river road and road south across river; iron post stamped " Prim. Trav. Sta. No. 6655.5 "
655.317

Roxbury, 0.24 mile north of, in south end of small concrete culvert on east side of railroad; aluminum tablet stamped " 654 "
653.714

\section*{From McConnelsville northeast to Rowland.}

McConnelsville, 0.85 mile northeast of, on rock on east side of road;
chiseled square marked " 744.25 "
McConnelsville, 2.93 miles northeast of, on east end concrete wall, iron bridge over Fourmile Creek; aluminum tablet stamped " 844 "----
McConnelsville, 4.08 miles northeast of, 40 feet south of small walnut Feet.tree, on rock west of road; chisel cut marked " 996.24 "995.44
McConnelsville, 4.78 miles northeast of, on east side of south abut- ment of covered bridge over Meigs Creek; chisel cut marked " 703.97 " ..... 703.17
McConnelsville, 6.26 miles northeast of, in east side of north corner of foundation of residence owned by Chas. H. Whitney; aluminum tablet stamped " 767 " ..... 766. 250
Meigs, 0.91 mile east of, on south side of west abutment of iron bridge; chiseled square marked " 679.320 " ..... 678.51
Meigs, 1.1 miles east of, at \(\mathbf{T}\) road south, on large rock in front of residence of John King; chiseled square marked " 727.545 " ..... 726. 73
Meigs, 1.92 miles north of, on large rock at crossroads; chiseled square marked " 692.624" ..... 691.80
MARENGO QUADRANGLE.[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Primary leveling by Carleton McRae in 1901.
From Delaware east along pikes 4.5 miles and return.
Delaware, 4.5 miles east of, on Sunbury pike, north side of east abut- ment of steel culvert; bronze tablet stamped " 897 C" ..... 898.020
From Delaware northeast via Leonardsburg to Ashley.
Leonardsburg, on stone steps of warehouse; bronze tablet stamped "971 C" ..... 972, 506
(1911 corrections give elevation 982.506.)
Primary leveling by Philip Flitman in 1911.
From point 3 miles north of Penlan south and west along highways to Marengo,
Penlan, 3.8 miles north of, at west end of \(\mathbf{T}\) road; spike in telephonepole, marked " 1178.3 "1, 176.98
Penlan, 2.7 miles north of, at southeast corner of crossroads; iron post stamped " 1217 " ..... 1, 217. 099
Marengo, 3.25 miles east by 1.5 miles north of, at southeast corner of crossroads; spike in fence post, marked " 1262.4 " ..... 1, 260.99
Marengo, 2.5 miles east by 0.8 mile north of, at northeast corner of \(T\) road; spike in fence post, marked " 1243.1 " ..... \(1,241.74\)
Marengo, 1.5 miles east by 0.8 mile north of, at northwest corner of crossroads; spike in telephone pole, marked " 1172.5 " ..... \(1,171,09\)

From point 3 miles north of Fulton south along Toledo \& Ohio Central Ry. to Peerless, thence south along highways to point 2 miles north of Condit.

Fulton, 3 miles north by 0.8 mile west of, at southwest corner of road crossing; spike in telephone pole, marked " 1075.9 "\(1,074.43\)Fulton, 1.5 miles north by 0.8 mile west of, at southeast corner ofroad crossing; iron post stamped " 1090 Ohio"\(1,088.457\)
Fulton, 1 mile north by 0.25 mile west of, at northwest corner of road crossing; spike in telephone pole, marked "1111.7" ..... \(1,110.23\)
Fulton, at southeast corner of road crossing, 40 feet north of station; top of curbstone, marked " 1113.0 " ..... \(1,111.53\)
Fulton, 1 mile south by 0.25 mile east of, at northeast corner of road crossing; iron post stamped " 1103 Ohio" ..... \(1,102.027\)
Marengo, 1.8 miles north by 0.25 mile west of, at northwest corner of road crossing; spike in telephone pole, marked " 1141.4 " ..... 1, 139.99
Marengo, 1 mile northeast of, at railroad crossing, at southwest cor- Feet.ner of ; spike in post of cattle guard, marked " 1139.9 "1, 138.52
Marengo, 100 feet south of station; iron post stamped " 1125 Ohio"-- ..... 1, 123. 129
Marengo, 0.8 mile south by 0.8 mile east of, at southwest corner of road crossing; spike in cattle guard, marked " 1150.6 " ..... \(1,149.15\)
Marengo, 1.5 miles south by 1.5 miles east of, at southeast corner of road crossing ; iron post stamped " 1173 Ohio" ..... 1, 171. 926
Peerless, 0.5 mile north by 0.5 mile west of, at southwest corner of road crossing; spike in telephone pole, marked " 1177.0 " ..... \(1,175.57\)
Peerless, 0.5 mile south by 0.5 mile east of, at southwest corner of road crossing; iron post stamped " 1195 Ohio" ..... 1, 193. 539
Peerless, 2 miles south by 0.5 mile east of, at southeast corner of crossroads; spike in telephone pole, marked " 1166.7 " ..... \(1,165.18\)
Peerless, 2.8 miles south by 0.5 mile east of, at northeast corner of T road; spike in fence post, marked " 1155.6 "- ..... \(1,154.12\)
Peerless, 2.8 miles south of, at southwest corner of crossroads; spike in fence post, marked " 1133.1 " ..... \(1,131.59\)
Condit, 2 miles north by 0.5 mile east of, at southwest corner of \(T\) road; iron post stamped " 1124 Ohio" ..... 1, 122.717
Condit, 2 miles north of, at southwest corner of crossroads; spike in fence post, marked " 1090.6 " ..... 1,089. 07
From point near Sunbury north and east along highways to Peerless.
Sunbury, 2.5 miles north of, at west end of \(T\) road; iron post stamped " 1027 Ohio" ..... 1, 025. 522
Sunbury, 3.5 miles north of, at northeast corner of \(\mathbf{T}\) road; spike in fence post, marked " 1022.8 " ..... 1, 021.30
Olive Green, 0.8 mile west by 0.8 mile south of, at northwest corner of crossroads ; spike in fence post, marked " 1032.2 " ..... 1,030. 68
Olive Green, 0.5 mile west of, at southwest corner of crossroads; spike in fence post, marked " 1038.6 " ..... 1, 037.13
Olive Green, at northwest corner of crossroads; iron post stamped " 1110 Ohio" ..... 1, 108. 768
East Liberty, at northeast corner of crossroads: spike in fence post, marked " 1096.3 " ..... 1, 094.83
East Liberty, 1 mile north by 1 mile east of, at northeast corner of crossroads; point on root of tree, marked " 1141.4 " ..... \(1,139.91\)
East Liberty, 2 miles east by 2 miles north of, at southwest corner of \(T\) road; spike in root of maple tree, marked " 1162.0 " ..... 1, 160.50
From point 4 miles west of Cardington south along highways to Leonardsburg. \({ }^{1}\)Cardington, 4 miles west by 1 mile south of, at southwest corner of \(T\)road; iron post stamped " 979 Ohio"978. 669
Westfield, 3 miles north by 1 mile east of, at southwest corner ofcrossroads; spike in telephone pole, marked " 974.520 "974.11
Westfield, 3 miles north of, at northwest corner of culvert; top of stone abutment, marked " 983.490 " ..... 983.07
Westfield, 2.5 miles north by 0.5 mile west of, at northwest corner of culvert; top of stone abutment, marked " 977.948 " ..... 977. 52
Westfield, 2 miles north by 0.5 mile west of. at northeast corner of crossroads; spike in telephone pole, marked " 977.254 " ..... 976. 81
Westfield, 1 mile north by 0.5 mile west of, at southwest corner ofculvert; top of stone abutment, marked " 965.652 "965. 20

\footnotetext{
\({ }^{1}\) Old value given in Bull. 411 for Leonardsburg bench mark found to be 10 feet too low.
}
Westfield, 0.5 mile west of, at southwest corner of \(T\) road; spike in

Feet.
949.54
Westfield, opposite town hall; iron post stamped " 962 Ohio"
Westfield, 1 mile east by 0.25 mile south of, at southeast corner of \(T\) road; spike in telephone pole, marked " 987.217 "
961. 797
Ashley, 1 mile north by 0.5 mile east of, at northwest corner of railroad crossing; spike in telephone pole, marked " 977.455 "
986. 74
Ashley, 300 feet north of station, 5 feet west of track center; top of curbstone, marked " 987.032 "
976.97
Ashley, 1 mile south by 0.5 mile west of, at southwest corner of crossroads; iron post stamped " 977 Ohio"
986.53
Leonardsburg, 2.5 miles north by 1 mile east of, at southeast corner of road crossing; spike in telephone pole, marked " 968.816 "
976.575
968. 30
Leonardsburg, 1.5 miles north by 0.5 mile east of, at northeast corner
of road crossing; spike in telephone pole, marked " 967.690 "....-- 967.18

From point 0.5 mile west of Olive Green west along highways to Leonardsburg.
Olive Green, 2 miles west of, at northwest corner of crossroads; spike in fence post, marked " 998.004 "
996. 52

Olive Green, 3 miles west of ; iron post stamped " 981 Ohio"
979.034

Kilbourne, 2 miles east of, at northwest corner of crossroads ; top of flagstone at northwest corner of culvert, marked " 973.908 "
972. 46

Kilbourne, 1.2 miles east of, at northwest corner of crossroads; spike in fence post, marked " 969.519 "
968.08

Kilbourne, at southeast corner of crossroads ; iron post stamped " 918 Ohio "
916. 305

Kilbourne, 1 mile north by 0.5 mile west of, at northwest corner of crossroads; spike in telephone pole, marked " 964.047 "
962. 64

Leonardsburg, 1 mile east of, at south end of \(\mathbf{T}\) road; spike in telephone pole, marked " 972.399 "
971. 00

From Marengo west along highways to Ashley.
Marengo, 1 mile west of, at southeast corner of bridge ; top of west
end of wing, marked " 1088.705 "----------1,088.27
Marengo, 1.8 miles west of, at northwest corner of concrete culvert, marked " 1061.206 "
\(1,060.77\)
Marengo, 2.5 miles west of, at west end of \(T\) road, north end of concrete culvert, marked " 1049.624 "

1, 049.19
South Woodbury, 1 mile south by 0.25 mile west of, at northeast
corner of crossroads; iron post stamped " 1019 Ohio"-...---.-. 1, 018. 741
South Woodbury, 1 mile south by 1.8 miles west of, at north end of stone culvert; west end of top layer, marked "1002.706"

1, 002. 27
Ashley, 2.5 miles east of, top of northeast stone pier of bridge over Brown Ditch, marked " 984.423 "
983. 98

Ashley, 1.5 miles east of ; iron post stamped " 987 Ohio "
986.918
\(\begin{array}{ccc}\text { Ashley, top of west end of southeast wing of bridge over Williams } & \\ \text { Ditch, marked " } 965.060 \text { "--------------------------- } 964.62\end{array}\)
From point near Ashley north along highway and Cleveland, Cincinnati, Chicago \& St. Louis Ry, to point 1 mile north of Cardington.

Ashley, 1.8 miles north by 0.8 mile east of, 10 feet west of track center; top of stone monument, marked " 988.723 "
988. 25

Ashley, 2.8 miles north by 1 mile east of, 10 feet west of track center;
top of stone monument, marked " 987.237 "
Cardington, 3.5 miles south by 1.5 miles west of, at northeast corner

Feet.
 990.412
Cardington, 2.25 miles south by 1 mile west of, at southeast corner of crossroads; spike in telephone pole, marked " 996.554 " ..... 996.12
Cardington, 1.5 miles south by 0.5 mile west of, at southeast corner of road crossing; spike in telephone pole, marked "1000.697" ..... \(1,000.28\)
Cardington, 0.8 mile south by 0.25 mile west of, at east end of masonry culvert 231 ; top of keystone, marked " 1004.421 " ..... 1, 004.01
From Cardington northwest along highway 1.4 miles.
Cardington, 0.8 mile west of, at northeast corner of Y road; spike in telephone pole, marked " 998.834 ..... 998. 45
Cardington, 1.25 miles west of, at southwest corner of masonry cul- vert, 3 feet from end ; chiseled cross marked " 982.525 " ..... 982. 14
Near Condit.
Condit, 1.2 miles north of, on north abutment of stone culvert 100, on west side of railroad; chiseled square, painted " 1112.8 " ..... 1,112. 59
Condit, 0.6 mile north of, 40 feet southeast of road crossing; spike in base of telegraph pole, painted "1102.5" ..... 1, 102. 33
From Condit southwest along Cleveland, Akron \& Cincinnati Ry. to Sunbury.
Condit, at southeast corner of road crossing; iron post stamped" 1087 Ohio"1, 085.460
Condit, 1 mile west of, 300 feet west of milepost C-24 at northeastcorner of concrete culvert; top of parapet, marked "1071.2"1, 069. 64
Condit, 2 miles west of, 100 feet east of milepost C-23; spike infence post, marked " 1060.3 "1, 058.72
MARIETTA QUADRANGLE.
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Primary leveling by J. W. Hodges in 1902.
From Willow Island, W. Va., northeast via Newport to Bevan, thence north-west via Steel Run to point 3 miles north of Stanleyville, thence southalong Pittsburgh, Cincinnati, Chicago \& St. Louis Ry, to Marietta andWilliamstown.

Willow Island, 4 miles northeast of, 2.2 miles southwest of Newport, on southeast pier of highway bridge over Newell Run; chiseled square
Fay, 3 miles south of Steel Run post office, southwest abutment of bridge over Little Muskingum River, on coping stone; bronze tablet stamped " 641 Grafton 1902 "
Dye, 3 miles southeast of, at forks of road, on south foundation of small bridge; chiseled square ..... 642.03
Marietta, opposite post office, southeast corner of (new) courthouse, in sill; aluminum tablet stamped " 616 Grafton 1902 " ..... 615. 730

\section*{MARION QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by C. W. Marvin in 1903.
From Waldo north along highway to Monnett.
Marion, 5 miles southeast of, SE. \(\frac{1}{4}\) sec. 5, T. 6 S., R. 16 E., east end of south abutment of small iron bridge over creek, in bridge seat; bronze tablet stamped " 963 Col "

Marion, 4 miles east of, 0.2 mile north of center of sec. 29 , T. 5 S.,
R. 16 E., 1.5 feet east of northwest corner of Baptist Church, in foundation; bronze tablet stamped " 986 Col "

Feet. 986. 700

Marion, 5 miles northeast of, west of quarter corner at north side of sec. 9, T. 5 S., R. 16 E., Claridon Township, in foundation of Bush schoolhouse (district 3), 1 foot south of northwest corner ; bronze tablet stamped " 1000 Col " \(\qquad\) 1,001. 009
Kirkpatrick, Scott Township, sec. 15, T. 4 S., R. 16 E.. 1 foot north of southwest corner of stone water table of schoolhouse (district 4); aluminum tablet stamped " 1013 Col "

From Monnett west along highway to Morral, thence southeast along Hocking Valley Ry, to Marion.

Monnett, crossing at station ; top of west rail
Monnett, near quarter corner at north side of sec. 8, T. 4 S., R. 16 E., 600 feet west of post office, 1 foot east of northwest corner of brick schoolhouse, in stone water table; bronze tablet stamped " 979 Columbus"
979. 959

Wyandot, 1.25 miles southwest of, sec. 9, T. 4 S., R. 15 E., opposite road running east, Antrim Township, 1 foot north of southeast corner of brick schoolhouse (district 2); bronze tablet stamped " 971 Col "
Morral, southeast corner of sec. 14, T. 4 S., R. 14 E., 1 foot east of northwest corner of schoolhouse; aluminum tablet stamped " \(913 \mathrm{Col} "\) \(\qquad\)
Morral, 4.19 miles south of, SE. \(\frac{1}{4}\) sec. 6, T. 5 S., R. 15 E., north abutment of bridge over highway, at southeast corner of bridge seat; bronze tablet stamped " 930 Col " (destroyed 1912) \(\qquad\) 931.068

From Marion west along railroad 4 miles, thence south along highway to Green Camp, thence east to point north of Waldo.
Marion, 200 feet north of Union Station, 15 feet east of Hocking Valley Ry. track, in stone abutment; bronze meridian tablet (south mark) stamped " 950 Col "
951. 404

Marion, souttwest corner of foundation cornerstone of courthouse; aluminum tablet stamped " 985 Col "
985.991

Marion, 3 miles west of, SE. \(\frac{1}{4}\) sec. 24 , T. 5 S., R. 14 E., northwest corner of east abutment of iron bridge over Little Scioto River; chiseled square
Bryan station, SE. \(\frac{1}{4}\) sec. 23, T. 5 S., R. 14 E., 650 feet south of Big Four Route crossing, 1 foot east of southwest corner of brick schoolhouse ; bronze tablet stamped " 914 Col " \(\qquad\)
Green Camp, southwest corner of sec. 12, T. 6 S., R. 14 E., northwest corner of brick schoolhouse ; aluminum tablet stamped " 919 Col"-
Owens, sec. 17, T. 6 S., R. 15 E., 600 feet east of station, 1 foot east of southwest corner of brick schoolhouse; bronze tablet stamped " 953 Col "
Waldo, 4.5 miles northwest of, sec. 14, T. 6 S., R. 15 E., on Marion road, 1 foot south of southeast corner of house of John Mantz; aluminum tablet stamped " 985 Col "
913.92
914. 892
920.371
954. 146
986. 234

Primary leveling by Philip Flitman in 1911.
From point 3.5 miles southwest of Claridon to point 5 miles southeast of Marion.
Claridon, 2 miles west by 2.5 miles south of ; spike in telephone pole, marked " 973.132 ".
972. 66

Primary leveling by E. C. Bibbee in 1912. From point 3 miles west of Green Camp to Green Camp.
Green Camp, 2.1 miles west of, at \(T\) road north, on west end of second step at Reform Church entrance; chiseled square

Feet.
946. 24

Green Camp, 0.9 mile west of, in forks of road, on west end of castiron drain; highest point
932.72

MASON QUADRANGLE.
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\circ}\). ]
Precise leveling by the Coast and Geodetic Survey.
From Middletown southwest along Cincinnati, Hamilton \& Dayton Ry. to Rockdale.
Excello Mills, Butler County, on Miami \& Erie Canal lock, west wall of tumble, north end, on end coping stone 6 inches from north face and 11 inches from east face; chiseled square (C. \& G. S. b. m. W \({ }_{2}\) )-
Trenton, 1 mile northeast of, Cincinnati, Hamilton \& Dayton Ry. bridge over Hill Creek, on east end of pier, in center of nose, 18 inches back from point; chiseled square (C. \& G. S. b. m. \(\mathrm{N}_{3}\) ) \(\qquad\)
638. 232
633.008

Hamilton \& Dayton Ry., on north retaining wall, east end of aqueduct over canal, opposite north end of railway bridge over creek, on third stone from end, 16 inches from south face and 8 inches from east face ; highest point in square lettered " U. S. C. \& G. S." (C. \& G. S. b. \(\mathrm{m} . \mathrm{V}_{3}\) )

Busenbark, 1 mile south of, 0.8 mile northeast of Overpeck, on line of the Cincinnati, Hamilton \& Dayton Ry., on arch culvert about 66 feet south of milepost C 31, on northeast corner of stone, about 6 inches from either face; chiseled square (C. \& G. S. b. m. Os )
From Flockton southeast along Cincinnati, Hamilton \& Dayton Ry, to Glendale.
Flockton, 1,000 feet west of, on culvert 34 , west abutment, north end; highest point in square \(2 \frac{1}{2}\) inches on a side (C. \& G. S. b. m. Pennsylvania R. R. No. 23)
Jones, 1.5 miles north of, on line of the Cincinnati, Hamilton \& Dayton Ry., 4.5 miles south of Hamilton, on viaduct bridge 11, north abutment, east end, on second step below bridge-seat course, on southeast corner of stone, 6 inches from either face; chiseled square (C. \& G. S. b. m. G4)
638.992

Port Union, in culvert 32 , north abutment, east end; highest point in square 2.5 inches on a side (C. \& G. S. b. m. Pennsylvania R. R. No. 21)

Crescentville, 1 mile north of, on culvert 30 , north abutment, east end; highest point in square 2.5 inches on a side (C. \& G. S. b. m. Pennsylvania R. R. No. 20)
605. 650

Crestrue, 0.2 mile south of, Cincinnati, Hamilton \& Dayton Ry., stone culvert over Carmins Creek, southwest quarter, on end coping stone, 10 inches east of west face and 5 inches north of south face; chiseled square (C. \& G. S. b. m. H \(H_{4}\) )
Crescentville, 0.5 mile south of, on railroad culvert 29 , on north abutment, east end; highest point in square 2.5 inches on a side (C. \& G. S. b. m. Pennsylvania R. R. No. 19)
596. 090
589.408
646. 878

Port Union, 2 miles south of, on bridge 27 over creek, east end of north abutment; highest point in square 2.5 inches on a side (C. \& G. S. b. m. Pennsylvania R. R. No. 17)
624. 938
635.355
638.002
579. 163
573. 704
\[
45281^{\circ}-\text { Bull. } 651-17-15
\]

Glendale, 1 mile south of, Cincinnati, Hamilton \& Dayton Ry., culvert 9 , northwest quarter, first step below bridge-seat course, 5 inches
east of west face and 10 inches north of south face; chiseled square (C. \& G. S. b. m. I 4 )

Feet. 607.200

Primary leveling by E. O. Garvin in 1898.
From Crestrue east along highway to Loveland, thence north to point near Red Lion.
Crescentville, 1 mile south of, iron bridge over Miami \& Erie Canal, in second stone from top of northwest abutment ; chiseled square_-
Brecon, at west door of Bethel M. E. Church, near west end of top stone step ; chiseled square \(\qquad\)
Loveland, at iron bridge over Little Miami River, near northeast corner of northwest abutment, in coping stone 0.5 foot from and 1.5 feet below bridge floor; bronze tablet stamped " 584 Cinn" \(\qquad\)
Loveland, 3.5 miles north of, at northwest corner of bridge 84 , on southeast corner of northwest abutment; chiseled square \(\qquad\)
Foster, 100 feet south of road crossing at station, in northwest abutment of bridge 82 , at northwest corner ; chiseled square \(\qquad\)
Camp Hagerman, 1.3 miles south of, 300 feet south of road crossing, in stone of northwest abutment of iron drawbridge; chiseled square_

From point near Red Lion west along highway to Excello.
Red Lion, 2 miles south of, at crossroads 50 feet south of stream, in northeast abutment of wooden bridge ; chiseled square \(\qquad\)
Blue Ball, in east front foundation wall of schoolhouse (subdistrict 8), 1.5 feet from vestibule wall and 3 feet above ground; aluminum tablet stamped " 734 Cinn" \(\qquad\)
Excello, on lock of Erie \& Miami Canal, at north end of west wall of tumble ; chiseled square

\section*{At Trenton.}

Trenton, north end of town, Madison Township, in south wall of south wing of schoolhouse (district 9), in south doorsill of store in L, 3 feet from ground; aluminum tablet stamped " 673 Cinn" \(\qquad\)
From Hamilton east along highway to Hughes, thence south to Sharonville.
Hughes, in south wall of stone foundation at southeast corner of schoolhouse (subdistrict 4), 0.6 foot from east wall and 1.6 feet above ground; aluminum tablet stamped " 769 Cinn" \(\qquad\)
Westchester, east of town, in water table of south foundation of Union Township schoolhouse (district 3), 3.5 feet west of vestibule wall of main entrance and 3.4 feet above ground; aluminum tablet stamped " 701 Cinn" \(\qquad\)
Sharonville, in south foundation wall of Sycamore Township public school (district 2), 0.6 foot west of sill to main entrance under tower, 2.2 feet above ground; aluminum tablet stamped " 591 Cinn"-
672. 718
593. 68
872.31
583.953
601. 27
599.713
661.53
843.72
734.078
638. 23
769.096
700.095
591. 200

\section*{MASSILLON QUADRANGLE,}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by the Baltimore \& Ohio R. R.
From Barberton southwest to Clinton, thence northwest to Easton.
Barberton, Summit County, 0.8 mile south of, set in southwest abutment, north side of bridge 18, Cleveland, Akron \& Columbus Ry.; copper bolt (B. \& O. b. m. 445)

Barberton, 2.5 miles west of, 0.6 mile south of milepost H 22, in east end of small culvert ; copper bolt (B. \& O. b. m. 446)
Turkeyfoot Junction, near, 300 feet south of milepost H 24, set in west end of small Cleveland, Akron \& Columbus Ry. culvert; copper bolt (B. \& O. b. m. 447) \(\qquad\)
Messenger, about 2 miles east of Warwick; northeast corner of south pier of water tank (Pennsylvania R. R. b. m.)
Clinton, 0.25 mile northeast of, 0.8 mile southwest of Clinton coaling station, in northwest end of small Cleveland, Akron \& Columbus Ry. culvert ; copper bolt (B. \& O. b. m. 448)
Warwick, 0.25 mile northeast of, in southeast corner of small Cleveland, Akron \& Columbus Ry. culvert; copper bolt (B. \& O. b. m 449)

Feet.
971.514
968. 526
960.428
945. 687
958.332

Warwick, 0.8 mile northwest of, in northeast corner of old part of Culvert; copper bolt (B. \& O. b. m. 450)
958.619

Warwick, about 1.5 miles northwest of, 500 feet west of milepost 59 , on east-bound track, in west end of north coping of culvert ; copper bolt (B. \& O. b. m. 451)
Easton, Wayne County, 2.8 miles southeast of, 100 feet east of milepost 58 , on east-bound track, set in west end of north coping of culvert ; copper bolt (B. \& O. b. m. 452)
948. 009

Easton, 1.8 miles southeast of, opposite milepost 57 ; section of rail set vertically in ground (B. \& O. b. m. 453)
954.326
958.992
960.638
955. 414
952.372
948. 759
949. 890
947. 220
948. 400
944.570
939.088
942. 460
940.405
948.340

Massillon, about 2 miles north of, 250 feet east of milepost 98 , in south end of west coping of box culvert on westbound tracks; square cut (B. \& O. b. m. 11)

Feet.
933.461

Massillon, about 1 mile north of, at milepost 97 ; section of rail set vertically in ground (B. \& O. b. m. 12)
934. 109

Massillon, 300 feet east of bridge 4 ; cut on northeast corner coping Pennsylvania R. R. arch bridge (Pennsylvania R. R. b. m.) \(\qquad\)
Massillon, 0.25 mile northwest of, in north end of mud wall of east abutment of bridge at telegraph pole \(96 / 10\); copper bolt (B. \& \(O\). b. m .13 )
941.359

Massillon, on north end of east back wall of Pennsylvania R. R. bridge 5 ; cut (Pennsylvania R. R. b. m.)
939.276

Massillon, 0.5 mile southeast of, set in north end of west abutment of highway bridge over river ; copper bolt (B. \& O. b. m. 14)
-------
Massillon, about 1.5 miles south of, at telegraph pole \(94 / 4\), set in southeast pedestal of water tank at Columbia; copper bolt (B. \& O. b. m. 15) \(\qquad\)
Massillon, about 2.5 miles south of, set in northeast end of northwest coping of culvert for pipe drain at telegraph pole \(93 / 7\); copper bolt (B. \& O. b. m. 16)
935.289
933.357
927. 529

Primary leveling by James B. Maguire in 1901.
From point 2.5 miles south of New Berlin southwest along highway to Massillon.
Massillon, on stone at northwest corner of city park; bronze tablet stamped " 951 Canton"
950.275

From Myersville southwest along highway via Nimisila Creek to Canal Fulton, thence southeast to Massillon.
Nimisila, northeast corner of crossroads, on south wall surrounding Henry Dailey's house, in coping stone; bronze tablet stamped " 1112 Canton" \(\qquad\) - =-1, 111. 259
Canal Fulton, in center of north wall of stone highway bridge over Tuscarawas River; bronze tablet stamped " 954 Canton 1901"
953.344

From Massillon west along highway to Dalton, thence north to Burton City.
Dalton, on stone at east line of Central Hotel on Main street, 1 foot inside of curb line; bronze tablet stamped " 1102 Canton" \(\qquad\) \(1,101.322\)

From Burton City north along highway via Marshallville to Easton, thence west to Sterling.
Marshallville, northeast corner of crossroads at Union Hotel, set in brown stone post; bronze tablet stamped " 1123 Canton"
Easton, 400 feet west of Baltimore \& Ohio R. R., on road to Warwick, 400 feet east of its intersection with road to Doylestown, in southeast corner of west abutment of bridge; bronze tablet stamped " 958 Canton" \(\qquad\)

\section*{MAUMEE BAY QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by Dean Halford in 1899.
From Walbridge to point 3 miles east of Genoa.
Walbridge, 0.5 mile north of, in face of north pier abutment of bridge over branch of Cedar Creek; bronze tablet stamped "Toledo 614"-
Ironville, 2.5 miles east of, in center of sec. 26 , T. 9 S., R. 8 E., 2 miles northwest of Momeneetown, northwest corner of \(T\) roads, in front of Sayers house, in slab of culvert; bronze tablet stamped "Toledo 587 "
Curtice, 1 mile south of, in west end of south pier of abutment of

Feet. 597.021 bridge over Crane Creek; bronze tablet stamped " 596 Toledo"----
Genoa, 1 mile west of, at northwest corner of crossroads, on stone road, at northeast corner of culvert; bronze tablet stamped "Toledo 626 " \(\qquad\)
Genoa, 5.75 miles west of, 2 miles east of Stony Ridge, on stone pike in south foundation of D. F. Mann's residence; bronze tablet stamped "Toledo 634 "
634. 328
Trowbridge, 1 mile east of, 0.25 mile south of northwest corner of sec. 9, T. 7 N., R. 14 E., in east end of south pier abutment of highway bridge over Turtle Creek; bronze tablet stamped "Toledo 582 "
583. 209
Genoa, 3 miles east of, in west end of north pier abutment of bridge over Toussaint Creek; bronze tablet stamped " 599 Toledo"
600.097

\section*{MAYSVILLE QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by C. E. Mills in 1910.
From Ripley along Ohio River to Aberdeen.

Ripley, southwest corner of Main and Second streets, 8 feet west
 of corner ; chiseled square; curbing marked " 505.439 "

506. 42

Ripley, 40 feet west of west end of steel bridge over Red Oak Creek,
 on East Second Street, 15 feet south of center of road; iron post
 stamped " 501 "

501.917

Ripley, 6 miles southeast of, 20 feet east from center of road forks, on Threemile Creek; iron post stamped " 514 "
515.119

Aberdeen, 0.5 mile north of, on Maysville and Zanesville Pike, at fork of road, 100 feet east of large steel bridge over Fishing Gut Creek, northwest corner of road forks; iron post stamped " Prim. Trav. Sta. No. 20, 1910, 521 " \(\qquad\) 522.055

Maysville, Ky., southwest corner of Court and Second streets, Pearce \& Wallingford building, occupied by State National Bank of Maysville, on water table on northwest corner about 4.5 feet above sidewalk; chiseled square marked " U. S. \(\square\) B. M." (This bench mark is on checked spur line from Aberdeen)

\section*{MECHANICSBURG QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by C. E. Mills and S. L. Parker in 1913.
From West Liberty east along highway 6.5 miles, thence south to Mingo.
West Liberty, 2.2 miles southeast of, in southwest sorner of crossroads at Catholic Cemetery, in fence post ; copper nail
West Liberty, 3.1 miles southeast of, southeast corner of T road east, 300 feet north of \(T\) road west, in fence post ; copper nail \(1,172.25\)

West Liberty, 3.8 miles east of, northeast corner of road forks, on
 stone; chiseled square
 1, 233.02

West Liberty, 4.5 miles east of, southwest corner of crossroads, in end of wooden drain; copper nail
\(1,304.64\)
West Liberty, 5.9 miles east of, southeast corner of \(T\) road south, on
granite bowlder ; chiseled square_-_-_ 1, 383.99
Mingo, 2.4 miles north of, northwest corner of T road west, on stone retaining wall ; chiseled square

1,377. 84

\title{
Mingo, 2.1 miles north of, northeast corner of T road east at LoganFeet. Champaign county line, on stone culvert; chiseled square \(1,350.42\) \\ Mingo, 1.8 miles north of, northwest corner of \(\mathbf{T}\) road west, on granite bowlder; chiseled square \\ ..... 1,356. 96 \\ From point 2.2 miles southeast of West Liberty south along highways toUrbana.
}
West Liberty, 1 mile south by 1.5 miles east of, in southeast corner of crossroads; iron post stamped " Prim. Trav. Sta. No. 96 Ohio 1910, 1090 " ..... \(1,089.470\)
West Liberty, 1.5 miles east by 2 miles south of, northwest corner of \(T\) road north, in base of fence post; spike ..... 1, 139. 70
West Liberty, 3.5 miles southeast of, on Urbana pike, about 300 feet southeast of "Stop 78" on Ohio Electric R. R., in southeast corner of crossroads ; iron post stamped " 1107 " ..... \(1,107.123\)
Urbana, 6 miles north of, on West Liberty pike, northeast corner of T road east, in base of telephone pole; spike ..... 1, 091. 61
Urbana, 5.25 miles north of, on West Liberty pike, southeast corner of crossroads, in base of telephone pole; spike ..... 1, 086.75
Urbana, 4.2 miles north of, on West Liberty pike, in northeast corner of crossroads ; iron post stamped " 1079 " ..... 1,078. 648
Urbana, 3.2 miles north of, 270 feet north of crossroads on WestLiberty pike, on east end of south abutment of small steel bridge;chiseled square1, 057.48
Urbana, 2.25 miles north of, on West Liberty pike, on east side of road opposite lane west, in base of telephone brace pole; spike.... ..... 1, 069.63
Urbana, 1.2 miles north of, in southeast corner of \(\mathbf{T}\) road east, at soldiers' monument, in base of telephone brace pole; spike ..... 1,057. 55
Urbana, crossing of Ohio Electric and Erie railroads; top of north- east corner of crossing ..... 1, 039. 68
Urbana, crossing of Ohio Electric and Pennsylvania railroads; top of southeast corner of crossing ..... 1, 039.04
From point 5.2 miles north of Urbana northeast along road and Erie R. R.via Mingo.Urbana, 5.25 miles north by 0.5 mile east of, in southeast corner ofT road south, in base of fence post; spike1, 097.95
Urbana, 5.25 miles north by 1.6 miles east of, in southwest corner of \(T\) road west, in base of fence post ; spike ..... \(1,147.55\)
Kennard, 1.7 miles west of, 300 feet west of Kings Creek, in north end of small iron bridge over drain, in west abutment; chiseled square ..... 1, 114.14
Kennard, 1 mile west of, in southeast corner of \(T\) road east, in base of telephone pole; spike ..... 1, 148. 29
Kennard, 0.6 mile west of, road crossing Erie R. R.; top of west rail ..... \(1,158.6\)
Kennard, 90 feet south of Erie R. R., 40 feet east of center of road forks; iron post stamped " 1172 " ..... 1, 171. 788
Kennard, 1.1 miles northeast of, on Erie R. R., 75 feet southwestof road crossing, north abutment east end of small wooden high-way bridge; chiseled square1, 196. 86
Mingo, 0.75 mile west of, on Erie R. R., 50 feet east of road crossing, west abutment south end of trestle; chiseled square ..... \(1,194.73\)
Mingo, road crossing at Erie station, 20 feet south of railroad, 20feet east of center of road ; iron post stamped " 1204 "1, 203. 618
Feet.
Mingo, in front of station ; top of rail1, 202.11, 202.1
Mingo, 20 feet east of crossing, at station, southwest corner of con- crete culvert at road crossing Erie R. R.; chiseled square ..... 1, 202. 82
Mingo, 1.3 miles east of, on Erie R. R., northeast corner of roadcrossing, on stone ; chiseled square\(1,177.45\)
Mingo, 2.25 miles east of, on Erie R. R., east end of small wooden trestle, in north guard rail; bolt head painted white ..... 1, 145. 94
North Lewisburg, 1.25 miles west of, on Erie R. R., west abutment ofsteel bridge over creek, 3 feet south of track; chiseled square\(1,131.16\)North Lewisburg, road crossing at elevator, 50 feet east of railroad,20 feet north of road, on corner of sidewalk; chiseled square1, 089. 16
North Lewisburg, in front of south entrance to school, on south edgeof walk; chiseled square1, 084. 70
North Lewisburg, 10 feet west of south entrance to public schoolbuilding; iron post stamped " 1087 "1, 086. 600North Lewisburg, 0.6 mile east of, 150 feet north of T road north,south abutment, east end of steel bridge; chiseled square_.........\(1,055.21\)
North Lewisburg, 1.4 miles east of, on north side of road, at T road south, in base of fence post; spike ..... \(1,037.83\)North Lewisburg, 1.6 miles east of, southwest corner of \(\mathbf{T}\) roadsoutheast, south end of stone drain; chiseled square_\(1,033.44\)North Lewisburg, 1.8 miles east of, 300 feet east of T road north,northwest corner of steel bridge over Darby Creek, north end ofsteel I beam; chiseled square1,028. 06
North Lewisburg, 2.25 miles east of, northeast corner of T road north, on end of vitrified pipe drain; painted square ..... 1, 032. 42
North Lewisburg, 3 miles east of, road forks at cemetery, on south side of road forks, in base of telephone pole; spike ..... \(1,035,05\)
From Urbana east along highway to point 2.2 miles south of Woodstock, thenceto Woodstock and 1 mile east.
Urbana, Soldiers' Monument in center in public square, north end of stone curbing around monument; chiseled square
Urbana, 3,500 feet east of Soldiers' Monument in public square, 27 feet south by 45 feet east of center of \(T\) streets ; iron post stamped "Prim. Trav. Sta. No. 99 Ohio 1910, 1074"
1, 073. 432
Urbana, 1.25 miles east of, on north side of road forks, in base of telephone pole ; spike ..... \(1,120.54\)
Urbana, 2.2 miles east of, southeast corner of crossroads, in base of telephone pole; spike ..... \(1,169.48\)
Urbana, 3.2 miles east of, on Milford Center pike, in southeast cor-ner of T road south; iron post stamped " 1139 "1, 139. 393Urbana, 3.8 miles east of, on Milford Center pike, east abutmentnorth wing wall of concrete arch bridge over improved ditch; chis-eled square\(1,131.57\)
Urbana, 4.5 miles east of, on north side of crossroads, north abut- ment east end of concrete bridge; chiseled square ..... \(1,140.24\)
Urbana, 5.8 miles east of, on Milford Center pike, in northeast cor- ner of \(T\) road, on stone ; painted square ..... 1, 249.98Urbana, 6 miles east of, on Milford Center pike, small wooden bridge,150 feet east of \(\mathbf{T}\) road south, at schoolhouse (subdistrict 7, UnionTownship), west abutment south end of bridge; chiseled square1, 235. 63

Urbana, 6.25 miles east of, on Milford Center pike, 0.25 mile east of school (subdistrict 7, Union Township), in northwest corner of \(T\) Feet. road north; iron post stamped " 1232 "
Urbana, 7.4 miles east of, on Milford Center pike, in southwest corner of T road south, at blacksmith shop, on west end of drain; chiseled square
\(1,221.58\)
Urbana, 8.5 miles east of, on Milford Center pike, in northeast corner of crossroads, in base of fence post; spike \(1,219.06\)
Mechanicsburg, 5.5 miles northwest of, on Urbana-Milford Center pike, 40 feet east of center of crossroads, on north end of cast iron drain pipe; chiseled square
Woodstock, 2.2 miles south by 2.7 miles west of, on north side of road at T road south; iron post stamped " 1176 "
Woodstock, 2.2 miles south by 1.6 miles west of, 300 feet west of A. C. Owen's residence, east abutment north end of small wooden drain ; chiseled square
Woodstock, 2.2 miles south by 0.5 mile west of, on north side of road opposite W. F. Woodward's mail box, on fence post; spike
Woodstock, 2.2 miles south of, southwest corner of crossroads, on south end of iron drain pipe; chiseled square
Woodstock, 0.7 mile south of, north abutment west side of steel bridge over creek; chiseled square

1, 037. 71
Woodstock, in northeast corner of town hall grounds; iron post
stamped " 1042 "
Woodstock, northwest corner of cross streets, in front of Smith and Smith's store, on concrete walk; chiseled square

1, 045. 24
Woodstock, 0.5 mile east of station, at road crossing Pennsylvania R. R.; top of north rail

1, 033.5
From point 2 miles south of Woodstock south along highway and east to Irwin.
Woodstock, 3 miles south of, 350 feet north of Milton Darrow's residence, on east end of small wooden bridge; spike head painted white_

Woodstock, 3.6 miles south of, southeast corner of T road east, south
 end of wooden drain; nail head painted white

1, 076. 75

Woodstock, 3.6 miles south of, in northeast corner of \(T\) road east; iron post stamped " 1076 "

1,075. 673

Irwin, 1.8 miles southwest of, 300 feet south of T road east, north
east corner of south abutment of small wooden bridge; chiseled
 square

\(1,052.58\)

Irwin, 0.8 mile southwest of, east abutment southeast corner of steel
bridge over Treacle Creek; chiseled square_-------19. 019.
From point 6 miles east of Urbana southeast along highways to wild Rose schoolhouse, thence northeast along highways near the Cleveland, Cincinnati, Chicago \& St. Louis Ry, to point near Irwin.

Urbana, 6 miles east of, on Milford Center pike, 150 feet east of T road south, at school (subdistrict 7, Union Township), west abutment south end of small wooden bridge; chiseled square
\(1,235.63\)
Mutual, 0.7 mile north of, in southeast corner of T road south, on top
of stone; chiseled square. 187.99
Mutual, northeast corner of T road north, 10 feet north of northwest corner of bridge; iron post stamped " 1198 "

1, 197. 584
Mutual, 0.7 mile east of, in southeast corner of T road south, in base Feet.of fence post ; spike1,249. 16
Mutual, 0.7 mile east by 1.5 miles southeast of, in northeast cornerof road forks, in base of telephone pole; spike1, 128.50
Mechanicsburg, 3.1 miles southwest of, on Springfield pike, in south- east corner of crossroads. about 400 feet north of Wild Rose school (district 7) ; iron post stamped " 1128 " ..... \(1,128.317\)
Mechanicsburg, 2.4 miles southwest of, on Springfield pike, in north- east corner of road forks, on top of west wing wall of concrete cul- vert; chiseled square ..... 1, 106. 49
Mechanicsburg, 0.4 mile southwest of, on Springfield pike, 550 feet west of railroad, on south side of road; iron post stamped " 1062 "-Mechanicsburg, in northwest corner of cross streets, in center oftown, on stone curbing; chiseled square\(1,084.29\)
Mechanicsburg, 0.7 mile northeast of, in southeast corner of \(T\) road southeast, on bowlder ; chiseled square ..... \(1,074.04\)
Mechanicsburg, 2.3 miles northeast of, east end of north abutment of steel bridge over creek; chiseled square ..... 1, 029. 10
Mechanicsburg, 3.1 miles northeast of, in northeast corner of \(T\) road east, on north end of cast-iron drain ; painted square ..... 1, 062.05
Irwin, 1.8 miles southwest of, 300 feet south of T road east, south abutment northeast corner of small wooden bridge; chiseled square ..... \(1,052.58\)
From Mechanicsburg southeast along highway to Tradersville.
Mechanicsburg, in northwest corner of cross streets, in center of town, on stone curbing; chiseled square ..... 1, 084. 29
Mechanicsburg, 175 feet west of station, at Big Four Route crossing; top of south rail ..... \(1,056.5\)
Mechanicsburg, 0.7 mile southeast of, at road forks, in top of 10 -inch stump on west side of road; copper nail ..... 1, 073. 27
Mechanicsburg, 1.5 miles southeast of, at road forks, on west side of base of telephone pole in center of road forks; iron bolt ..... 1, 082.09
Mechanicsburg, 2.9 miles south of, 100 feet east of road forks, in root on south side of 4 -foot white-oak tree; copper nail ..... \(1,102.42\)
Mechanicsburg, 3 miles southeast of, on Tradersville pike, 3.5 miles north of schoolhouse No. 3 (Goshen Township), on east side of road, in base of telephone pole; copper nail ..... 1, 105. 676
Mechanicsburg, 3.4 miles southeast of, northwest corner of \(T\) road southwest, at schoolhouse No. 3 (Goshen Township), on Traders- ville pike; iron post stamped " 1111 " ..... 1, 111. 474
Tradersville, 2.3 miles northwest of, on north abutment east end of small wooden bridge, 600 feet southeast of J. H. Lee's residence; chiseled square ..... 1. 100.93
Tradersville, 0.8 mile northwest of, on south side of road at road forks, in base of telephone pole; spike ..... 1, 109. 71
From point 4.6 miles south of Urbana east to point 3 miles west of Mechanics- burg.
Urbana, 1 mile east by 5 miles south of, at \(T\) road north, on south side of road, 15 feet west of center of road; iron post stamped "1128" ..... 1, 127. 701
Urbana, 1 mile east by 4 miles south of, opposite \(T\) road west, on sandstone anchor to fence post; chiseled square ..... \(1,145.45\)
Catawba, 3 miles northwest of, at Pretty Prairie schoolhouse (subdistrict 3, Urbana Township), on southeast corner of first step, at crossroads; chiseled square 1, 122. 20
Catawba station, 1.7 miles northwest by 1.3 miles west of, northwest corner of \(T\) road west; iron post stamped " 1114 "
1, 113. 280
Catawba station, 1.6 miles north of, at \(\boldsymbol{T}\) road north, south end of concrete culvert; chiseled square
Catawba station, 2.1 miles northeast of, directly opposite \(T\) road northwest, 0.3 mile east of railroad crossing, in base on north side of telephone pole; copper nail1,110. 29
Catawba station, 2.4 miles northeast of, southeast corner of \(T\) road south, on north end of 12 -inch steel tile under pike; highest point_- 1, 127.95
Mechanicsburg, 3.1 miles southwest of, on Springfield pike, in southwest corner of crossroads, 400 feet north of Wild Rose schoolhouse (district 7) ; iron post stamped " 1128 " \(1,128.317\)
MEDINA QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\). ]
Precise leveling by the Baltimore \& Ohio R. R. Co.
From point near Creston northwest to point near Lodi.

Creston, Wayne County, 2.25 miles northwest of, at milepost 44 ; section of rail set vertically in ground (B. \& O. b. m. 466)
961. 908

Creston, 3.25 miles northwest of, at milepost 43 ; section of rail set vertically in ground (B. \& O. b. m. 467)
966. 755

Lodi, Medina County, 3 miles southeast of, at milepost 42 ; section of
rail set vertically in ground (B. \& O. b. m. 468)
Lodi, 2.5 miles southeast of, set in north end of small culvert at telegraph pole \(34 / 17\); copper bolt (B. \& O. b. m. 469)
952.182

Lodi, 1 mile southeast of, at milepost 40 ; section of rail set vertically in ground (B. \& O. b. m. 470)
931.890

Lodi, 800 feet east of, in unstable ground; section of rail set vertically in ground (B. \& O. b. m. 471)
913. 791

Lodi, 1 mile southwest of, at milepost 38 ; section of rail set vertically in ground (B. \& O. b. m. 472)
913. 794

Primary leveling by J. B. Maguire in 1901, E. I. Shea and C. R. Harvey in 1904, and G. M. Dimmick in 1905.

\section*{From Seville west along highway to Lodi.}

Seville, southeast abutment of highway bridge over Chippewa ditch;
aluminum tablet stamped " 988 Canton"
988.478

Seville, 5.75 miles west of, in northwest corner of northeast abutment stone of iron girder bridge over Camel Creek; aluminum tablet stamped " 997 Canton"
997.543

From Sterling northwest along Cleveland, Lorain \& Wheeling Ry. to Grafton,
Seville, 350 feet north of station, Cleveland, Lorain \& Wheeling Ry. bridge over creek, in northwest corner of south abutment; bronze tablet stamped " 987 Canton" \({ }^{1}\)
986.368

Chippewa Lake, 2,000 feet north of station, on the Cleveland, Lorain \& Wheeling Ry. in south wing wall of west wall of culvert; bronze tablet stamped " 1036 Canton"

1, 035. 713

\footnotetext{
\({ }^{1}\) This bench mark is to be destroyed. See first entry in this list for new bench mark.
}
Medina, northwest corner of courthouse, in water table; aluminum Feet. tablet stamped " 1093 Canton"
Feet. 1, 092. 134
Lester, 1,150 feet east of, on public road, northwest corner of west
abutment of highway bridge over Mallet Creek; aluminum tablet
stamped " 934 Canton "

From Bennetts Corners south along highway to Wadsworth.

Weymouth, 0.7 mile north of, in east side of northeast corner of iron girder bridge over Plum Creek; aluminum tablet stamped " 1032 Canton"

1, 032.962
Windfall, northwest corner of crossroads, in northeast corner of schoolhouse steps; aluminum tablet stamped " 1195 Canton"\(1,195.822\)
Boneta, 1 mile south of, in south side of foundation at southeast corner of schoolhouse; aluminum tablet stamped " 1108 Canton" 1, 109. 358

From Lester north to Liverpool, thence east to Sherman Corners.
Liverpool, in east side of main entrance of Lutheran Church; bronze
tablet stamped "Prim. Trav. Sta. No. 62,814 ".............. 814.819
Brunswick, in corner stone at northwest corner of west front of
Methodist Church; aluminum tablet stamped " 1178 Canton".-.-- 1, 179.092

\section*{From Seville east along highways to Wadsworth.}

Seville, 4.75 miles east of, on abutment stone, at southwest corner of
bridge over River Styx; aluminum tablet stamped " 966 Canton"- 964.836
MENTOR QUADRANGLE.
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Primary leveling by C. H. Moore in 1903.
From Euclid northeast along Lake Shore \& Michigan Southern Ry, to Wickliffe, thence along Euclid Avenue (North Ridge road) to Painesville.
Wickliffe, at southeast corner of red brick Presbyterian Church, in face; aluminum tablet stamped " 696 Cleveland"
695.963

Willoughby, at northeast corner of iron flagstaff in public square;
top of bolt.
West Mentor, Mentor Township, in front entrance of village hall, at southeast corner of 2 by 3 by 4 foot stepping stone; chiseled square_
695.21

West Mentor, at front entrance of village hall, 2 by 3 by 4 foot carriage stepping stone, at northeast corner; bronze tablet stamped "695 Cleveland"
Mentor, 2.5 miles northeast of, at T road north, on south side of Mentor Avenue, in center and on top of stone culvert; chiseled square
682.71

From Fowlers Mill west along highway to South Euclid.
Fowlers Mill, 60 feet east of station, north side of east-west road, on top of sandstone hitching post ; chiseled square

1, 127. 22
Fowlers Mill, 0.5 mile west of, at southwest corner of iron truss bridge over Chagrin River, at top of northwest corner of top abutment stone ; bronze tablet stamped " 1111 Cleveland"
Fowlers Mill, 1.25 miles west of, at southeast corner of crossroads, on top of culvert stone; chiseled square

Chesterland, 100 feet southeast from center of crossroads, northwest corner of general store of H. C. Cattrell; bronze tablet stamped "1217 Cleveland"

Feet.
Gates Mill, high truss iron bridge over Chagrin River, at northwest corner of top abutment stone; aluminum tablet stamped "729 Cleveland"
728.607

Gates Mill, 2 miles west of, 100 feet west of center of crossroads, north side of road, on top of center of 2 by 2 foot granite bowlder; chiseled square

1, 049.88
Gates Mill, 4.75 miles west of, 1 mile east of South Euclid, on north side of culvert-at crossroads, in center of top stone; chiseled circle_ 1,013.99

MIAMISBURG QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).] Precise leveling by the Coast and Geodetic Survey.

From Alexandersville southwest along Cincinnati, Hamilton \& Dayton Ry, and Cleveland, Cincinnati, Chicago \& St. Louis Ry. to Middletown.

Alexandersville, 0.7 mile south of, in Miami Township, on line of Cleveland, Cincinnati, Chicago \& St. Louis Ry., 300 feet north of street car power house, on pier of stone culvert over ditch, east end, 10 inches west of east face and 18 inches south of point; chiseled square (C. \& G. S. b. m. D4)
722.157

Whitfield, 0.8 mile north of, in Montgomery County, on line of Cincinnati, Hamilton \& Dayton Ry., north abutment of bridge 36 over Parthin Creek, east end, on wing wall bridge seat coping, 4.9 feet east from chord and 9 inches from retaining wall; chiseled square (C. \& G. S. b. m. D \({ }_{3}\) )
714.310

Carrollton, on Miami \& Erie Canal, on tumble of lower Carrollton lock, west side, south end, on second step below coping, 4 inches north of south face and 6 inches west of east face of stone; chiseled square (C. \& G. S. b. m. C 4 )
Miamisburg, on line of Cleveland, Cincinnati, Chicago \& St. Louis Ry., in north end of town, 500 feet north of Enterprise Carriage Works, on bridge 250, over Sycamore Creek, north abutment, west end, on retaining wall, second step below coping, 14 inches east of west face and 6 inches north of south face; chiseled square (C. \& G. S. b. m, B4)
707. 776

Miamisburg, 0.2 mile north of station, on Cincinnati, Hamilton \& Dayton Ry., east end of north abutment of bridge over Bear Creek, on bridge seat course at east end of wing wall, 6 inches from south face and 12 inches from east face; highest point in rounded square, lettered "U. S. C. \& G. S." (C. \& G. S. b. m. E 3 )
Miamisburg, on west abutment of road bridge over Miami River at Cincinnati, Hamilton \& Dayton Ry. station, on south face of retaining wall, 7 feet west of angle in eighth course of masonry below the coping; brass bolt marked with horizontal line (C. \& G. S. b. m. Fs)
696. 984

Miamisburg, south end of village, about 8 feet east of center of Third Street, north side of Smith Street, 6.72 feet west of center of Cleveland, Cincinnati, Chicago \& St. Louis track, 2.4 feet below top of rail on bridge seat course of masonry ; chiseled square (C. \& G. S. b. \(\mathrm{m} . \mathrm{A}_{4}\) )

Miamisburg, 2.2 miles south of, on Cincinnati, Hamilton \& Dayton Ry. culvert 32, northeast quarter, fourth step below bridge seat course, 3 inches west of east face and 6 inches north of south face; chiseled square (C. \& G. S. b. m. Gs )

Feet.
693. 755

Franklin, 2 miles north of, Cleveland, Cincinnati, Chicago \& St. Louis Ry. culvert 223 , over race from lock, south abutment, second stone from east end of bridge seat course, 7 inches south of north face and 6 inches west of east face; chiseled square (C. \& G. S. b. m. \(Z_{3}\) )

Carlisle, 0.5 mile north of, Warren County, Cincinnati, Hamilton \& Dayton Ry. culvert 31 over creek, north abutment, east end, on bridge seat course, 6 inches from east face, 12 inches north of south face; chiseled square (C. \& G. S. b. m. H \({ }_{3}\) )
Franklin, plant of Franklin Water Works, northwest corner of Sixth Street at Cleveland, Cincinnati, Chieago \& St. Louis Ry. crossing, southeast corner of water table; highest point of rounded square exactly in angle (C. \& G. S. b. m. I \({ }_{3}\) )
Carlisle, 2.2 miles south of, Cincinnati, Hamilton \& Dayton Ry. bridge 30 over Big Twin Creek, on south pier of two on east end, center of nose, 15 inches back from point; chiseled square (C. \& G. S b. \(\mathrm{m} . \mathrm{J}_{3}\) )

Franklin, 1 mile south of station, Miami County, Cleveland, Cincinnati, Chicago \& St. Louis Ry. bridge 254 over Clear Creek, south abutment, west side on second course below top of retaining wall, 3 feet above bridge seat course, 5 inches from both west and north faces ; chiseled square (C. \& G. S. b. m. Y \({ }_{3}\) )
Poast Town, 0.5 mile south of, Butler County, Cincinnati, Hamilton \& Dayton Ry. bridge 26 over Brown Run, on east end of wing wall, north abutment, first step below bridge-seat course, southeast corner of stone ; chiseled square (C. \& G. S. b. m. K \({ }_{3}\) )
658. 288

Middletown, 2.8 miles north of, Cleveland, Cincinnati, Chicago \& St. Louis Ry. culvert 270, south abutment, east end of bridge seat course, 13 inches south of north face and 10 inches west of east face ; chiseled square (C. \& G. S. b. m. X \({ }_{3}\) )
Middletown, 400 feet north of station, in village of Keno, on Cincinnati, Hamilton \& Dayton Ry., north abutment of culvert 21, east end, on first step below bridge seat course, 6 inches west of east . face and 6 inches north of south face; chiseled square (C. \& G. S. b. \(\mathrm{m} . \mathrm{L}_{3}\) )
643.037

Middletown, eastern part of city, about 493 feet west of Cleveland, Cincinnati, Chicago \& St. Louis Ry. track, southwest corner of Third and Grimes streets, on east face of Kimball block, 12 inches south of north corner and 3.5 feet above flagging; brass bolt marked with a horizontal line (C. \& G. S. b. m. M \(\mathrm{M}_{3}\) )
677.655
684. 451
674. 697

Primary leveling by R. P. Thompson in 1905.
From Franklin southwest along highway to Middletown, thence northwest to Astoria, thence northeast via Germantown to Miamisburg.
Franklin, near Cincinnati Northern R. R. station at Sixth Street, in northwest corner of north face of water table of Eagle mill; aluminum tablet stamped " 685 "
685.023

Middletown, No. 216 South Main Street, in water table at south side of entrance to Tytus Paper Co.'s building; aluminum tablet stamped " 653 "

Astoria, in center of south face of stone doorsill of Pleasant Hill (white brick) Methodist Church ; aluminum tablet stamped " 824 "-
Germantown, 5 miles west of, Browns Chapel, at southeast corner of crossroads, in south face of stone doorsill; aluminum tablet stamped " 974 " \(\qquad\)
Germantown, at southwest corner of Market and Walnut streets, in northeast corner of foundation wall of Reform Church, aluminum tablet (reported destroyed in 1907)
Miamisburg, at West Linden Avenue, northwest abutment of retaining wall of iron highway bridge over Miami River, in center of third top stone; aluminum tablet stamped " 709 "
Miamisburg, at Cincinnati, Hamilton \& Dayton Ry. station, on south face of retaining wall of west abutment of road bridge over Miami River, 7 feet west of angle in eighth course of masonry below the coping; brass bolt (C. \& G. S. b. m. "F "
From Miamisburg north along highway to point near Frytown, thence west via Liberty to county-line road, thence south and east to Farmersville, thence southeast to Germantown.

Frytown, 0.5 mile south of, north corner of crossroads, in southeast corner of red brick schoolhouse at Lower Miami Church; aluminum tablet stamped " 824 "
Liberty, in south face at southwest corner of water table of St. Paul's Church; aluminum tablet stamped " 840 " \(\qquad\)
New Lebanon, 1 mile south of, at T road north, in south face at southeast corner of red brick schoolhouse (district 5) ; aluminum tablet stamped " 910 " \(\qquad\)
Farmersville, 4 miles northwest of, at northwest angle of five forks, in top stone at west end of county-line road culvert; aluminum tablet stamped " 929 " \(\qquad\)
Farmersville, 3 miles west of, 0.2 mile north of east-west road, west of county-line road, in northeast corner of water table, east face of red brick house of David Wampler; aluminum tablet stamped " 890 "--
Farmersville, in water table, east face of south entrance to public school; aluminum tablet stamped " 882 "

\section*{MILFORD CENTER QUADRANGLE.}
\[
\text { [Latitude } 40^{\circ}-40^{\circ} 15^{\prime} \text {; longitude } 83^{\circ} 15^{\circ}-83^{\circ} 30^{\prime} \text {.] }
\]

Primary leveling by C. H. Birdseye in 1901.
From Kileville south to covered bridge over Darby Creek, thence east to Hilliard.

Hayden, 3.4 miles southwest of, in southeast abutment of covered bridge over Darby Creek; aluminum tablet stamped " 899 Col " \(\qquad\) 899.229

Primary leveling by C. E. Mills and S. L. Parker in 1913.
From New Dover southwest along highway to Marysville and northwest 1.7
miles.
New Dover, road crossing Cleveland, Cincinnati, Chicago \& St. Louis Ry., 400 feet east of station; top of north rail

New Dover, southwest corner of public-school grounds; iron post stamped " 974 " \(\qquad\)
New Dover, northwest corner of T road north, west end of town, on stone; painted square \(\qquad\)
Marysville, 1.7 miles east of, northeast corner of \(\mathbf{T}\) road north, on end of iron drain pipe; painted square

Feet.
823.741
973.772
725. 456
708.671
696.984
823.661
839.675
909. 657
929. 422
889. 835
882.367
972.1
974. 365
968. 71
982.22
Marysville, northwest corner of East Fifth and North Cherry streets,

Feet.

996. 61

994.13
Marysville, southwest corner of South Court and West Sixth street, 8 feet north of northeast corner of First M. E. Church, in stone; bronze tablet stamped "Prim. Trav. Sta. No. 75 1910, 991 " \(\qquad\) 991. 282
Marysville, at intersection of West Fifth, West Fourth, and North Grove streets, 10 feet south of concrete watering trough, on con- crete curbing; chiseled square ..... 1, 018. 17
Marysville, North Main Street crossing Toledo \& Ohio Central R. R.; top of north rail ..... 986.6
Marysville, southwest corner of North Main and Elwood streets, on curbing; chiseled square ..... 984. 78
Marysville, forks of Maple and Elwood streets, on west side of street, in base of telephone pole; spike ..... \(1,005.68\)
Marysville, 1.2 miles west of, northwest corner of road forks, in base of telephone pole; spike ..... \(1,025.20\)
Marysville, 1.7 miles west of, 100 feet east of crossroads, north side of road, on stone block at mail-box post ; chiseled square ..... \(1,026.47\)
Near Allen Center.
Allen Center, 0.7 mile west of, on east abutment at north end of small wooden bridge over improved ditch; chiseled square ..... 1, 031. 43
Allen Center, northwest corner of \(T\) road west, in southeast corner of Allen Township building grounds; iron post stamped "Prim. Trav. Sta. No. 941047 " ..... 1,046. 996
From Marysville southeast along highway 8 miles, thence south to Plain City.
Marysville, northeast corner of East Fifth and North Cherry streets, on stone curbing; chiseled square ..... 996. 61
Marysville, 600 feet east of corner of Fifth and Cherry streets, top of east rail at Big Four Route crossing. ..... 999.4
Marysville, 1 mile southeast of, top of east rail of Toledo \& Ohio Central R. R ..... 993.1
Marysville, 1.2 miles southeast of, 1,200 feet east of Toledo \& Ohio Central R. R. crossing, on south side of 3 -foot steel drain under pike; highest point ..... 985.56
Marysville, 2.6 miles southeast of, on California and Marysville pike, on east end of Gilleris schoolhouse doorstep ; chiseled square ..... 983.54
Marysville, 3.1 miles southeast of, on Marysville and California pike, southeast corner of road crossing; iron post stamped " 970 " ..... 970.062
Marysville, 4 miles southeast of, on Marysville and California pike, in northwest corner of district No. 6, Mill Township schoolhouse yard, on stone cistern top; chiseled square ..... 982.08
Marysville, 5.1 miles southeast of, southwest corner of T road west, in base of corner fence post ; spike ..... 978.84
Marysville, 5.8 miles southeast of, northwest corner of T road north; iron post stamped " 967 " ..... 966. 815
Marysville, 7.7 miles southeast of, on Marysville and California pike, on south end of 10 -inch steel drain pipe under road at southwest corner of \(T\) road west ; highest point ..... 974. 46
Arnold, 0.3 mile southeast of, on southwest abutment of iron bridge over Sugar Run ; chiseled square ..... 945.20

Arnold, 550 feet south of station, at Toledo \& Ohio Central R. R. crossing; top of rail
Arnold, 0.25 mile west of, 15 feet west of northwest corner of \(T\) road north ; iron post stamped " Prim. Trav. Sta. No. 79 1910, 959 " \(\qquad\)
Arnold, 1.4 miles southwest of, in top of northeast abutment of iron bridge over Robinsons Run; chiseled square \(\qquad\)
Arnold, 1.7 miles southwest of, northwest corner of T road west, on limestone culvert ; chiseled square
From Plain City west along highway to Chuckery, thence north to Marysville.
Plain City, southeast corner of schoolhouse yard, 10 feet north of sidewalk; iron post stamped " 935 "
Plain City, 0.9 mile west of, at viaduct crossing of Pennsylvania R. R., on second step from bottom on southwest abutment; chiseled square
Plain City, 1.7 miles west of, in base of telephone pole opposite \(T\) road north, 1,000 feet south of Pennsylvania R. R. crossing; iron bolt
Plain City, 2.6 miles west of, on post road, at southwest corner of T road south; iron post stamped " 971 "
Plain City, 3.8 miles west of, on post road, southeast corner of crossroads, in root of 4 -foot white-oak tree on north side; copper nail_-_
Plain City, 4.1 miles west of, on post road, on southwest corner of \(T\) road south, in top of brace to second fence post ; copper nail
Chuckery, 1 mile northeast of, northwest corner of T road north, 20 feet east by 25 feet south to center of \(T\) road; iron post stamped " Prim. Trav. Sta. No. 78, 980 "
Chuckery, in southeast corner of Lewis Chapel grounds, in root on east side of 4 -foot white-oak tree; copper nail \(\qquad\)
Chuckery, 1.2 miles north of, northwest corner of T road west, at base of corner fence post, on granite bowlder 1.5 feet in diameter; highest point
984.15

Chuckery, 2.6 miles north of, at Pennsylvania R. R. crossing; top of north rail
Chuckery, 2.8 miles north of, on northeast concrete abutment of small iron bridge, 200 feet north of crossroads; chiseled square_ \(\qquad\)
Bridgeport, 0.45 mile east of, northeast corner of T road north, 100 feet north of water's edge of Darby Creek; iron post stamped " 970 "-
Bridgeport, 100 feet north of schoolhouse, on south end of stone culvert, 125 feet east on \(T\) road east; chiseled square
Bridgeport, 1.7 miles north of, northeast corner of \(T\) road northeast, on north end of stone culvert under pike ; chiseled square_--
Bridgeport, 2 miles north of, on southwest abutment of small iron bridge over ditch, at \(T\) road; chiseled square \(\qquad\)
Bridgeport, 3 miles north of, southeast corner of \(T\) road east, at base of corner fence post, on 18 -inch granite bowlder ; highest point_
Bridgeport, 3.6 miles north of, southwest corner of \(T\) road west; - iron post stamped " 1022 " \(\qquad\)
Marysville, 0.8 mile south of, on London and Marysville pike, on top of east end of concrete culvert under pike; chiseled square__- 1,011.21
Marysville, southwest corner of West Ninth Street and London Avenue, on sandstone gutter cover ; chiseled square
Marysville, northwest corner of West Eighth Street and London Avenue, on sandstone sidewalk, 10 feet from curbstone; chiseled square

\section*{From Marysville southwest along highway to point near Woodstock.}
Marysville, 1.7 miles west of, 100 feet east of crossroads, on north Feet. side of road, on stone block at mail-box post ; chiseled square ..... 1, 026, 47
Marysville, 1.8 miles southwest of, northwest corner of road forks, in base of fence post; spike ..... 1, 057.94
Marysville, 3.5 miles southwest of, 330 feet east of G. W. Connolly's residence, on south side of road, in base of telephone pole; cop- per nail ..... 1, 045.16
Marysville, 3.5 miles southwest of, 50 feet north by 7.5 feet east of G. W. Connolly's residence, on south side of road; iron post stamped "1044" ..... 1, 044.075
Milford Center, 2.5 miles northwest of, southwest corner of cross- roads, in base of telephone pole ; copper nail ..... 1, 040.54
Milford Center, 2.5 miles northwest of, southeast corner of crossroads, in base of fence post; copper nail ..... \(1,002.26\)
Milford Center, 2.5 miles west of, at T road north, on south side of road, in base of telephone pole; copper nail ..... 1, 004. 29
Milford Center, 2.5 miles west of, northwest corner of T road north,60 feet west of steel bridge over Darby Creek; iron post stamped"1006"\(1,005.945\)
Milford Center, 2.5 miles west by \(\mathbf{1 . 2}\) miles south of, northwest corner of T road west, on end of tile drain; chiseled square ..... 1,010. 28
Woodstock, 1.8 miles east of, at road crossing Pennsylvania R. R.; top of south rail ..... \(1,018.3\)
Woodstock, 1.7 miles east of, southwest corner of road forks, in base of fence post; copper nail ..... 1, 017.09
From Irwin east along highway to Chuckery.
Irwin, road crossing Big Four Route; top of west rail ..... 1,011. 0
Irwin, 10 feet north of northwest corner of Irwin Hardware Co.'sbuilding; iron post stamped "Prim. Trav. Sta. No. 761910 1012"-- 1, 011. 816
Irwin, 0.6 mile east of, southwest corner of road forks, in base oftelephone pole; spike\(1,005.24\)
Irwin, 1.1 miles south of, southwest corner of T road south, in base of telephone pole ; spike ..... \(1,005.33\)
Irwin, 1.9 miles east of, 350 feet east of \(\mathbf{T}\) road north, on west abutment north end of covered bridge over Little Darby Creek; chiseled square ..... 995. 54
Chuckery, 1.9 miles west of, on Post Road, 200 feet south of covered bridge over Little Darby Creek, northwest corner of T road north; iron post stamped " 990 " ..... 990. 330
Chuckery, 1.4 miles west of, southeast corner of T road south, in base of telephone pole; spike ..... 987. 52
Chuckery, in northeast corner of Lewis Chapel grounds, on east side of white-oak tree 4 feet in diameter, in root; copper nail ..... 978.38
From Chuckery south along highway 4 miles, thence northwest to point nearIrwin.
Chuckery, 1.2 miles south of, south abutment east end of wooden bridge; chiseled square ..... 980.96
Chuckery, 1.8 miles south of, 350 feet south of Ben King's residence, in base of telephone pole; spike ..... 986.63
Bosedale, 2.5 miles east of, northeast corner of crossroads ; iron post stamped " 977 " ..... 976.854
45281 \({ }^{\circ}\)-Bull. 651-17-16
Rosedale, 2.5 miles east by 0.9 mile south of, southeast corner of ..... Feet. crossroads, on end of 18 -inch cast-iron drain pipe ; chiseled square_Rosedale, 1.2 miles southeast of, northwest corner of crossroads, ontop of stone drain ; chiseled square\(1,005.52\)
Rosedale, northwest corner of crossroads, on stone drain; chiseled square ..... 1,010. 06
Rosedale, 1 mile north of, on top of west end of stone drain ; chiseled square ..... \(1,005.34\)
Rosedale, 2 miles north of, on east side of road, in base of telephone pole ; spike ..... 1,008. 21
Irwin, 1.1 miles east of, southwest corner of T road south, in base of telephone pole ; spike ..... \(1,005.33\)
From Rosedale southwest along highway to Tradersville.
Rosedale, 1.25 miles southwest of, in southeast corner of crossroads; iron post stamped " 1020 " ..... 1,019. 697Rosedale, 1.25 miles southwest by 1.5 miles south of, northwest cornerof T road north, on concrete base of fence post; chiseled square_..._ 1, 041. 71Tradersville, 2.2 miles northeast by 2 miles northwest of, in north-east corner of \(T\) road northeast, in base of telephone pole; spike__. 1, 055. 63Tradersville, 2.2 miles northeast of, in southeast corner of crossroads,on concrete base of fence post; chiseled square1,039. 05
Tradersville, 1.1 miles northeast of, in southeast corner of \(T\) road south, in base of fence post; spike ..... 1,073. 88Tradersville, in west corner of crossroads ; iron post stamped " Prim.Trav. Sta. No. 77 Ohio 1910, 1105 ".\(1,104.676\)
From Plain City southwest along highway to Gillivan.
Plain City, 200 feet east of Pennsylvania R. R. station, at road crossing, middle of road; top of north rail ..... 932.8
Plain City, 0.8 mile southwest of, northeast corner of crossroads, on north end of stone culvert under pike; chiseled square ..... 940.09
Plain City, 1.3 miles southwest of, 200 feet north of \(T\) road east, on north end of stone culvert under pike; chiseled square ..... 945. 52
Plain City, 2.3 miles southwest of, 200 feet south of T road east, on top of southwest abutment of concrete bridge ; chiseled square_- ..... 949. 78
Plain City, 3 miles southwest of, southwest corner of T road west; iron post stamped " 953 " ..... 953.095
Plain City, 4.4 miles southwest of, southeast corner of crossroads, in base of fence post ; \(\frac{1}{2}\)-inch bolt ..... 955.81
Plain City, 5.8 miles southwest of, southeast corner of T road east; iron post stamped " 959 " ..... 958. 680
Plain City, 6.3 miles southwest of, northwest corner of T road west, on north end of stone culvert under pike; chiseled square ..... 960.42
Gillivan, 1.2 miles north of, on southwest corner of 4 -foot steel plate at east end of culvert ; highest point ..... 973.94
From Gillivan northwest along highway to point 2.5 miles east of Rosedale.
Gillivan, 2.6 miles northwest of, southwest corner of \(\mathbf{T}\) road west,on south end of limestone culvert; chiseled square982. 87
Gillivan, 3.4 miles northwest of, northeast corner of \(\mathbf{T}\) road south- east ; iron post stamped " 977 " ..... 977. 167

\title{
Resaca, 1.7 miles southeast of, southwest corner of \(\mathbf{T}\) road northwest, on south side of 12 -inch steel pipe under pike; highest point \\ Feet. 977.73 \\ Resaca, northwest corner of crossroads, on southeast corner of concrete porch floor of store; chiseled square \\ 982.20 \\ Resaca, 0.8 mile west of, opposite \(T\) road south, in root of 18 -inch sugar-maple tree on south side; copper nail \\ 968. 84 \\ Resaca, 1.8 miles west of, southeast corner of T road east, on south end of vitrified tile under pike; highest point
}

\section*{MILLERSBURG QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Primary leveling by S. R. Archer in 1909 and E. C. Bibbee in 1910.
From Killbuck west along railroad 1.2 miles.
Killbuck, 1.2 miles west of, on coping stone of stone culvert under railroad, at railroad crossing; chiseled square

S07. 12
From Mount Hope southwest along road to Millersburg, thence east to Walnut Creek.

Mount Hope, 1.6 miles east of, on large rock on south side of road; chiseled square painted " 1124.7 "
Mount Hope, 15 feet southwest of southwest corner of Methodist Episcopal Church, 5 feet north of public road; iron post stamped " 1285 "- 1, 285. 063
Benton, southwest corner of crossroads, 2 feet east of property line of. E. R. Farver ; iron post stamped " 991 "
990. 910

Benton, 1.8 miles west of, southwest side of \(T\) road north, on stone ledge; chiseled square painted "1192.7"
Benton, 2.7 miles west of, south side of road at T road north; chiseled square painted " 1103.6 "
Benton, 2.8 miles west of, southwest side of Troad west, in front of residence of W. H. Gindlesburger ; iron post stamped " 1128 "
Millersburg, 1.5 miles east of, on west abutment, east side of bridge over Honey Run; chiseled square painted " 879.204 "
Millersburg, curb in front of courthouse ; chiseled square
879.070

Millersburg, west side of courthouse, along wingwall of steps; iron post stamped " 904 ," painted " 904.3 "
904.164

Millersburg, 1.1 miles east of, east end of small rock culvert under wagon road at \(T\) road east; chiseled square
976. 640

Millersburg, 3.8 miles east of, southwest corner of crossroads at guidepost marked "Millersburg 4 miles, Berlin 3 miles, Benton 4 miles, Salbillo \(2 \frac{1}{2}\) miles" ; iron post stamped " 1202 "
\(1,202.162\)
Berlin, 1.6 miles west of, on top of large stone at \(T\) road south, opposite residence of Fred Mast; chiseled square painted " 1062.8 "-
\(1,062.668\)
Berlin, in center of town, northwest corner of crossroads; iron post stamped " 1292 "

1, 292. 303
Walnut Creek, 2.5 miles west of, at southeast corner of \(T\) road south, in corner of field owned by E. M. Beachy; iron post stamped " 1259 "
Walnut Creek, 1.7 miles west of, on southwest corner of first step from bottom at schoolhouse at northeast corner of crossroads; chiseled square painted " 1273.3 "

1, 273.134

\section*{From Apple Creek southwest along railroad to point 1.1 miles south of Holmesville.}

Apple Creek, 2.3 miles south of, southeast corner of crossroads, 100 feet east of railroad, at guidepost marked "Maysville 5 miles, Fredericksburg \(2 \frac{1}{2}\) miles, Apple Creek \(3 \frac{1}{2}\) miles"; iron post Feet. stamped " 1034 " 1,033. 517
Fredericksburg, 1.1 miles north of, 100 feet north of railroad crossing, on south abutment, east side of bridge over Salt Creek, at milepost ; chiseled square marked "H 50 C 94 "
Fredericksburg, east side of schoolhouse yard, in front of church; iron post stamped " 974 "
973.874

Fredericksburg, 2.4 miles south of, 35 feet south of railroad at railroad crossing, on north end of bridge abutment on east side of twin bridge over Salt Creek; chiseled square
894.87

Holmesville, 500 feet north of station, 25 feet north of railroad, near right of way at railroad crossing; iron post stamped " 871 "
870.409

From Millersburg northwest along railroad to Shreve.
Millersburg, 2.7 miles north of, 690 feet east of Cleveland, Akron \& Columbus Ry., at T road east, west of public road, in corner of field opposite Alvin Slavock's residence; iron post stamped " 832 "
831. 688

Holmesville, in front of station; top of rail
833.6

Hard, 100 feet west of station, south side of public road; iron post stamped " 837 "
837.298

Hard, in front of station; top of rail
836.5

Kauke, 10 feet northwest of station, 10 feet south of road, on right of way at railroad crossing; iron post stamped " 862 "
861. 808

Shreve, 2.6 miles east of, north side of bridge 124, on east abutment; chiseled square marked "G. B." \(\qquad\) 837.86

Shreve, 2.3 miles east of, on west abutment, north side of bridge 125 ; chiseled square painted " 839.0 "

From Millersburg south along railroad 3 miles.
Millersburg, 2.6 miles south of, on west side of bridge approach at railroad crossing; chiseled square painted " 813 "
812.89

Millersburg, 3.1 miles south of, 3 miles east of Killbuck, at Hardy's switch, 280 feet east of fork of road, southeast corner of road; iron post stamped " 811 "

From Killbuck north along railroad to Shreve.
Killbuck, 1.4 miles northwest of, at crossroads, on north end of stone culvert; chiseled square painted " 844.1 "

From Charm northeast along highways to point \(\mathbf{3 . 1}\) miles southwest of Walnut Creek.

Charm, center of town, opposite post office, at southwest corner of yard on east side of road at T road east, 130 feet northwest of road forks; iron post stamped " 1047 "

1, 046.628
Walnut Creek, 3.1 miles southwest of, 550 feet east of Shelter schoolhouse ; iron post stamped " Prim. Trav. Sta. No. 40, 1040 "
Walnut Creek, 3.1 miles southwest of, about 600 feet east of Shelter schoolhouse, on south abutment, west side of bridge at \(T\) road north; chiseled square painted " 1028.3 "

1, 028.24

\section*{From Killbuck east along highway to Charm.}

Killbuck, 450 feet west of station, steel bridge on main line Cleveland, Akron \& Columbus Ry. over Killbuck River, in north wing of east abutment; aluminum tablet stamped " Prim. Trav. Sta. No. 16, 1907, \(807^{\prime \prime}\)

Feet.
Killbuck, in front of Cleveland, Akron \& Columbus Ry. station; top of rail
810.6

Killbuck, 3 miles east of, 280 feet south of Hardy's switch, southeast corner of forks of road ; iron post stamped " 811 "
810.594

Grade, 0.25 mile west of, road forks at old post office, west side of road; iron post stamped " 1162 "
Saltillo, northeast corner of crossroads, inside fence line; iron post stamped "Prim. Trav. Sta. No. 24, 1907, 1217 " \(\qquad\) 1,216. 898
Charm, 1.25 miles northwest by 1.25 miles west of, four corners, southwest corner of north road forks, in top of stone; chiseled square
Charm, east part of town, T road southwest of schoolhouse, 90 feet northwest of road forks, in top of west wing of south abutment of small iron bridge; chiseled square
\(1,030.51\)

\section*{MORNINGVIEW QUADRANGLE.}
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).]
Primary leveling by E. C. Bibbee in 1915.
From Clermontville along highways northwest to New Richmond, thence northeast to point near Mount Pisgah.
Clermontville, at junction of three roads, directly in front of old seminary, 2 feet west of fence; iron post stamped " 501 Ohio," painted on telephone pole
New Richmond, 1.59 miles southeast of, on river road, 300 feet south of lane leading to A. Conner and E. C. Baker's residence, in forks of road, on large flat rock; chiseled square, " 504 " painted on telephone pole
503. 58

New Richmond, 0.98 mile southeast of, on river road, 95 feet north of \(T\) road east, on south abutment west side of iron bridge; chiseled square, " 491-67" painted on bridge girder
New Richmond, in the northwest corner of Town Hall yard, 90 feet north of entrance to post office, 2 feet south of fence line; iron post stamped " 498 Ohio," painted on telephone near
497. 517

New Richmond, in the northeast part of city at corporation line, 20 feet west of John Reinhart mail box, on sandstone ledge; chiseled square, " 510 " painted on telephone pole
509.64

New Richmond, 1.55 miles north of, on Twelve Mile Creek, about 500 feet east of Charles Laub's residence, on south abutment west side of concrete box culvert; chiseled square, " 492 " painted on bridge parapet
New Richmond, 2.15 miles north of, about 200 feet east of cemetery, 100 feet north of \(T\) road east, on south abutment, west side of iron bridge over Twelve Mile Creek; chiseled square, " \(509-94\) " painted on bridge girder

\section*{MORROW QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Primary leveling by E. O. Garvin in 1903.
Bench marks at Red Lion and Kings Mills set from level lines on Mason quadrangle.
Kings Mills, on top of stone of southwest abutment of iron bridge over

Little Miami River, 3 feet from end of bridge truss and 0.3 foot below bridge floor; aluminum tablet stamped "618 Cin" (destroyed) -
Red Lion, 5 feet from northwest corner of M. E. Church, in north foundation wall, 1 foot above ground; aluminum tablet stamped "962 Cinn"

Feet.
618. 502
962.433

Primary leveling by C. W. Ogle in 1905 and J. M. Perkins and F. L. Whaley in 1914.

From Red Lion along highway southeast to Lebanon, thence northeast to Little River, thence east to Jonah Run Church.
Red Lion, 5 feet from northwest corner of Methodist Church, in north foundation wall, 1 foot above ground; aluminum tablet stamped " 962 "
Red Lion, 1.15 miles south of, at southeast angle of T road south, at interurban railroad station No. 27 ; painted square on south end of drain tile
908. 22

Lebanon, 4.25 miles northwest of, 10 feet west of center of crossroads, north of track, in road, on white limestone rock; chiseled square
- Lebanon, 3 miles north of, 200 feet north of T road west, on west end of stone culvert; chiseled square
956. 84

Lebanon, 3 miles north of, northwest angle of T road west; iron post stamped " 890 Ohio " \(\qquad\) 890.409

Lebanon, 2 miles north of, south end of west guard wall of concrete culvert ; chiseled square

Lebanon, 1 mile north of, at north end of fair grounds, on west end of stone culvert; chiseled square

Lebanon, north edge of town, in wing wall of steel bridge over Turtle Creek, on southwest stone ; chiseled square
720.00

Lebanon, at south entrance step of courthouse, on east stone pedestal; chiseled square
769. 83

Lebanon, at south entrance to courthouse; on east end of top step; aluminum tablet stamped " 769 Ohio"
769.223

Lebanon, 1 mile northeast of, along Lebanon and Waynesville pike, in southeast wing wall of bridge; chiseled square
811. 86

Lebanon, 2 miles northeast of, 400 feet north of Lelan siding, east side of pike, in butt of telephone pole; copper nail
895.84

Lebanon, 3 miles northeast of, 0.5 mile northeast of Glenntown, at \(T\) road east, on northeast end of concrete culvert; chiseled square
963.30

Lebanon, 4 miles northeast of, 15 miles northeast of Glenntown, 40 feet south of junction of \(T\) road south ; chiseled square at west end of concrete culvert
957.86

Lebanon, 4 miles northeast of, 1.5 miles east of Glenntown, at southwest angle of \(T\) road south; iron post stamped " 960 Ohio"
960.258

Lebanon, 5 miles northeast of, 3 miles northwest of Oregonia, 300 feet east of junction of T road east, north side of road; chiseled square on top of large granite bowlder

Oregonia, 2.5 miles northwest of, 5.5 miles south of Waynesville on Waynesville pike, at T road west, on north end of culvert; chiseled square

Feet.
910. 49

Waynesville, 4.4 miles south of, 100 feet north of sawmill at pike crossing with creek and \(T\) road east, on northwest abutment of bridge ; chiseled square
705.16

Waynesville, 3.5 miles west of, on east side of T road west, at Ellis Viris's residence, 10 feet west by 25 feet south to center of stone culvert ; iron post stamped " Prim. Trav. Sta. No. 49, 1909, Ohio, 700 "
699.747

Waynesville, 3 miles south of, 0.5 mile north of mouth of Cæsars Creek, on southeast abutment of bridge over Little Miami River ; chiseled square
708.91

Waynesville, 3 miles south of, at bridge over Little Miami River; water surface, July 30,1914 , at 7.30 a. m
694.97

Waynesville, 3.5 miles south of, at covered bridge over Cæsars Creek; water surface, July 30,1914 , at 8.30 a. m
693. 71

Waynesville, 4 miles south of, 2 miles north of Oregonia, east side of bridge; chiseled square in concrete floor
Waynesville, 4 miles southeast of. 1 mile east of Little Miami River, top of bluff, at Asa Whitaker's residence, at east end of culvert; chiseled square in top of red granite bowlder \(\qquad\)
Waynesville, 4 miles southeast of, 3.4 miles west of Henpeck, south side of pike near Allen Kibler's residence; copper nail in butt of telephone pole
945.85

Henpeck, 2.5 miles west of, 4.5 miles southeast of Waynesville, 100 feet south of \(T\) road west; chiseled square on southeast abutment of bridge_
885.95

Henpeck, 2 miles west of, 2 miles north of Oregonia, at T road north; chiseled square at west end of stone culvert
946. 22

Henpeck, 1.5 miles west of, at south entrance to schoolhouse at crossroads; chiseled square at west end of concrete step
936. 76

Henpeck, 1.5 miles west of, in southwest angle of crossroads at Liberty Hall Schoolhouse, Dist. No. 1, Massa Township; iron post stamped " 937 Ohio"
936. 518

Henpeck, northwest angle of crossroads in town; chiseled square at west end of stone culvert
940.28

Harveysburg, 1 mile south of, at T road west, on west end of stone culvert ; chiseled square
924. 70

Harveysburg, 1.5 miles south of, at north end of jog in east and west road; chiseled square at north end of concrete culvert
928.53

\section*{From Lebanon east along Wilmington Pike to Vandervorts Corner.}

Lebanon, east part of town, at Pennsylvania R. R. crossing; south joint of west rail

Lebanon, 1 mile east of, 200 feet south of Pike Junction, in southeast wing wall of steel bridge over Turtle River; chiseled square_-
Lebanon, 2 miles east of, along Wilmington Pike, on northeast wing wall of steel brldge over Turtle Creek; chiseled square
Lebanon, 2.5 miles east of, northwest angle of crossroads; painted square on west end of iron drain pipe
853. 78

Lebanon, 3.5 miles east of, top of hill, on north side of road opposite Jim Young's residence; chiseled square in top of concrete foundation for gate post
Lebanon, 4 miles east of, southwest angle of crossroads along Wil- Feet. mington Pike ; painted square on west end of stone culvert 907.80
Lebanon, 4 miles east of, 100 feet south and 20 feet west of center of crossroads; iron post stamped " 913 Ohio"
912. 458
Lebanon, 4.75 miles east of, at T road north, top of hill before road slopes east toward Little Miami River; painted square at east end of stone culvert
Oregonia, 2 miles south of, at northwest corner of steel bridge over Little Miami River; chiseled square at west end of concrete wing wall
690.14
Oregonia, 2 miles south of, 200 feet below bridge over Little Miami River; water surface, August 5, 1914, 11.15 a. m_
Oregonia, 2 miles southeast of, 2 miles northeast of Fort Ancient, south side of Wilmington Pike, opposite Bayless Sellemyer's house; copper nail in root of double-trunk jack-oak tree \(\qquad\)
Oregonia, 2.5 miles southeast of, at south entrance to Olive Branch school ; chiseled square at southwest corner of concrete platform
Oregonia, 3 miles southeast of, 6 miles northwest of Clarksville, at T road north from Wilmington Pike; chiseled square on east end of stone culvert
663. 14
Clarksville, 5 miles northwest of, north side of pipe at T road south; copper nail in root of leaning jack-oak tree 18 inches in diameter_-
Clarksville, 5 miles northwest of, 3 miles west of Vandervorts Corner ; at southeast angle of \(T\) road south; iron post stamped " 946 Ohio"
946. 256

> Clarksville, 3.5 miles northwest of, northeast corner of T road north, on north end of large white limestone rock ( 2 by 4 feet by 2 inches) ; chiseled square._-
Clarksville, 3.5 miles northwest of, 1 mile west of Vandervorts Cor-
ner, chiseled square on north end of stone culvert
From Lebanon south along highway to Stubbs Mills, thence southwest to Kings Mills.

Lebanon, 2 miles southeast of, at west entrance to schoolhouse, Union fractional township (district 6) ; chiseled square in north end of stone step
846.52

Stubbs Mills, 2.5 miles north of, 200 feet north of T road east, southeast abutment of bridge over Dry Run; chiseled square
808.02

Stubbs Mills, 2.5 miles north of, opposite \(T\) road east, on west side of pike south, 200 feet south of bridge over Dry Run; iron post stamped " 817 Ohio"
816.615

\begin{tabular}{lll} 
Stubbs Mills, 0.5 mile north of, east side of pike; copper nail in root \\
of elm tree 24 inches in diameter & \\
\hline
\end{tabular}
Stubbs Mills, at south end of steel bridge over Little Miami River; chiseled square on east abutment
639. 38

Stubbs Mills, at bridge over Little Miami River; water surface, July \(23,1914,5\) p. m
612.28

South Lebanon, 0.5 mile east of, at Pennsylvania R. R. crossing ; chiseled square on south end of stone culvert

South Lebanon, 0.5 mile east of, 50 feet southwest of center of crossroads, southwest angle; 70 feet south of Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. crossing ; iron post stamped " 632 Ohio "--
South Lebanon, 0.5 mile east of, at ford over Little Miami River; water surface, July 24,1914 , at 10.30 a. m

Feet.
631. 456
605.33

South Lebanon, opposite center of depot: rail joint of south rail on main line of Pennsylvania R. R
630.78

South Lebanon, 0.5 mile west of, 6 feet north of Pennsylvania R. R. track; chiseled square on north end of stone culvert \(\qquad\)
Middletown Junction, opposite east side of station ; joint on west rail_
Middletown Junction, 0.25 mile south of, 0.75 mile north' of Kings Mills, at east end of stone culvert; chiseled square on top of capstone \(\qquad\)
Kings Mills, opposite Pennsylvania R. R. depot; top of west rail_-_-
Kings Mills, 70 feet west of Pennsylvania R. R. depot; in northeast abutment of steel bridge over Little Miami River; aluminum tablet stamped " 623 "
631.07
621. 73
611. 08
622.695

Kings Mills, at bridge over Little Miami River; water surface, July \(25,1914,1.30\) p. m
589.27

From point 2 miles south of Oregonia south along highway to Morrow, thence west to Stubbs Mills.

Oregonia, 2 miles south of, northwest corner of steel bridge over Little Miami River ; chiseled square in west end of concrete wing wall
690.14

Fort Ancient, 0.8 mile north of, at northwest corner of stone railway bridge No. 69 under Pennsylvania R. R.; chiseled square
676. 71

Fort Ancient, 20 feet east of passenger platform, in yard in front of hotel ; chiseled circle on top of large granite bowlder
670.20

Fort Ancient, north side of Main Street, 40 feet east of Pittsburgh, Cincinnati, Chicago \& St. Louis Ry., 30 feet south of hotel ; iron post stamped " 670 Ohio"
670.236

Fort Ancient, 500 feet west of railway crossing, at steel bridge over Little Miami River; water surface, August 13, 1914, 10.45 a. m_
656. 07

Fort Ancient, 1 mile south of, under Pennsylvania R. R.; chiseled square on east end of concrete culvert
668. 82

Hammel, at steel bridge over Little Miami River; chiseled square on northeast abutment
663. 27

Hammel, at steel bridge over Little Miami River; water surface, August 8, 1914, 11.45 a. m
659. 26

Morrow, 2 miles north of, 10 feet west of Pennsylvania R. R. track; chiseled square on west end of concrete culvert \(\qquad\) 662.19

Morrow, 2 miles north of, 100 feet east of and 10 feet below Pennsylvania R. R. at old viaduct, 1 mile west of Roachester, 10 feet north of dim road; iron post stamped " 652 Ohio"
651. 712

Morrow, 2 miles north of, 1 mile west of Roachester, at ford of dim road crossing Little Miami River; water surface, August 13, 1914, 1.30 p. m
639. 23

Morrow, 1 mile north of, 10 feet west of Pennsylvania R. R. track; chiseled square on west end of concrete culvert
658.11

Morrow, on southwest corner of stone wall forming platform of Pittsburg, Cincinnati, Chicago \& St. Louis Ry. station; chiseled square
Morrow, at foot of center street; water surface of Little Miami River, August 10, 1914, 2.45 p. m

Feet.
 625. 67
Morrow, 1 mile west of, at west side of farm crossing with Pittsburgh, Cincinnati, Chicago \& St. Louis Ry.; chiseled square on south end of stone culvert \(\qquad\)
Stubbs Mills, at south end of bridge over Little Miami River; chiseled square on east abutment
656.42
639.38
From point 4.3 miles north of Blanchester southwest along highway to point 1.7 miles southeast of Oak Ridge School, thence west to Maineville, thence west and north to Kings Mills.
Pleasant Grove ; copper nail on doorsill of Friends Church__-......-
Edwardsville School, at four roads, southeast of road intersection; chiseled square on top of stone culvert
919. 46
925.42
Fdwardsville School, 1.6 miles southwest of, on south side of road to Black Hawk, opposite T road north; iron post stamped "Ohio 823 "-
Black Hawk, 0.7 mile southeast of, at three corners, south of corner; copper nail in root of oak tree
823. 201
886.98
Black Hawk, 1 mile southwest of, on south abutment of steel bridge over creek; chiseled square on top stone
811.07
Butlerville, 0.2 mile east of, at \(T\) road north; chiseled square on northwest abutment of steel bridge
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Butlerville, 0.8 mile northwest of, southeast of road intersection, by house of William Foxbower ; chiseled square on concrete culvert_-
Oak Ridge School, 1.7 miles southeast of, at T road northeast, north of road intersection; nail in base of corner fence post \(\qquad\)
Oak Ridge School, in northwest corner of school yard, 15 feet south of locust tree; iron bench mark post stamped "Ohio 869 " \(\qquad\)
Maineville, 3 miles east of, at four roads, southwest of road intersection; chiseled square on concrete culvert \(\qquad\)
Maineville, 2 miles east of, at four roads, 120 feet southeast of school; chiseled square on stone culvert
860.18
S51. 44
S49. 09
869.932
894.29
852. 81
Maineville, in yard of Maineville School, 6 feet south of sidewalk; iron bench mark post stamped "Ohio 804 "
S04. 947
Foster station, 0.3 mile east of, at T road south, on northwest corner of stone culvert; square cut on top stone
688.85

From Loveland east along Baltimore \& Ohio Southwestern R. R. to Blanchester.
Loveland, 0.25 mile west of, 25 feet east of fork, south of road at road north; square cut in stone of culvert
669.664

Loveland, on stone window ledge of post office; aluminum tablet stamped "Ohio 583" \(\qquad\)
Loveland, 2 miles southeast of, 100 feet east of crossing of Baltimore \& Ohio Southwestern R. R,, at highway crossing; square cut on base of semaphore signal
634.98

Milepost P 167, 50 feet west of, on northeast abutment of steel railroad bridge; chiseled square on top of stone
693.42

Hills station, 400 feet south of, 100 feet west of Baltimore \& Ohio Southwestern R. R. track, 15 feet west of fence corner; iron bench mark post stamped " 740 Ohio" \(\qquad\)
Cozaddale, 50 feet south of depot; on northeast abutment of steel bridge; chiseled square on top of stone
739.777
814.21

Cozaddale, 1.1 miles east of, at highway crossing, under large oak tree ; copper nail on stump

Pleasant Plain, 0.7 mile west of, 15 feet east of highway at crossing, 15 feet north of railroad; copper nail in stump
Pleasant Plain, opposite "Pleasant Plain House," under large maple tree ; iron bench mark post stamped "Ohio 886 "
Pleasant Plain, 1.1 miles east of, on road crossing at Baltimore \& Ohio Southwestern R. R.; spike in base of warning sign \(\qquad\)
Pleasant Plain, 2.2 miles east of, at highway crossing; spike in base of warning signpost
Windsor, 60 feet south of Baltimore \& Ohio Southwestern R. R. depot, 15 feet east of highway; iron bench mark post stamped "Ohio 918 "
Windsor, 1.2 miles east of, at highway crossing; spike in base of warning signpost \(\qquad\)
Blanchester, 1 mile west of, at railroad bridge over highway; chiseled square in top of northeast abutment

From point 1.7 miles southeast of Oak Ridge southeast along highway to point 1.1 miles east of Pleasant Run.

Butlerville, 0.7 mile southwest of, at four roads, 15 feet south of road intersection; chiseled square on stone

\section*{From Woodville northwest along highway to Windsor.}

Woodville, in northwest corner of A. W. Garrison's front yard, 20 feet south by 20 feet east of town pump, at center of cross pikes; iron post stamped "Prim. Trav. Sta. No. 91, Ohio 947 " \(\qquad\)
Windsor station, 1 mile southeast of, at \(T\) road south, in northeast corner of Wesley church yard, by edge of road; chiseled square on flat rock

From Morrow east along Cincinnati \& Muskingum Valley R. R. to Clarksville (leveled twice).

Morrow, on southwest corner stone wall forming platform of Pittsburgh, Cineinnati, Chicago and St. Louis Ry. station; chiseled square
Morrow, 0.25 mile east of station, on northwest corner of west abutment of railroad bridge; chiseled square \(\qquad\)
Morrow, 1.75 miles east of, at north end of 2.5 foot pipe culvert; on top of masonry
Milepost 147, 550 feet east of and just southeast of intersection of northeast and southwest road and the Cincinnati \& Muskingum Valley R. R., on east side of wagon road; iron post stamped "No. 52,1909 , Ohio 726 "
Morrow, 2.15 miles east of, 30 feet north of railroad and east of highway; nail in stump
Morrow, summit 2.75 miles east of ; railroad summit
Morrow, 3.5 miles east of, south and 25 feet east of highway; on coping of culvert
Morrow, 3.75 miles east of, southeast corner of coping west abutment of railroad bridge ; chiseled square
Morrow, 4.5 miles east of, southwest corner of coping west abutment of railroad bridge crossing Todds Fork; chiseled square_
Morrow, 4.75 miles east of, southeast corner of coping north abutment railroad bridge crossing Todds Fork; chiseled square
645. 44
726. 402

Feet. 887. 49
886.190
881. 23
904.01
917. 778
946. 22
945.73
870.76
946. 62
936.54
653.9
719.38
726.90
754.0

Morrow, on top of large drift bolt in northwest corner of crib forming station platform at Hicks on Cincinnati \& Muskingum Valley R. R., east of Morrow
Feet.
767.972
Morrow, 5.25 miles east of, on coping southeast corner of north abutment Cincinnati \& Muskingum Valley R. R. ; chiseled square 772. 894
Morrow, 5.75 miles west of, on southeast corner of coping north abutment; chiseled square
782.148
Morrow, 8 miles east of, at road crossing; nail in post of warning sign
794. 495
Morrow, 8.75 miles east of, north side of railroad at road crossing; nail in warning signpost 813.283
Clarksville, 2.3 miles southwest of, on east side of Cincinnati \& Muskingum Valley R. R., 50 feet west and 15 feet south to center of road crossing; iron post stamped "No. 53, 1909, Ohio 799 "
799.310
Clarksville, 0.75 mile west of, on southwest corner of parapet wall west abutment railroad bridge; chiseled square
807.334

MOUNT GILEAD QUADRANGLE.
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Primary leveling by Philip Flitman and C. E. Mills in 1911.
From Kirkpatrick southeast along highway to Caledonia, thence east along Cleveland, Cincinnati, Chicago \& St. Louis Ry, to Galion.

Kirkpatrick, at southeast corner of crossroads; spike in fence post, marked "1008.2"
Kirkpatrick, 2 miles east of, at southeast corner of \(\mathbf{T}\) road; spike in fence post, marked " 1006.5 "
Kirkpatrick, 2 miles east by 1 mile south of, at southeast corner of crossroad; spike in fence post, marked " 1002.0 "
Kirkpatrick, 2 miles east by 2 miles south of, at southeast corner of T road; spike in fence post, marked " 995.7 "
995.67

Kirkpatrick, 2 miles east by 2.5 miles south of, at south end of T road; spike in telephone pole, marked " 996.7 "
Caledonia, 60 feet east of station, between Cleveland, Cincinnati, Chicago \& St. Louis Ry. and Erie R. R. tracks; iron post stamped " 999 "
998. 85 ।

Caledonia, 1.5 miles east by 1 mile north of, at southwest corner of crossroads ; spike in telephone pole, marked " 1006.637 "
\(1,006.58\)
Martel, 0.8 mile south by 0.5 mile west of, at road crossing; spike in post of cattle guard, marked " 1033.6 "

1, 033. 50
Martel, 100 feet south of station; iron post stamped " 1038 ".........
Martel, 1.8 miles east by 1.25 miles north of, at southwest corner of road crossing; spike in telephone pole, marked " 1060.9 "

1, 037.859
road \(1,059.82\)
Martel, 2 miles north by 2.5 miles east of, north of railroad, at road crossing; iron post stamped " 1079 "
Galion, 1 mile south by 2.5 miles west of, at southeast corner of road
crossing; spike in post of cattle guard, marked " 1127.9 "
1, 078. 578
1, 126. 61
Galion, 0.8 mile south by 1 mile west of, south of tracks, between crossroads ; spike in telephone pole, marked " 1145.4 "
\(1,144.17\)
Galion, at crossing of Cleveland, Cincinnati, Chicago \& St. Louis Ry. and Erie R. R., 100 feet northeast of crossing plant "Burt"; iron post stamped " 1171 "

\section*{From point 3 miles northwest of Galion southeast along highway to Galion.}

Galion, 3 miles northwest of, at stop No. 162 on Cleveland, Southwestern \& Columbus Electric R. R., southeast corner of T road south; Feet. iron post stamped " 1064 " 1, 064.021
Galion, 2.5 miles northwest of, at Beck station on Southwestern Electric R. R., northwest corner of crossroads; spike in base of trolley pole, marked " 1084.5 " (probably moved)
Galion, 1.5 miles northwest of, northeast corner of crossroads, at schoolhouse; spike in base of trolley pole, marked " 1121.2 "
\(1,121.08\)
Galion, west end of town, on West Main Street, northwest corner of crossroads, on stone curbing 3 inches west of iron catch basin; chiseled square marked "1131.547"
\(1,131.42\)
Galion, northeast corner of Main and Washington streets, 20 feet west of railroad at station, on concrete walk; chiseled square marked " 1169.030 "
From Galion south along Cleveland, Cincinnati. Chicago \& St. Louis Ry. to Cardington,
Galion, 0.5 mile south of, on top of milepost "Cle. 81 "; spike marked "1172.7"
Galion, 1 mile south by 0.25 mile west of, 200 feet south of road crossing, 12 feet west of track center; top of stone monument, marked "1163.2" \(1,161.96\)
Galion, 2 miles south by 0.5 mile west of, at southeast corner of road
crossing; iron post stamped " 1168 ".-.------1,-166. 782
Galion, 3 miles south by 1 mile west of, at northeast corner of road crossing; spike in telephone pole, marked " 1159.2 "
\(1,157.89\)
St. James, 1 mile east by 0.5 mile north of, 10 feet west of track center; top of stone monument, marked " 1165.8 " \(\qquad\) \(1,164.46\)
St. James, 0.3 mile north by 0.3 mile east of, 20 feet west of track center; top of northeast corner of concrete foundation of semaphore, marked " 1165.8 "
\(1,164.46\)
St. James, 10 feet west of track center, north of station; iron post stamped " 1160 "
\(1,158.719\)
St. James, 1 mile south of, 10 feet west of track center; top of stone
monument, marked " 1145.6 " (not found, 1913)
St. James, 1.5 miles south by 0.25 mile west of, at southeast corner of crossing ; spike in post of cattle guard, marked " 1137.5 "
\(1,136.09\)
Climax, 2.8 miles east of, at southeast corner of road crossing; spike in telephone pole, marked "1128.3"
\(1,126.91\)
Edison, 3.5 miles north by 1 nile east of, at southeast corner of road
crossing; iron post stamped " 1110 "--.---.-. 108.920
Edison, 3 miles north by 0.8 mile east of, spike on top of milepost
"Cle. 90 ," marked " 1098.1 "--. 0.6 .
Edison, 2 miles north by 0.5 mile east of, at southeast corner of road crossing; spike in telephone pole, marked " 1088.0 "
\(1,086.60\)
Edison, 1 mile north by 0.3 mile east of, 10 feet west of track center; top of stone monument, marked " 1076.6 "
\(1,075.11\)
Edison, 1.5 miles south by 0.5 mile west of, 12 feet west of center of track; top of stone monument, marked " 1038.392 "

1, 038.05
Cardington, 2 miles north by 0.5 mile east of, 12 feet west of track center; stone monument, marked "1038.144"

1,037. 81
Cardington, 350 feet north of station; iron post stamped " 1014 Ohio "- 1, 013. 462
Cardington, 1 mile north by 0.2 mile east of, 12 feet east of track center; top of concrete foundation of electric wire tower

1, 024.88

From point 1.4 miles south of Mount Gilead north along Toledo \& Ohio Central Ry. to point 4.8 miles south of Bucyrus.

Mount Gilead, 1.4 miles south of, at northwest corner of road cross- Feet. ing; spike in telephone pole, marked " 1084.5 " 1, 083.06
Mount Gilead, 1 mile south of, west of center of railroad bridge at overhead road crossing; top of bolt at west rail, marked "1077.9"-1, 076. 44
Mount Gilead, 50 feet south of station; top of curbstone, marked "1096.3"
\(1,094.87\)
Edison, at northwest corner of crossing of Cleveland, Cincinnati, Chicago \& St. Louis Ry. and Toledo \& Ohio Central Ry.; iron post stamped " 1064 Ohio" 1, 062.430
Edison, 1 mile north by 0.5 mile west of, at southwest corner of crossing; spike in telephone pole, marked " 1045.0 "
\(1,043.57\)
Climax, 2 miles south by 0.5 mile east of, at northwest corner of road crossing; spike in telephone pole, marked " 1034.3 "

1,032. 88
Climax, 1 mile south by 0.25 mile east of, at northwest corner of road crossing; spike in telephone pole, marked " 1041.6 "

1, 040, 22
Climax, at southwest corner of road crossing; iron post stamped " 1035 "

1, 033.305
Climax, 1 mile north by 0.25 mile west of, at northwest corner of crossroads; spike in telephone pole, marked "1039.7",

1,038. 38
Martel, 1 mile south by 0.25 mile east of, center beam of railroad bridge across Flat Run; top of bolt, marked "1021.5" \(\qquad\) 1, 020.22
New Winchester, 2.1 miles south of, southwest corner of road crossing, in base of north post of cattle guard; spike, marked "1040.5"- 1, 040. 38
New Winchester, 1 mile south of, on south side of road at \(T\) road north, 30 feet east of railroad; spike in base of telephone pole, marked " 1029.276 "
New Winchester, 25 feet east of railroad, scuth side of road at road crossing at station; iron post stamped " 1025 "

1, 025.239
New Winchester, 1 mile north of, northwest corner of road crossing, in top of north post of cattle guard; spike, marked " 1024.7"

1,024. 63
Bucyrus, 4.8 miles south of, northwest corner of private-road crossing, in base of telephone pole 73-20; spike marked "1025.377"--- 1, 025. 28
From Caledonia south along highways to point 2 miles southeast of Claridon.
Caledonia, 1 mile south of, at southeast corner of Troad; spike in telephone pole, marked "991.7"
Caledonia, 2.5 miles south by 0.5 mile west of, at northwest corner of crossroads; iron post stamped " 993 "
993.297


Claridon, 1 mile south of; spike in telephone pole, marked " 988.1 "-- 987.82
Claridon, 1.8 miles south of, at northwest wing of Olentangy River bridge; top of pier, marked " 972.7 "
972.44

Claridon, 1.8 miles south by 1 mile east of, at northeast corner of crossroads; top of southwest corner of stone step of Salem Church, marked " 983.2 "
982.86

From Edison west along highways to point 2 miles southeast of Claridon,
Edison, 0.3 mile south of, at northwest corner of road crossing; spike in telephone pole, marked " 1050.6 "
Edison, 1 mile west by 0.3 mile south of ; top of west end of lowest Feet.
concrete step of J. M. Farley's house, marked " 1034.8 " ..... 1, 034. 40
Edison, 2 miles west by 0.3 mile south of, at southwest corner of crossroads; spike in fence post, marked " 1020.1 " ..... \(1,019.6\)
Edison, 2.8 miles west by 0.3 mile south of ; top of northwest pier of bridge orer Shaw Creek, marked " 1000.838 ". ..... \(1,000.43\)
Marits, 2 miles south by 0.8 mile west of, at southeast corner of \(T\) road; iron post stamped " 1009 Ohio" ..... 1,008. 613
Claridon, 2.25 miles east by 1.8 miles south of, at south end of \(T\) road; spike in fence post, marked " 997.399 " ..... 997.01
From point 2 miles southeast of Claridon south along highways to point 3 miles southwest of Claridon.
Claridon, 1.8 miles south by 1 mile east of, at northeast corner ofcrossroads; top of southwest corner of stone step at Salem Church,marked " 983.196 "982. 86
Claridon, 2.25 miles south by 1 mile east of ; top of northeast pier of bridge, marked " 980.683 " ..... 980,31
Claridon, 2.8 miles south by 1 mile east of; top of west end of north beam of bridge, marked " 983.186 " ..... 982. 82
Claridon, 3.8 miles south by 1 mile east of, at southeast corner of crossroads; iron post stamped " 991 Ohio" ..... 990.748
Claridon, 3 miles south of ; top of northeast pier of bridge over Mc- Kibbin Ditch, marked " 973.607 " ..... 973. 21
Claridon, 2.8 miles south by 1 mile west of, at southwest corner of crossroads; spike in telephone pole, marked " 977.590 " ..... 977.15From point 4 miles southeast of Claridon south along highway to point 4 mileswest of Cardington.
Cardington, 5 miles west by 1 mile north of, at northeast corner of \(T\) road; spike in telephone pole, marked " 994.680 " ..... 994.31Cardington, 4 miles west by 1 mile north of, southwest corner ofcrossroads ; top of masonry at west end of stone culvert, marked" 992.767 "992. 39
Cardington, 4 miles west of, at northwest corner of crossroads, at northwest corner of culvert, marked " 987.445 " ..... 987.05From point 2 miles northwest of Cardington northwest along highways to point4 miles southeast of Claridon.

Cardington, 1.5 miles west by 1 mile north of, at southeast corner of crossroads; spike in root of elm tree, marked " 1004.636 "
Cardington, 2 miles west by 1.25 miles north of ; top of masonry at east end of northwest wing of bridge over Shaw Creek, marked " 983.772 "
983. 40

Cardington, 2.5 miles west by 1.5 miles north of ; top of masonry 3 feet from end of northwest corner of culvert, marked " 987.830 "-987.47

Cardington, 3 miles west by 1.5 miles north of ; top of masonry 3 feet from northeast corner of culvert, marked " 992.981 "
992.58

From Mount Gilead northeast along public road to point 2.5 miles northwest of Williamsport.
Mount Gilead, in front of city hall; iron post stamped " 1148 Ohio ".- 1, 147. 375
Mount Gilead, 0.5 mile east by 0.5 mile north of ; top of masonry at east end of northwest wing of Olentangy River bridge, marked "1099.379"

Mount Gilead, 1.25 miles north by 1.25 miles east of, at northeast Feet. corner of \(Y\) road; spike in telephone pole, marked " 1182.424 "
Mount Gilead, 1.8 miles north by 1.8 miles east of, at southeast cor-
ner of T road; iron post stamped " 1219 "-.-.-.-.-. 218.499
Williamsport, 3 miles west of ; top of masonry at west end of northeast wing of small bridge, marked " 1212.027 "

1,211. 56
Williamsport, 2.5 miles west by 1.5 miles north of, at south end of
T road; spike in telephone pole marked " 1260.203 "--.-.-.-. 1, 259.72
Williamsport, 2 miles west by 1.5 miles north of; top of northwest
wing of bridge, marked " 1249.847 "--n.
From point 4.5 miles east by 1 mile south of Mount Gilead southwest to point 3 miles north of Penlan.

Mount Gilead, 4.5 miles east by 1 mile south of, at southwest corner of crossroads; spike in telephone pole, marked " 1278.6 "
Mount Gilead, 4 miles east by 2 miles south of, at northwest corner of crossroads; iron post stamped " 1211 "

1, 211.130
Mount Gilead, 4 miles east by 3 miles south of, at northwest corner of crossroads; spike in fence post, marked " 1168.4 "
\(1,167.10\)

\section*{MOUNT STERLING QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by B. J. Green in 1903.
From Mount Sterling southwest along Baltimore \& Ohio Southwestern R. R. via Bloomingburg to Washington Courthouse.
Mount Sterling, 2 feet north of main entrance to town hall building, in water table; aluminum tablet stamped " 905 Columbus 1903"
905. 535

Mount Sterling, at south end of station; top of east rail
907.9

Cook, east end of south abutment of concrete wall of sewer under public road 100 feet north of station; chiseled square
911. 41

Madison Mills, 300 feet north of station, small iron bridge leading north from station, on top of east end of north abutment ; aluminum tablet stamped " 914 Columbus 1903 "
913. 487

Madison Mills, north end of station; top of east rail
920.5

Bloomingburg, on south wall at southeast corner of Bloomingburg mill; aluminum tablet stamped " 980 Columbus 1903 " \(\qquad\) Bloomingburg, north of station, at road crossing; top of east rail_-. Washington Courthouse, on window seat at south corner of courthouse; aluminum tablet stamped " 980 Columbus 1903 "
980.175
978.5
979.921

From Washington Courthouse southeast along Cincinnati, Hamilton \& Dayton
Ry, and highway 7 miles, thence northeast to New Holland, thence north to
Mount Sterling.
Washington Courthouse, 6 miles southeast of, on the Robinson road, on south end of west abutment of small iron county bridge; aluminum tablet stamped " 888 Columbus 1903"
Wayne-Marion township line, on east side of road, at foot of hill ; top of township-line monument
853.75

New Holland, on Fayette-Pickaway county line, north side of road, at forks to south; top of stone monument
860.17

New Holland, on foundation wall of town hall, 3 feet north of main entrance; aluminum tablet stamped " 857 Columbus 1903"
New Holland, south margin of road at southwest corner of cemetery and forks to north, on Pickaway-Fayette county line; top of monument
Feet.
862.11
New Holland, 1.35 miles northwest of, on top of east abutment of stone culvert; chiseled square
870.62

Waterloo (Pancoastburg post office), 0.9 mile south of, on west margin of Waterloo-New Holland pike, 50 feet south of crossroads, on Fayette-Pickaway county line; top of monument
869.72

Waterloo, on foundation wall at southeast corner of public-school building; aluminum tablet stamped " 868 Columbus 1903 "
867.253

Waterloo, 1.6 miles north of, on east end of south abutment of small iron bridge; chiseled square
829. 59

Yankeetown, 150 feet north of crosspikes, on west end of south abutment of small iron bridge ; chiseled square
841.04

Yankeetown, at west end of north abutment of small iron bridge; aluminum tablet stamped " 842 Columbus 1903 "-
841.064

Mount Sterling, 3.35 miles south of, on top of east abutment of stone culvert ; chiseled square
862.85

Mount Sterling, 1.75 miles south of, on west margin of pike at Fay-ette-Madison county line; top of stone monument
897.17

\section*{From Mount Sterling west along public reads via Range to Sedalia.}

Mount Sterling, 2.95 miles west of, on north end of east abutment of small bridge; chiseled square
922.96

Chenoweth, 2 miles east of, on north wall of brick schoolhouse at south side of pike at fork to south; aluminum tablet stamped " 942 Columbus 1903 "
942. 348

Range, 1.7 miles east of, on west wall at southwest corner of Bethel Church; aluminum tablet stamped " 990 Columbus 1903 "
990.645

Sedalia, 0.7 mile east of, just east of cemetery to south, on south end of east abutment of iron bridge; chiseled square
\(1,043.85\)
Sedalia, at southeast corner of Federal and Main streets, on top of stone; aluminum tablet stamped " 1071 Columbus 1903 "

1, 071.748
From Sedalia south along highway to Washington Courthouse.
Sedalia, 2.25 miles south of, at Madison-Fayette county line, on west margin of pike ; top of monument
Yatesville, 1.7 miles northwest of, on south wall near southeast corner of Green's schoolhouse ; aluminum tablet stamped " 1034 Columbus 1903 "

1, 034. 624
Eber, 3.3 miles northwest of, at fork to west, north end of east abutment of iron bridge over Paint Creek; aluminum tablet stamped " 1005 Columbus \(1903 "\)
\(1,005.940\)
Primary leveling by R. G. Clinite in 1914
At points 5 miles southeast of Washington Courthouse.
Cincinnati, Hamilton \& Dayton Ry. crossing; top of rail
917.5

Washington Courthouse, about 5 miles southeast of, by rail, at turn in road 0.2 mile east of Cincinnati, Hamilton \& Dayton Ry., opposite one-story frame dwelling, on top of concrete base of corner post ; chiseled circle
909.59
\[
45281^{\circ}-\text { Bull. } 651-17-17
\]

\section*{NAPOLEON QUADRANGLE. \\ [Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).] \\ Precise leveling by C. H. Semper in 1906. \\ From point near Ridgeville east along highway to Liberty Center.}

Ridgeville Corners, 2.41 miles east of, at crossroads, schoolhouse north side of road, front fence; aluminum tablet stamped " 722 "--
Ridgeville Corners, 4.41 miles east of, front of schoolhouse No. 5 at crossroads; aluminum tablet stamped " 706 " \(\qquad\)
Ridgeville Corners, 7.36 miles east of, at crossroads, west end of north abutment of bridge; aluminum tablet stamped " 682 " \(\qquad\) 682.338

Liberty Center, 2.4 miles west of, entrance of schoolhouse at crossroads; aluminum tablet stamped " 678 "
678.211

Liberty Center, crossing of Wabash R. R. west side of town; top of rail
680.6

Liberty Center, front face of townhouse; aluminum tablet stamped " 686 "
685. 694

Primary leveling by W. H. Monahan in 1907.
From Ridgeville Corners south and east along highway via Florida to point 5 miles east of Holgate, thence north to point 10 miles east of Ridgeville Corners.
Napoleon, 4 miles west of, in northwest corner of foundation of schoolhouse at southeast corner of crossroads; aluminum tablet stamped " 702 "
701. 814

Okolona, 1.09 miles north of, 100 feet north of crossroads, at east side of south abutment of bridge; aluminum tablet stamped " 702 ". \(\qquad\) 702.337

Florida, at iron bridge over Maumee River, at top of east end of north stone abutment; aluminum tablet stamped " 671 "
671. 256

Florida, 4.13 miles south of, in foundation of F. Tietje's stable, 175 feet south of road corners and 150 feet west of road; aluminum tablet stamped " 717 "
717. 492

Holgate, 2.02 miles west of, at road intersection in stone abutment of culvert on north side of road; aluminum tablet stamped " 711 "--
Holgate, 400 feet west of Baltimore \& Ohio R. R. station, brick building north of railroad, in south end of east water table; aluminum tablet stamped " 712 "
711. 458
712.146

Holgate, 3.96 miles east of, in southwest foundation of German Lutheran Church at northwest corner of crossroads; aluminum tablet stamped " 707 "
706. 763

Malinta, 2.85 miles south of, in southwest abutment of concrete bridge over small creek at west side of crossroads; aluminum tablet stamped " 694 "
694.548

Malinta, in concrete front and near southeast corner of Levi Ritter's store; aluminum tablet stamped " 687 "
687.495

Shunk, 5 miles southeast of Napoleon, in northeast abutment of iron bridge over Turkeyfoot Creek; aluminum tablet stamped " 668 "--
Shunk, 2.93 miles north of, at brick schoollouse on southeast corner of road forks; aluminum tablet stamped " 671 "
668. 276

\section*{Primary leveling by C. W. Howell in 1911.}

From point 3 miles north of Liberty Center south along highways to Liberty Center.
Liberty Center, 3 miles north of, at southwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 31, 1905, 689 "
- 689.525

Liberty Center, 2 miles north of, at northwest corner of crossroads; spike in corner post, painted "T. B. M. 685.3 "

Feet.
Liberty Center, 1 mile north of, at southwest corner of crossroads; spike in post, painted "T. B. M. 679.9 "
685. 42
680.08

\section*{NAVARRE QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by the Baltimore \& Ohio R. R.
From point 4.25 miles south of Massillon south to point 2 miles northwest of Canal Dover.
Massillon, Stark County, about 4.25 miles south of, in north end of west coping of large concrete-arch culvert near where old line is crossed by present line ; copper bolt (B. \& O. b. m. 17)
Navarre, about 0.8 mile northeast of, in southwest end of southeast coping of large stone arch 450 feet southwest of first Wheeling \& Lake Erie R. R. crossing ; copper bolt (B. \& O. b. m. 18)
980.909

Navarre, 0.8 mile southwest of Navarre, at milepost 89 ; section of rail set vertically in ground (B. \& O. b. m. 19)

1, 003. 488
Justus, 0.5 mile north of, 300 feet south of Wheeling \& Lake Erie R. R. crossing, in north end of west coping of small culvert at telegraph pole \(88 / 5\); copper bolt (B. \& O. b. m. 20)
\(1,000.364\)
Justus, 0.5 mile south of, in west end of south abutment of arch culvert near milepost 87 ; copper bolt (B. \& O. b. m. 21)
976. 711

Justus, 1.5 miles south of, in west end of south abutment of arch culvert at telegraph pole 86 ; copper bolt (B. \& O. b. m. 22) \(\qquad\) 974.910

Beach City, 1 mile north of, in south end of west coping of stone culvert for traction line near railroad; copper bolt (B. \& 0 . b. m, 23) \(\qquad\)
Beach City, 800 feet north of station, in west end of south abutment of bridge over creek; copper bolt (B. \& O. b. m. 24)
976.079

Beach City, 0.8 mile southeast of, in southwest end of southeast abutment of bridge; copper bolt (B. \& O. b. m. 25)
969. 456
961.937

Beach City, 2 miles southeast of, in southwest end of back wall, northwest abutment of bridge ; copper bolt (B. \& O. b. m. 26)
944.603

Strasburg, Tuscarawas County, 2 miles northwest of, at milepost 81 ; section of rail set vertically in ground (B. \& O. b. m. 27)
929.665

Strashurg, 1 mile northwest of, at milepost 80 ; section of rail set vertically in ground (B. \& O. b. m. 28)
924.741

Strasburg, at milepost 79 ; section of rail set vertically in ground (B. \& O. b. m. 29)
914.099

Strasburg, about 0.8 mile southeast of, in southwest end of back wall of southeast abutment of bridge ; copper bolt (B. \& O. b. m. 30)
Strasburg, about 1 mile southeast of, near milepost 78, in first course of masonry, southeast end of southwest abutment of trolley overhead bridge; copper bolt (B. \& O. b. m. 31) \(\qquad\)
Strasburg, about 2 miles southeast of, 500 feet northwest of milepost 77, in southeast end of southwest coping of culvert; copper bolt (B. \& O. b. m. 32)
Strasburg, 3 miles southeast of, in south end of west coping of culvert, telegraph pole \(76 / 6\); copper bolt (B. \& O. b. m. 33)
Canal Dover, 2 miles northwest of, at milepost 75 ; section of rail set vertically in ground (B. \& O. b. m. 34)
901.593
897.046
912.671
909.698
886.023
Primary leveling by James B. Maguire in 1901.
From Massillon south along Wheeling \& Lake Erie R. R. to point 2.5 milessouth of Navarre.
Navarre, 0.7 mile north of station, in east end of north abutment of

Wheeling \& Lake Erie R. R. bridge 142 A (Toledo division); bronze tablet stamped " 916 Canton"
Navarre, at road crossing; top of rail
Feet. 915. 507 921. 3

Navarre, 2.5 miles south of, on west end of pier of highway bridge over the Tuscarawas River; chisel mark

\section*{Primary leveling by E. C. Bibbee in 1910.}
From Wilmot northwest along highway to Kidron.

Wilmot, south side of Maple Street at T road west of Winesburg, 75
feet east of Methodist Episcopal Church; iron post stamped
"1024"
Wilmot, 1.1 miles northwest of, on east abutment, south side of bridge over Little Sugar Creek at \(Y\) road; chiseled square
\(1,000.46\)
Wilmot, 2.4 miles northwest of, south of Mount Eaton Road at T road north; iron post stamped " 1184 "

1, 184. 168
Wilmot, 3.1 miles northwest of, on south abutment west side of bridge over creek; chiseled square

1, 026. 33
West Lebanon (Pem station), 0.7 mile east of, on north abutment. east side of bridge 300 feet south of railroad; chiseled square
West Lebanon (Pem station), north side of railroad, on right of way, 25 feet east of wagon road; iron post stamped " 988 "
West Lebanon, 1.1 miles west of, 50 feet north of railroad at railroad crossing; on south abutment, east side of bridge over Little Sugar Creek; chiseled square
West Lebanon, 1.7 miles west of, on south abutment, west side of bridge over Little Sugar Creek, at railroad crossing; chiseled square

1, 013.08
West Lebanon, 3.4 miles west of, 60 feet north of railroad at railroad crossing, on north abutment, east side of bridge over Little Sugar Creek, chiseled square

1,077. 004
Kidron, center of town, southwest corner of crossroads; iron post
stamped "Prim. Trav. Sta. No. 38, 1104"
From Canal Dover west along highway to Sugar Creek, thence north along railroad to Beach City.

Canal Dover, 3.5 miles west of, north of road at T road south; iron post stamped " 932 "
932.005

Canal Dover, 6.4 miles west of, northwest corner of T road north;
iron post stamped " 1038 "-_--.-. 037.508
Canal Dover, 7.2 miles west of, southwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 41, 1003" 1, 002. 574
Sugar Creek, 175 feet north of station, 15 feet east of public road; iron post stamped " 992 " in culvert head wall
991. 900

Sugar Creek, south end of station platform ; top of east rail 990.7

Sugar Creek, 2.1 miles north of, west side of public road, 15 feet east of railroad crossing, on stone; chiseled mark painted " 980.2 " 980.03

Barrs Mills, 150 feet south of railroad crossing, on north abutment west side of railroad bridge ; chiseled square

Feet. 975.41

Barrs Mills, 490 feet north of railroad station at railroad crossing, 25 feet west of Wheeling \& Lake Erie R. R. on railroad right of way; iron post stamped " 969 ".
968. 407

Barrs Mills, 1 mile north of, 9 feet east of railroad at whistle post; chiseled square on large rock, marked "Bars Mills 1 mile" on whistle post
972.42

Dundee, in front of station, on Wheeling \& Lake Erie R. R. right of way; iron post stamped " 972 "
971. 702

Dundee, \(\mathbf{1 . 2}\) miles north of, on north abutment, west side of railroad bridge; chiseled square painted " 959.9 "
959.76

Dundee, 2.5 miles north of, 60 feet north of telephone pole 1810 , on right of way of Wheeling \& Lake Erie R. R., 60 feet west of railroad; iron post stamped " 960 "
959.836


\section*{From Beach City southwest along highway to Winesburg.}

Wilmot, 0.5 mile southwest of, on north side of, under wagon road, stone-arch culvert 300 feet west of T road south ; chiseled square_-
Wilmot, 0.9 mile southwest of, south end of stone culvert under wagon road, on line between Stark and Holmes counties; chiseled square painted " 1019.3 "
\(1,019.11\)
Wilmot, 2.8 miles southwest of, in northwest corner of lot owned by Christian Weiss, 25 feet northeast of house ; iron post stamped "1039"

1, 038.837

Winesburg, in southwest corner of schoolhouse yard, 325 feet west of crossroads; iron post stamped " 1311 "

1,311. 316
Winesburg, 2.5 miles southwest of, at southeast corner of crossroads, about 500 feet west of schoolhouse; iron post stamped " Prim. Trav. Sta. No. 39, 1186 "
\(1,185.423\)
From Winesburg southwest along highway to Charm.
Winesburg, 1.3 miles south of, east end of stone culvert; chiseled square painted " 1026.3 "
\(1,026.14\)
Walnut Creek, 2.8 miles north of, northwest corner of crossroads, at guidepost marked "Dundee \(4 \frac{1}{2}\) miles, Berlin 4 miles, Trail 1 mile, Walnut Creek 3 miles; " iron post stamped " 1156 "

Walnut Creek, 1.6 miles north of, on north end of concrete culvert at
 T road east; chiseled square painted " 1054.8 "

1, 054. 68

Walnut Creek, southeast corner of crossroads, on curb opposite post office; chiseled square \(1,190.375\)

Walnut Creek, in front of schoolhouse, west side of yard; iron post
 stamped " 1198 "
 \(1,197.458\)


\section*{NEWARK QUADRANGLE.}
\[
\text { [Latitude } 40^{\circ}-40^{\circ} 15^{\prime} ; \text { longitude } 82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime} \text {.] }
\]

Primary leveling by C. H. Burns, I. M. Flocker, and R. C. Seitz in 1907.
From Union Station east along Baltimore \& Ohio R. R. and Pennsylvania R. R. to Hanover.
Newark, on east side of courthouse, in stone step; aluminum tablet stamped " 836 "

Feet. 836.037

Newark, 2.4 miles east of, on south side of road, at forks to north and south, south of blacksmith shop, in sandstone abutment of iron bridge; aluminum tablet stamped " 820 " \(\qquad\)
Claylick, on south side of road and south side of trolley, in sandstone abutment of country bridge over canal; aluminum tablet stamped " 799 " (stone moved, elevation unreliable) \(\qquad\) 789.982

Hanover, in sandstone abutment at southwest corner of bridge; aluminum tablet stamped " 784 "
783. 651

Hanover, in front of Pennsylvania R. R. station; top of south rail_-
From Newark south along Baltimore \& Ohio R, R, 3 miles.
Newark, 2.8 miles south of, in sandstone abutment on southeast corner of railroad bridge; aluminum tablet stamped " 844 "

\section*{From Newark north along Baltimore \& Ohio R. R. to Utica.}

Newark, 3.3 miles north of, 100 feet from road, in sandstone foundation to large brick house on east side of road; aluminum tablet stamped " 887 "
886. 759

St. Louisville, 4.8 miles south of, on east side of road, east side of railroad, 60 feet from road, in sandstune post; aluminuin tablet stamped " 882 " \(\qquad\) 881.722

St. Louisville, 0.4 mile north of, in sandstone abutment of old covered bridge; aluminum tablet stamped " 907 "
906.255

Utica, in sandstone doorstep at south end of city hall building; aluminum tablet stamped " 966 "
965. 800

From Hanover north along highway to Long Run, thence west and northwest to Utica.

Hanover, 2.6 miles north of, on west side of road, in sandstone culvert; aluminum tablet stamped " 813 "
812.666

Hanover, 6.5 miles north of, at road fork on west, in sandstone abutment of county bridge over Clear Fork; aluminum tablet stamped " 854 "
853.358

Hanover, 10 miles north of, in southeast corner of sandstone abutment of old covered bridge; aluminum tablet stamped " 879 "
878. 807

Purity, in concrete doorstep of town hall; aluminum tablet stamped " 1173 "
 \(1,173.003\)
Purity, 3.4 miles north of, at northeast corner of crossroads, in sandstone doorstep of private house ; aluminum tablet stamped " 1107 "\(1,106.506\)
Purity, 6.01 miles northwest of, at north side of road, in sandstone foundation of schoolhouse; aluminum tablet stamped " 1098 " 1, 098.010

\section*{From Claylick southeast along Baltimore \& Ohio R. R. to Toboso.}

Claylick, in front of station; top of rail
785.4

Toboso, 2.7 miles west of, north of track, in northeast abutment of iron bridge over creek; aluminum tablet stamped "776" (not found, 1916)

\section*{From Claylick south along highway 3.7 miles.}
Claylick, 4 miles south of, in south part of grounds of Boodle School, 57 feet south of southwest corner of schoolhouse; iron post stamped "Prim. Trav. Sta. No. 44 "

Feet.
886.535
Primary leveling by E. C. Bibbee in 1911.
From point near Utica south along highways to Utica, thence east along highways 2.5 miles.
Utica, 1.1 miles north of, 25 feet south of railroad crossing on east side of railroad; spike in base of telegraph pole
980.13
Utica, in front sandstone doorstep of city building; aluminum tablet_ 965.800
Utica, 1.2 miles east of, 40 feet east of T road north, 25 feet south of small gas-test house; highest point on 4 -inch gas pipe
Utica, 2.5 miles east of, at concrete bridge 100 feet south of \(\mathbf{T}\) road west ; chiseled square on top of west abutment
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1,055.75

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1,055.75

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1,055.75

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NEW COMERSTOWN QUADRANGLE.
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From Guernsey northeast along Pennsylvania R, R. to Port Washington.
Guernsey, 6.69 miles north of, crossing of Pennsylvania lines and Cleveland \& Marietta Ry. ; top of rail
803.0

New Comerstown, 3.69 miles east of, 40 feet north of track; iron post stamped " 804 "
804.718

New Comerstown, 5.42 miles east of, on stone foundation of Pennsylvania R. R. water tank; chiseled square (railroad bench mark 816.10)
817.874

New Comerstown, 6.18 miles east of, 30 feet south of railroad, 20 feet west of highway ; iron post stamped " 817 "
817. 856

Port Washington, in front of station; top of rail
820.2

Primary leveling by C. H. Semper in 1908, S. R. Archer and C. B. Minks in 1909, and E. C. Bibbee in 1910.

\section*{From West Lafayette east via New Comerstown to Bernice.}

West Lafayette, in front of station; top of rail
802.0

West Lafayette, northwest corner of public-school grounds, 120 feet south of Pennsylvania R. R. ; iron post stamped "Prim. Trav. Sta. No. 58809 " \(\qquad\) 809.351

Isleta, in front of station; top of rail
792.1

Isleta, 265 feet east of station, 25 feet north of track, in railroad culvert; aluminum tablet stamped " 791 "
790.637

New Comerstown, in front of station; top of rail
802.9

New Comerstown, in front step of Fountain Hotel, northwest corner, 1 foot from sidewalk; aluminum tablet stamped " 805 "
805. 191

New Comerstown, in foundation of high school building, 6 feet south of entrance from College Street; aluminum tablet stamped " 809 "-
Bernice, 2 miles west of, in north abutment, east side of iron bridge over Dunlap Creek; aluminum tablet stamped " 802 "
808. 623

Bernice, 0.6 mile west of, on west abutment, north side of iron bridge; chiseled square, painted " 811.9 "
803.17 S
812. 88

\section*{From New Comerstown north along Pennsylvania R. R. to Joyce (the error distributed in this line is excessive).}

New Comerstown, 2.4 miles northeast of, about 0.1 mile east of road forks at road crossing, in top of south wing of east abutment of steel bridge; chiseled square

Feet.
815.50

New Comerstown, 3 miles northeast of, 550 feet east of Pennsylvania R. R., west side of road, at T road east; iron post stamped " 827 "-

Wolf, 2.6 miles north of, 30 feet east by 10 feet south of overhead railroad crossing ; iron post stamped " 890 " 826.953

Stone Creek, 1.9 miles north of, at road crossing, in north abutment of bridge over stream; chiseled square
889.652

Stone Creek, 3.1 miles north of, 20 feet east of railroad, at private road crossing; iron post stamped " 901 "
905. 82
900. 880

From West Lafayette north along Wheeling \& Lake Erie R, R. to Chili.
West Lafayette, east of Pennsylvania R. R. station, at center of road crossing; top of north rail of north track
802.4

West Lafayette, 1.4 miles north of, in top of west wing of north abutment of steel highway bridge over Tuscarawas River; chiseled square
778.73

West Lafayette, in front of Wheeling \& Lake Erie R. R. station, at road crossing; top of rail
West Lafayette, 2.3 miles north of, on Wheeling \& Lake Erie R. R. east right of way line, north side of road at road crossing, inside fence corner; iron post stamped " 779 "
Fresno, in front of station ; top of rail
Fresno, 110 feet west of Wheeling \& Lake Erie R. R., in southeast corner of schoolhouse grounds; iron post stamped " Prim.Trav.Sta. No. 271907785 "
Chili, south end of station platform, 35 feet east of track, 50 feet west of crossroads ; iron post stamped " Prim. Trav. Sta. No. 26 1907823 "
822.757

Chili, 0.9 mile west of, southwest corner of crossroads, at foot of mail-box post, 15 feet west of fence corner; iron post stamped " 993 "

\section*{From Sugar Creek southwest along railroad to New Bedford.}

Sugar Creek, 3.4 miles south of, 25 feet west of railroad, 10 feet south of wagon road; iron post stamped " 998 ," painted " 998.4 "998. 226

Baltic, in yard at Bixler Hotel ; iron post stamped " 1041 " 1, 041.305
Baltic, 2.6 miles west of, at \(Y\) road; iron post stamped " 1151 " 1,150.916

From Baltic southeast along highway to Stone Creek.
Fiat schoolhouse, in northwest corner of foundation; aluminum tablet stamped " 1089 "
\(1,088.983\)

Baltic, 5.4 miles southeast of, on east end of stone arch culvert at T road; chiseled square painted " 1068.2 "

1,067. 94
Baltic, 6 miles southeast of, about 500 feet east of William Thomas's residence; iron post stamped " 1126 "

1,126. 132
Stone Creek, 3.5 miles west of, in northwest corner of Angel schoolhouse yard; iron post stamped " 970 ". \(\qquad\)Stone Creek, in foundation at northwest corner of P. E. Buehler'sstore; aluminum tablet stamped " 932 "
NEW LEXINGTON QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by W. H. Monahan in 1907 and T. A. Green in 1908.
From Rehoboth south along the Toledo \& Ohio Central and the Zanesville \& Western Ry. lines to Glouster.

Feet.
970.398
931. 648

Rehoboth, 1,150 feet south of, in south abutment east side of covered bridge; aluminum tablet stamped " 894 " \(\qquad\)
New Lexington, 0.3 mile north of courthouse, 40 feet south of Cincinnati \& Muskingum Valley R. R., at northwest corner of scales; top of bolt head
866.24

New Lexington, school yard; stone post marked " U. S. C. 1904 \& G. S." \(\qquad\)
New Lexington, on north side of foundation of courthouse, 5 feet from northeast corner; aluminum tablet stamped "Prim. Trav. Sta. No. 1, 958 "
942.405
958.174

New Lexington, 1.4 miles south of, at first tunnel south of Lexington, on stone on east side of railroad; chisel marks
930.21

Moxahala, in front of station, at north end of platform; top of east rail

827
Moxahala, 860 feet south of station, in east side of south abutment of iron bridge; aluminum tablet stamped " 829 "
828. 457

Rendville, 0.3 mile south of Ohio Central Ry. station, in east side of south abutment of railroad bridge; aluminum tablet stamped " 752 "-
Corning, in foundation of Ohio Central Ry. station, on west side, at sixth guard post from north end; aluminum tablet stamped " 728 "-
Corning, 2.4 miles south of, 100 feet north of road crossing, in east side of south abutment of iron bridge; aluminum tablet stamped " 711 " \(\qquad\) 711. 406

Burr Oak, 0.5 mile north of, on north side of east abutment of county bridge at road crossing; chiseled square
699.51

Palos, in foundation of turntable of Marietta, Columbus \& Cleveland R. R.; aluminum tablet stamped " 699 " 698.4
698.990

Glouster, 1 block west of Main Street, south of livery stable formerly owned by Carpenter \& Morgan, in northeast corner of county bridge over Sunday Creek; aluminum tablet stamped "682" (set in 1907) -
Trimble station, in northeast corner of curbing of station platform; chiseled square, painted " 679.3 "
681. 282
679.33

\section*{From Junction City southeast and south to Bristol.}

Junction City, 3.65 miles southeast of, 50 feet west of road crossing, in southeast abutment of wagon bridge over stream; aluminum tablet stamped " 879 " \(\qquad\)
Bristol, in front of station at road crossing; top of rail
878. 402
914.7

\section*{From Crooksville south to Corning, thence west to Dixie.}

Crooksville, 60 feet south of Cincinnati \& Muskingum Valley R. R. station, on west end of north abutment of iron railroad bridge, chiseled square marked " 752 "
752. 28

Tropic, 260 feet south of station, west of railroad, in west end of south abutment of iron railroad bridge; aluminum tablet stamped " 767 1908" \(\qquad\)
Misco, in front of station; top of rail (marked " 780 ")
Feet
767.171
779.5
812. 344
ner of wagon bridge over creek, in sandstone outcrop on west side of creek; aluminum tablet stamped " 8131908 "
849. 4

Sayre, 2.48 miles south of, west of railroad, 15 feet north of road crossing, 2 feet north of cattle-guard, in limestone rock; aluminum tablet stamped "915 1908"
914. 679

Rendville, 0.3 mile north of, in southeast corner of south abutment of Ohio Central iron bridge; aluminum tablet stamped " 752 " \(\qquad\) 751. 464

Corning, in east side foundation of Ohio Central Ry. station; aluminum tablet stamped " 728 "
728. 234

Corning, 2.15 miles west of, north of tracks, 50 feet east of east end of tunnel ; point on sandstone rock marked " 869 "
869.06

Congo, 75 feet northeast of station, 50 feet east of railroad, 5 feet south of entrance to butcher shop, in west foundation wall of Sunday Creek Co.'s store 108; aluminum tablet stamped "833 1908"...
Congo, in front of station; top of rail (marked "830")
Drakes, in front of station; top of rail
833.512
830.6
740.7
747.5

Hemlock, 45 feet south of post office, east of road, 160 feet south of railroad, at northeast corner of highway bridge over creek, in sandstone abutment; aluminum tablet stamped " 765 1908" \(\qquad\)
Shawnee, 100 feet north of Zanesville and Western station, in northwest abutment of highway bridge over creek; aluminum tablet stamped "803 1908" -
Shawnee, in front of Baltimore \& Ohio station ; top of rail (marked "794")
McCuneville, road crossing at station; top of rail (marked " 775 ") _
McCuneville, at northwest edge of public school ; iron post stamped "Prim. Trav. Sta. No. 2 778-1907" \(\qquad\)
McCuneville, 1.18 miles northwest of, 115 feet north of railroad crossing, on east corner of stone in south abutment of iron highway bridge ; cross marked " 804 " \(\qquad\)
- old bench mark on west corner of same abutment marked "B. M. 804.9
764.835
803. 001
794. 2
775.3
778. 489
804. 62

Dixie, in front of station; top of rail (marked " 857 ")
804.61

Dixie, at southwest corner on south side of Upson Coal Co.'s store; aluminum tablet stamped " 861 " (U. S. G. S. 1907)
857.4
860.834

From Crooksville west via New Lexington to Junction City.
Crooksville crossing of the Cincinnati \& Muskingum Valley R. R. and the Zanesville \& Western Ry. at milepost "T-30"; top of rail ( marked " 755 ")
754. 6
761.98

McLuney, 30 feet south of tracks, 100 feet north of front entrance to store kept by Baughman \& Blackburn, 25 feet west of house occupied by Mr. Blackburn, on land owned by Charles Myers; iron post stamped "Prim. Trav. Sta. No. 65-805"

McLuney, in front of station; top of rail (marked " 808 ") \(\qquad\)
McLuney, 2.61 miles west of, at Goston flag station, 5 feet east of milepost "T-35"; top of rail section driven in ground (marked " 921 ")
McLuney, 2.93 miles west of, 0.3 mile west of Goston siding, north of railroad, in center of sandstone culvert 38 ; aluminum tablet stamped " 911-1908"
McLuney, 4.61 miles west of, at milepost "T-37", on north end of east steel beam of railroad bridge 40 ; cross marked " 875 " \(\qquad\)
New Lexington, on northwest corner of platform at union station; chiseled square marked " 861.2 "
New Lexington, 1.42 miles west of union station, 20 feet east of railroad crossing, in west end of south abutment of small rock culvert; aluminum tablet stamped " 848 "
911.310

Feet. 807.8
920.55
874. 88
861.22
848.020

\section*{NEW LONDON QUADRANGLE.} [Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]

Precise leveling by the Baltimore \& Ohio R. R.

\section*{From Nova west along Baltimore \& Ohio R. R. to point about 0.8 mile east of Greenwich.}

Nova, Ashland County, about 1.5 miles east of, on culvert at telegraph pole \(51 / 14\), in the west end of south coping; copper bolt (B. \& O. b. m. 484)

Nova, about 0.5 mile east of, north end of small culvert at telegraph pole \(52 / 15\); copper bolt (B. \& O. b. m. 485)

1, 123. 337
Nova, about 325 feet east of station on a small culvert, at top of beveled surface; northeast corner of morth coping (B. \& O. b. m. 485 A )
\(1,111.050\)
Nova, T. 1 N., R. 19 W., in foundation wall of the United Brethren Church, on south face of southeast corner; aluminum tablet stamped "1127 Adj 1903"
\(1,127.315\)
Nova, about 0.6 mile west of, culvert at telegraph pole \(53 / 17 \frac{1}{2}\), in west end of north coping; copper bolt (B. \& O. b. m. 486) 1, 103.946
Nova, about 2 miles northwest of, large arch bridge at telegraph pole \(55 / 1 \frac{1}{2}\), in east end of north coping ; copper bolt (B. \& O. b. m. 487) - 1, 071.539
Hereford, about 1.9 miles east of, small culvert at telegraph pole \(56 / 6\), in west end of south coping; copper bolt (B. \& O. b. m. 488) - 1,050. 135
Hereford, about 0.9 mile east of, bridge at telegraph pole \(57 / 5\), in south end of east abutment; copper bolt (B. \& O. b. m. 489)

1,037. 597
Hereford, near, on north side of east abutment of a steel girder bridge, about 800 feet west of station; copper bolt (B. \& O. b. m. 490)

Hereford, about 1.5 miles west of, on large arch bridge, in east end of north coping; copper bolt (B. \& O. b. m. 491)
988. 458

Ramey, about 0.25 mile west of, on large arch bridge at telegraph pole 60/18, in east end of north coping; copper bolt (B. \& O. b. m. 492) - 1, 000. 707
Greenwich, Huron County, about 2.8 miles east of, on arch culvert at telegraph pole 61/213, in east end of north coping; copper bolt (B. \& O. b. m. 493)

1,028.983
Greenwich, about 1.8 miles east of, on arch culvert at telegraph pole \(62 / 21 \frac{1}{2}\), in west end of north coping; copper bolt (B. \& O. b. m. 494)

Greenwich, about 0.8 mile east of, on arch culvert at telegraph pole Feet. \(62 / 23 \frac{1}{2}\), in east end of north coping ; copper bolt (B. \& O. b. m. 495) - 1, 038.959

Primary leveling by G. M. Dimmick in 1905.
From Wakeman south along highway via Clarksfield and New London to Hereford.
Wakeman, 1.5 miles south of, T. 4 N., R. 20 W., in south end of east face of foundation wall of residence of Mason Sheldon; aluminum tablet stamped " 876 Adj 1903 "
877. 091

Clarksfield, T. 3 N., R. 20 W., west end of north face of stone schoolhouse; aluminum tablet stamped " 909 Adj 1903 "
910. 234

Clarksfield, 2.5 miles south by 1.5 miles east of, T. 3 N., R. 20 W., in top of bridge seat of highway bridge over East Branch Vermilion River, at north end of east abutment; aluminum tablet stamped " 901 Adj \(1903 "\)
901. 339

Clarksfield, about 4 miles south of, in T. 3 N., R. 20 W., at four corners, south end of east face, in water table of brick church; aluminum tablet. stamped " 934 Adj 1903 "
934.792

New London, T. 2 N., R. 20 W ., in center of north face of foundation wall of Methodist Church ; aluminum tablet stamped "991 Adj 1903 "
992.055

Hereford, west of Baltimore \& Ohio R. R. station, north end of east abutment of railroad bridge 800 ; copper bolt (B. \& O. b. m. 400) -

1, 014.894
From New London east along highway to point 3 miles north of Sullivan.
New London, 6 miles east of, in T. 2 N., R. 19 W., 200 feet east of crossroads, in top of south end of east abutment of highway bridge over small stream; aluminum tablet stamped " 974 Adj 1903 " \(\qquad\) 974.647

From bench mark 6 miles east of New London north along highway to Kipton.
Rochester (station), T. 2 N., R. 19 W., in foundation wall of store of D. B. Swift ; aluminum tablet stamped " 934 Adj 1903 "
934.385

Brighton, 3.29 miles north of, T. 3 N., R. 19 W., south end of west face of town hall, in water table; aluminum tablet stamped " 906 Adj 1903 " \(\qquad\)
Brighton, 4.66 miles north of, T. 4 N., R 19 W., in north end of east face of foundation wall of Baptist Church at four corners; alumi, num tablet stamped " 871 Adj 1903 "
906.519
871.713

From Collins south along highway and east along railroad to Clarksfield.
Collins, 2.6 miles south of, T. 4 N., R. 21 W., in foundation wall of residence of William Dabon, center of west face; aluminum tablet stamped " 937 Adj 1903 "
937.936

From point near Collins south along highway to Fitchville, thence east to New London.

Hartland, T. 3 N., R. 21 W., 5.51 miles south of Collins, east end of north face of foundation wall of residence of W. H. Darling; tablet stamped " 946 Adj 1903 "
947. 160

Hartland, 3.65 miles south of, T. 3 N., R. 21 W., 700 feet south of highway fork, in east end of north face of foundation wall of residence of W. W. Meade; aluminum tablet stamped " 948 Adj 1903 "-
Fitchville, T. 2 N., R. 21 W., 7.18 miles south of Hartland, in east end of south face of foundation wall of Methodist Church; aluminum tablet stamped "995 Adj 1903 "
995.620

From Fitchville south along highway about 5 miles, thence east to Ruggles, thence north to Hereford.
Fitchville, 4.51 miles south of, on west end of north coping of arched Feet. culvert; copper bolt (B. \& O. R. R. b. m.)

1,042.458
Fitchville, 4.76 miles south of, T. 1 N., R. 21 W., in south end of west face of foundation wall of residence of W. P. Brown; aluminum tablet stamped "1065 Adj 1903 " 1, 065. 286
Ruggles, T. 1 N., R. 20 W., in south end of west face of foundation wall of Methodist Church; aluminum tablet stamped " 1103 Adj 1903 "

1, 103566

\section*{From Ruggles east along highway to Sullivan.}

Nova, 25 feet east of Baltimore \& Ohio R. R. station; northeast (beveled) corner of north coping of small culvert (B. \& O. R. R. bench mark 485 A )
Nova, T. 1 N., R. 19 W., in east end of south face of foundation wall of United Brethren Church; aluminum tablet stamped " 1127 Adj 1903." (Recovered by U. S. C. \& G. S.)
\(1,127.315\)
From Rochester east along highway to bench mark \(\mathbf{3 . 7 5}\) miles south of Wellington.
Rochester, 3.01 miles east of, in T. 2 N., R. 18 W., 500 feet east of 3 corners, top of north end of west abutment of highway bridge over Charlemont Creek; aluminum tablet stamped " 859 Adj 1903 " \(\qquad\) 859. 786

From Brighton east along highway to Wellington.
T. 3 N., Rs. 18 and 19 W., in east end of south face of foundation wall of brick schoolhouse; aluminum tablet stamped " 878 Adj 1903 "-.
878.555

> NEW MARTINSVILLE QUADRANGLE,
> [Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\). ]
> Primary leveling by R. E. McFadden in 1903 .
> From point near Alexis south to Sistersville.

Alexis, 3 miles southeast of, on farm of David Yeager, 0.2 mile west of house, north side of road, in ledge of rock; aluminum tablet stamped " 969 Stbnvl"
968. 322

From Proctor, W. Va., across Ohio River and up river road and Opossum Creek to Winklers Mill (single-spur line).
Opossum Creek, county bridge over mouth of, at east side of south abutment; square
621. 29

Winklers Mill, opposite Godfrey Winkler's house, county bridge over Opossum Creek, in top of north abutment, west side; bronze tablet stamped " 896 Grafton 1903 "
895.835

NEW MATAMORAS QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by R. G. DeFrees in 1903 .
From Sycamore Valley east along highways to point near Alexis.


\begin{tabular}{l|l} 
Mechanicsburg (Aitch post-office), iron bridge over Little Muskingim & \\
River, on northwest abutment; square cut & \(\mathbf{7 2 2 . 6 1}\)
\end{tabular}
Antioch, in front foundation of Christian Church; bronze tablet stamped " 1026 Stbnvl" \(1,025.675\)


\section*{From Sistersville southwest along highways via New Matamoras and Lawrence to Steel Run.}

New Matamoras, in southeast corner of foundation of school building; bronze tablet stamped " 637 Stbnvl"

Feet. 636. 892
884.358

Macabee Hill, 2 miles northeast of Ward, sec. 36 (old system), T. 3 N., R. 5 W., 0.5 mile northwest of Leith Run, 0.25 mile east of Miller's store, 150 feet west of bend in road, on hillside, north side of road, in ledge of rock; aluminum tablet stamped " 885 Stbnvl"-
Lawrence, 1.5 miles northeast of sec. 30 (old system), T. 3 N., R. 6 W., in northeast corner of foundation of "Goals Knob" schoolhouse (No. 3) ; aluminum tablet stamped " 1108 Stbnvl" 1, 107. 363

NEW PARIS QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(84^{\circ} 45^{\prime}-85^{\circ}\).] Primary leveling by E. C. Bibbee in 1914.
From Glenkarn south to New Paris, thence east to Gettysburg.
Hollandsburg, at the northwest corner of Main and Liberty streets, 1 foot north of maple tree, on concrete sidewalk; chiseled square....
Hollandsburg, 0.98 mile southwest of, at the northwest corner of \(T\) road west, 5 feet northeast of telephone pole, on large rock; chiseled square
Hollandsburg, 1.70 miles southwest, at \(T\) road east, at the northeast corner of road, on cornerstone; chiseled square
Hollandsburg, 2.80 miles southwest of, on south line of sec. 18, T. 10 N., R. 1 E., at northeast corner of \(T\) road east, about 0.1 mile east of Ohio-Indiana State line; iron post stamped " 1121 Ohio" \(\qquad\) 1, 121. 237
T. \(10 \mathrm{~N} .\), R. \(1 \mathrm{E} ., 0.2\) mile south of north line of sec. 30 , and about 0.1 mile east of Ohio-Indiana State line, at the southwest corner of \(T\) road west, on large rock; chiseled square
T. 10 N., R. 1 E., about 0.1 mile east of northwest corner of sec. 31, about 0.1 mile east of Ohio-Indiana State line, on west end of drain tile, at northwest corner of \(T\) road west; highest point \(1,077.07\)
T. \(10 \mathrm{~N} .\), R. 1 E., about 500 feet east of the southwest corner of Darke County, sec. 31, on concrete base to corner fence post, on inside of right-angle line to north and east; chiseled square
T. 9 N., R. 1 E., near the center of sec. 6, at the northwest corner of crossroads, 150 feet north of Pleasant Hill United Baptist Church, on west end of large flat rock over end of culvert; chiseled square
New Paris, 2.2 miles north and 1 mile west of, 0.5 mile east of OhioIndiana State line, on south side of T road north, at J. A. Ganetson's residence; iron post stamped " Prim.Trav.Sta. No. 39 Ohio 19101126 "
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1, 126. 352

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New Paris, 1.8 miles northeast of, 300 feet south of Pat. Harigan's residence, on east side of road, on ledge of rocks ; chiseled square__ 1, 167. 72
New Paris, 1.04 miles northeast of, 100 feet south of Dry Run schoolhouse, on most northern water-gate hinge, on east side of concrete arch culvert ; highest point \(\qquad\) 1, 031. 69
New Paris, on curb at southwest corner of Washington and Main streets, directly in front and in line with north side of Neal Hapner's grocery store, 1 foot east of telephone pole ; chiseled square__ 1, 039. 28
New Paris, 0.84 mile southwest of, on electric railroad, 300 feet north of C. Cross's residence, on south end west side of stone box culvert; chiseled square
\(1,018.55\)

Gettysburg, 4 miles west of, on National pike, 1.44 miles south of New Paris, 60 feet east of electric railroad, at the southwest corner Feet. of crossroads, on large flat rock; chiseled square_
Gettysburg, 3.11 miles west of, on National pike, directly opposite lane leading south to John Barney's residence, 4 feet south of north fence line, on large anchor rock; chiseled square
Gettysburg, 1.94 miles west of, on National pike, 43 feet east of lane leading to Alexander Barr's residence, on south side of road, on stone box culvert; chiseled square

From point 3 miles west of West Florence along highways north 3 miles, thence east 1.2 miles, thence north to point 1.4 miles south of New Paris.
T. 8 N., R. 1 E., 590 feet north of southwest corner of sec. 30, 5.47 miles south of New Westville, on Ohio-Indiana State line, on east side of road, 2 feet west of fence, in root of ash tree 20 inches in diameter ; copper nail, " 1140 " painted on fence near by \(1,140.45\)
T. 8 N., R. 1 E., 25 feet north of southwest corner of sec. 19, 4.55 miles south of New Westville, on Ohio-Indiana State line, on west side of road, 4 feet east of fence, in base of telephone guy pole; 60 penny spike, " 1142 " painted on telephone pole \(\qquad\) \(1,141.96\)
T. 8 N., R. 1 E., 20 feet north by 20 feet west of southwest corner of sec. 18, 3.49 miles southwest of New Westville, on Ohio-Indiana State line, in base of guy pole; 60-penny spike, " 1133 " painted on telephone pole 1, 132. 74
T. 8 N., R. 1 E., at northeast corner of sec. 19, 2.64 miles southwest of New Westville, on concrete base to corner fence post; chiseled square, " 1149 " painted on fence post \(1,148.81\)
T. 8 N., R. 1 E., near center of sec. \(17,1.82\) miles south of New Westville, 60 feet south of \(T\) road west, on west abutment of north end of stone culvert; chiseled square, " 1172 " painted on culvert 1, 171. 83
New Westville, 1.25 miles south of, at northwest corner of iron bridge over Elkhorn Creek, on extreme west end of wing wall; chiseled square, " 1117 " painted on girder of bridge
\(1,117.02\)
New Westville, 0.46 mile south of, 30 feet north of southeast corner of schoolhouse yard, in base of telephone pole; 60-penny nail level with ground, " 1180 " painted on telephone pole
New Westville, 25 feet south of southeast corner of crossroads, 1 foot west of fence directly opposite E. L. Brown's residence; iron post stamped " 1185 "

\section*{NORWALK QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).]
Precise leveling by the Baltimore \& Ohio R. R.
From point 1 mile west of Greenwich west to Chicago Junction (bench marks established by Baltimore \& Ohio R. R. adjusted by Coast and Geodetic Survey).
Greenwich, Huron County, 0.25 mile west of, in south end of east abutment of bridge for undergrade street crossing; copper bolt (B. \& O. b. m. 496)
\(1,029.623\)
Greenwich, 1 mile west of, in east end of north coping of large arch
at telegraph pole \(65 / 17 \frac{1}{2}\); copper bolt (B. \& O. b. m. 497)
Greenwich, 1.6 miles west of, 20 feet north of tracks, by telegraph pole 65/5; vertical rail section (B. \& O. b. m. 498)

Greenwich, 2.8 miles west of, in east end of north coping of small Feet. culvert at telegraph pole \(67 / 7 \frac{1}{2}\); copper bolt (B. \& O. b. m. 499) _- 1, 035. 688
Boughtonville, 1.5 miles east of, in east pedestal of highway bridge at telegraph pole 69/10, south of tracks; copper bolt (B. \& \(O\). b. m. 500)

1,020. 131
Boughtonville, 300 feet east of, in west end of south coping of arch bridge ; copper bolt (B. \& O. b. m. 501)
988. 324

Boughtonville, 0.8 mile west of, in east end of south coping of culvert at telegraph pole \(70 / 18\); copper bolt (B. \& O. b. m. 502)
964.390

Boughtonville, about 1.8 miles west of, at telegraph pole \(71 / 18\), in south end of east abutment of an undergrade crossing bridge; copper bolt (B. \& O. b. m. 503)
953.727

Chicago Junction, about 3 miles east of, 700 feet east of milepost 3 ; originally a copper bolt set in the south end of east abutment of an undergrade crossing bridge. In 1905 it was found that the copper bolt had been removed and the top surface of the stone close to the hole on the south side was used as the bench mark (B. \& O. b. m. 504)
935. 483

Chicago Junction, 2 miles east of, opposite milepost 2 ; section of rail set vertically in ground (B. \& O. b. m. 505)
937. 995

Chicago Junction, about 1 mile east of, 500 feet west of milepost 1 , set in the east end of south coping of a culvert; copper bolt (B. \& O. b. m. 506)
928.175

Chicago Junction, Huron County, 600 feet east of Baltimore \& Ohio R. R. crossing; section of rail set vertically in ground (B. \& O. b. m. 507)
914. 793

Chicago Junction, corner of Washington and First streets; crosscut in top surface of east end of top step of St. Francis Xavier Church (C. \& G. S. b. m. F5)
918.142

Chicago Junction, corner of Myrtle Avenue and Pearl Street, at southwest corner of the Shiedley Hotel block, on the side facing Myrtle Avenue, in second course of brick above water table; copper bolt (C. \& G. S. b. m. G5)
Chicago Junction, about 656 feet south of Baltimore \& Ohio R. R. tracks, on west side of Myrtle Avenue, in east end of sandstone sill of the Home Sav̈ings \& Banking Co.'s building; red-metal disk (C. \& G. S. b. m. H \({ }_{5}\) )
925. 867

Primary leveling by Philip Flitman, C. W. Howell, and J. J. McNulta in 1911.
From Chicago Junction south along highway to point near Plymouth.
New Haven, northeast corner of intersection of five roads, south end
of town; iron post stamped " 935 Ohio"

\section*{Temporary bench marks near Greenwich.}

Greenwich, 1.5 miles south of, northeast corner of crossroads ; copper nail in side of fence post (possibly 1 foot low)

1, 090.39
Greenwich, northwest corner of Main and Cross streets, 200 feet south of railroad; square cut on curb \(1,041,00\)
Greenwich, 0.25 mile west of, south end of east abutment of bridge over Townsend Street; copper bolt (B. \& O. R. R. b. m. No. 496) _-_ 1, 029. 62
Greenwich, 1.5 miles southwest of, 300 feet north of crossroads, west side of track; southeast spike in post of concrete rail rest

1, 051.01

\section*{From point near Hunts Corners to Norwalk.}

Hunts Corners, 0.8 mile east of, at northwest corner of north end of concrete culvert; top of parapet

Monroeville, 1.5 miles west of, at southeast corner of schoolhouse; east end of lower step

Feet.
748.42

Monroeville, at southwest corner of crossing; iron post stamped " 723 Ohio"
723.697

Monroeville, 2 miles east by 1 mile south of, at northeast corner of crossroads ; iron post stamped " 727 Ohio"
727. 467

Norwalk, 1.5 miles west by \(0 . \overline{0}\) mile south of, at bridge over East Branch of Huron River ; top of west end of north truss
692.54

Norwalk, at northeast corner of Main and West streets; spike in root of maple tree
729. 23

Norwalk, in front of courthouse; iron post stamped " 733 Ohio" 733. 411

\section*{From Fitchville northwest along highway to Norwalk.}

Fitchville, 0.8 mile north of, at northwest corner of \(T\) road west; spike in base of telephone pole, painted " 985.9 "
985. 89

Fitchville, 1.8 miles northwest of, at southwest corner of crossroads; spike in base of telephone pole, painted " 983.6 "
983. 58

Fitchville, 2.3 miles northwest of, at northwest corner of \(\mathbf{T}\) road south; iron post stamped " 974 "-
974. 362

Fitchville, 3.1 miles northwest of, 800 feet north of T road east, on northwest corner of west abutment of bridge; chiseled square painted " 975.0 "
974.94

Olena, 1.8 miles southeast of, at northwest corner of \(\mathbf{T}\) road west; spike in base of telephone pole, painted " 989.2 "
989.13

Olena, at southeast corner of crossroads; iron post stamped " 955 Ohio"
954.904

Olena, 1.8 miles northwest of, at northwest corner of \(\mathbf{T}\) road west; spike in base of telephone pole, painted " 928.1 "
927.98

Olena, 2.8 miles northwest of, at northeast corner of T road east; spike in base of telephone pole, painted " 900.5 "
900.42

Norwalk, 2.8 miles southeast of, at southwest corner of crossroads; iron post stamped " 846 Ohio"
845.594

Norwalk, 1.7 miles southeast of, at northwest corner of crossroads; spike in base of telegraph pole, painted " 784.0 "
783.82

Norwalk, 1.2 miles southeast of, at road west to county infirmary, at southwest corner of \(T\) road; spike in base of fence post, painted " 775.2 "
775.09

From Norwalk southeast along highway to point 2.6 miles south of Collins. \({ }^{1}\)
Norwalk, at center of street crossing of Wheeling \& Lake Erie R. R.; top of north rail of main track, painted " 719.2 " \(\qquad\)
Norwalk, 1.6 miles east of, at railroad crossing, east of waterworks; spike in base of telegraph pole, painted " 770.6 " \(\qquad\)
Norwalk, 2.7 miles east of, at southeast corner of crossroads, near brick schoolhouse ; chiseled square on stone culvert, painted " 832.7 "
Norwalk, 4.1 miles east of, at northwest corner of crossroads; iron post stamped " 881 " \(\qquad\)
Norwalk, 5.6 miles east of, 1.5 miles northwest of Hartland station, at northwest corner of T road north; spike in base of corner post, painted " 905.2 "
718. 9
770.27
832.31
880.043
904.60

\footnotetext{
\({ }^{1}\) Double line, in adjustment of which it was necessary to revise adjustment of lines in north half of New London quadrangle, raising by 0.4 foot the Bulletin 411 value for the bench mark 2.6 miles south of Collins.
\[
45281^{\circ}-\text { Bull. } 651-17-18
\]
}

From Boughtonville north along highways to Norwalk.
Boughtonville, 1 mile north of, at northeast corner of crossroads;
spike in base of fence post, painted " 965.4 "
Boughtonville, 1.7 miles north of, at southwest corner of crossroads; spike in root of maple tree, painted " 948.0 " \(\qquad\)
North Fairfield, 1.1 miles south of, at southwest corner of crossroads; spike in base of corner post, painted " 946.4 "
North Fairfield, at northeast corner of crossroads; iron post stamped " 932 "

\section*{North Fairfield, 1 mile north of, at northeast corner of crossroads; spike in base of telephone pole, painted " 911.0 " \\ 911.02}

North Fairfield, 1.7 miles north of, at southeast corner of T road
east; spike in base of telephone pole, painted " 897.9 "---- 897.85
North Fairfield, 2.4 miles north of, at southeast corner of crossroads ;
iron post stamped " Prim. Trav. Sta. No. \(48,1910,884\) " 884.346

Norwalk, 4.7 miles south of, at northeast corner of crossroads; spike
in base of telephone pole, painted " 845.5 "
\(\begin{array}{lll}\text { Norwalk, } 3.7 \text { miles south of, at southwest corner of crossroads; spike } \\ \text { in base of trolley pole, painted " } 818.7 \text { " } & 818.61\end{array}\)
Norwalk, 2.1 miles south of, at southeast corner of \(T\) road east; spike in base of telephone pole, painted " 777.3 "
\(\begin{array}{lll}\text { Norwalk, } 1.5 \text { miles south of, on north end of west abutment of stone- } & \\ \text { arch bridge ; chiseled square, painted " } 733.6 \text { "-------------- } & 733.46\end{array}\)
Norwalk, 1.1 miles south of, at southwest corner of T road west; spike in base of telephone pole, painted " 746.6 "

From point 3 miles east of Chicago Junction north along highways to point 3 miles west of Norwalk.

Steuben, 3.5 miles south of, at southeast corner of crossing; spike in telegraph pole, painted " 937.570 "
Steuben, 2.5 miles south of, at northeast corner of crossroads; spike in base of trolley pole, painted " 944.0 "
\(\begin{array}{ccc}\text { Steuben, } 1.8 \text { miles south of, at northeast corner of crossroads; spike } & \\ \text { in base of trolley pole, painted " } 920.5 \text { " } & 920.45\end{array}\)
Steuben, 1 mile south of, at southeast corner of crossroads; spike in base of trolley pole, painted " 890.2 "
Steuben, at southeast corner of public-square lot; iron post stamped
" 871 "
Steuben, 1 mile north of, on north bridge abutment at west end, 300 feet south of crossroads; chiseled square, painted " 813.4 "--
Steuben, 1.8 miles north of, at head of \(T\) road west; spike in base of telegraph pole 3439 , painted " 824.5 "
Steuben, 2.5 miles north of, at southwest corner of crossroads; spike in brace of telephone pole, painted " 818.9 "
Steuben, 3.6 miles north of, at southeast corner of T road east; spike
in base of telephone pole, painted " 797.0 "----------------- \(796.9 \%\)
947.97
946. 37
777.25
746.52
937. 56
944. 01
890.17
813.37
824.40
818. 81
911. 20
936.22
965.35
932. 363
\(\square\)

Steuben, 4.1 miles north of, 2.2 miles west of Peru, at southeast corner of crossroads; iron post stamped " 807 Ohio"

Feet. 807. 084

Steuben, 4.8 miles north of, at head of \(\mathbf{T}\) road west; spike in base of telephone pole, painted " 781.0 "
780.95

Steuben, 5.6 miles north of, at southeast corner of \(T\) road east ; spike in base of telegraph pole, painted "770.1"
770.01

Steuben, 6.3 miles north of, at southeast corner of T road east; spike in base of telephone pole, painted " 761.5 "
761.34

Monroeville, 2 miles east by 3.4 miles south of, at northeast corner of \(T\) road north; spike in base of telephone-pole anchor, painted "716.8"
716. 67

Monroeville, 2 miles east by 2.7 miles south of, at head of lane east; spike in base of telephone pole 3669 , painted " 755.0 "
754. 89

Primary leveling by E. C. Bibbee in 1912.
From Monroeville southwest along Baltimore \& Ohio R. R. to Havana.
Monroeville, southwest corner of Baltimore \& Ohio R. R. crossing; iron post stamped " 723 "
723.697

Monroeville, 1.4 miles south of, on east side of railroad at crossing; copper nail in top of fence post
744.15

Monroeville, 1.7 miles south of, on west side of railroad, 5 feet east of right of way ; highest point on granite rock
742.29

Monroeville, 2.4 miles south of, 15 feet west of railroad at crossing; highest point on south end of culvert under wagon road
Pontiac, 0.7 mile north of, spike in base of third telegraph pole north of pole \(97 / 5\) \(\qquad\)
Pontiac, 350 feet south of station, on west side of public road, 30 feet northeast of railroad crossing; iron post stamped " 767 " \(\qquad\)
Pontiac, 1 mile south of, 70 feet west of railroad at crossing; chiseled square on south end of east side of stone culvert
773.97

Havana, 1.4 miles north of, 25 feet west of right of way, south side of railroad at crossing; copper nail in top of fence post \(\qquad\)
Havana, 0.8 mile north of, first drift bolt head in first trestle north of Havana, south end east side of trestle
818.59
818. 48
833. 847
838.617

From Centerton southeast along Baltimore \& Ohio R. R. to Chicago Junction.
Chicago Junction, 1 mile north of, 60 feet north of railroad at crossing; spike in telephone pole
892. 40

Chicago Junction, 600 feet east of, on Baltimore \& Ohio R. R. crossing; rail section set vertically in ground
Chicago Junction, corner of Washington and First streets; cross cut in top surface of east end of top step of St. Francis Xavier Church (Coast and Geodetic Survey bench mark \(\mathrm{F}_{5}\) )
918.142

\section*{OAK HARBOR QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by Dean Halford in 1899.
From point near Limestone to Rocky Ridge.
Limestone, 2 miles northeast of, east side of sec. 13 , T. 7 N., R. 14 E., 600 feet south of creek road, 0.3 mile east of Daniel Muggy's house, in west end of north pier abutment of bridge over Toussaint Creek; bronze tablet stamped "Toledo 578 "
579.125

Lacarne, 1.5 miles west of, near northeast corner of sec. 1, T. 6 N., R. 15 E ., on south side of road to Oak Harbor, in top tier of culvert; bronze tablet stamped "Toledo 579 "

Feet.
580.210

Oak Harbor, on east end of second tier of second abutment from north end of bridge over Portage River; bronze tablet stamped "Toledo 581" \(\qquad\)
Rocky Ridge, 0.75 mile south by 0.5 mile east of, on east side of sec. 35, T. 7 N., R. 14 E., 0.25 mile north of Genoa-Oak Harbor road, in west end of south pier of bridge over branch; bronze tablet stamped "Toledo 596 "
581.944
596.707

\section*{OAKHILL QUADRANGLE.}
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\) : longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).] .
Primary leveling by E. L. McNair in 1897-98.
From Rempel south along Cincinnati, Hamilton \& Dayton Ry. to Gallia, thence southwest to Olive Furnace, thence northwest along highway to Hales Creek.
Rempel, 575 feet north of station, near south end of rock cut on curve of about 8 feet, west of center of track of Cincinnati, Hamilton \& Dayton Ry. ; bronze tablet stamped " 688 A"
Oakhill, Madison Township, 25 feet west of Cincinnati, Hamilton \& Dayton Ry., 15 feet north of highway at crossing; iron post stamped " 695 I" \(\qquad\)
Gallia, northwest corner of store and post office, between doors of post office and telegraph office, north side of building, 19 feet from northwest corner, in sandstone water table; bronze tablet stamped " 657 I"
Greenfield, section 31, on land of Lloyd heirs, in field, 1,200 feet from house of Mrs. Jenkins, in sandstone ledge; copper bolt stamped "884 I"

From Hales Creek north to Mabee.
Esther, 1.4 miles northwest of, 1.9 miles northwest of Monroe station on Baltimore \& Ohio Southwestern R. R., in northern half of northeast quarter section 29, Jefferson Township, 140 feet east of highway, 0.25 mile north of water tank on coal railway, in face of sandstone ledge; bronze tablet stamped " 803 I"
804.773

From Mabee via Grahamsville and Camba to Clay.
Camba, 4.3 miles west of, Freedman Church, Franklin Township, between the two front doors, set horizontally in center of foundation stone; bronze tablet stamped " 739 I "
Clay, 0.75 mile east of, on road to Madison furnace, district schoolhouse No. 3, Madison Township, in foundation stone under southwest corner ; bronze tablet stamped " 745 I " \(\qquad\)

\section*{At Hales Creek.}

Hales Creek, on north side of road about 0.25 mile west of station and postoffice, on land of Mrs. Gertrude Kuhner, 64 feet above level of road, in extreme west end of perpendicular sandstone bluff about 50 feet high; copper bolt stamped " 714 I"
741. 757
747. 574
715.985

\section*{Primary leveling by C. E. Mills in 1910.}

From Edmunds switch along Baltimore \& Ohio Southwestern R. R. to Keystone.
South Webster, in concrete curbing, east end of station platform, 10 feet west of road crossing; chiseled square
Bloom, 0.2 mile south of, 20 feet north of road and 15 feet east of

Feet.railroad at road crossing; iron post stamped " 633 " 633. 170
Eifort, on north end of concrete curbing of station platform; chiseled square painted " 665.5 "
665.50
Eifort, 1.1 miles northeast of, 60 feet north of milepost "H 31P 25," 10 feet south of road, 10 feet west of railroad, at road crossing; iron post stamped " 676 "
675.857

Black Fork, 10 feet north of northeast corner of station, 20 feet west of railroad; iron post stamped " 687 "
686. 88.4
Oakhill, 35 feet west of railroad, 15 feet south of center of road, road crossing at Baltimore \& Ohio Southwestern R. R. station; iron post stamped " 707 "
707. 417
Clay, 40 feet south of railroad and 20 feet east of road at road cross- .
ing near station; iron post stamped " 695 ".--.-. 694.964
Camba, 25 feet south of station, 20 feet east of track, under overhead highway bridge; iron post stamped " 728 " \(\qquad\) 728.538

OBERLIN QUADRANGLE.
[Latitude \(41^{\circ} 155^{\prime}-41^{\circ} 30^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by George Bailey in 1901.
From Eagle Cliff via Lorain, North Amherst, and Elyria to North Ridgeville.
Lorain, Erie Street Bridge over Black River, north side of street, inside railing, west abutment; aluminum tablet stamped " 598 Cleveland 1901 "
598. 600

North Amherst, 0.75 mile west of, east wall of Lake Shore \& Michigan Southern Ry. bridge, in third course of stone 5 feet 4 inches from ground, in eighth stone from south end; bronze tablet stamped " 678 Cleveland 1901"
678. 847

Elyria, in top of foundation stone at northwest corner of courthouse; aluminum tablet stamped " 735 Cleveland 1901 "
721.322

\section*{From South Amherst via Oberlin and Grafton to Fields.}

Oberlin, northwest corner of Lorain and Professor streets, Severance Laboratory of Oberlin College, in southeast corner of east wing; aluminum tablet stamped " 817 Cleveland 1901." (Set at same elevation as old tablet removed by destruction of entrance wall)
817.072

Grafton, 0.5 mile southwest of, highway bridge over East Branch (of Black River), in top of northeast wing wall; bronze tablet stamped " 793 Cleveland 1901 "
793. 811

\section*{OCTA QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by B. J. Green in 1903.
From Sedalia northwest along highway via South Solon to Selma.
Sedalia, 3.7 miles west of, on west end of south abutment of covered wooden bridge over Paint Creek; chiseled square
Sedalia, 4.95 miles west of, on north end of east abutment of iron bridge; chiseled square

1, 081.90
South Solon, on north wall near northeast corner of city building; Feet. aluminum tablet stamped " 1117 Columbus 1903 ".-...................... 117. 700
South Solon, 3.8 miles west of, on south end of small culvert at cross-
roads (schoolhouse to north) ; chiseled square

Primary leveling by C. E. Mills, S. L. Parker, and F. L. Whaley in 1913.
From South Solon south along Detroit, Toledo \& Ironton Ry, to Parrot station, thence east to bridge over Paint Creek.

South Solon, road crossing Detroit, Toledo \& Ironton Ry., 300 feet
south of station; top of east rail
South Solon, 1.7 miles south of, on west side of Detroit, Toledo \& Ironton Ry. track, in top of box culvert under track; spike_......... 1, 097. \(73^{\circ}\)
Blessing, 30 feet southwest of center of road crossing, in base of railroad-crossing sign ; spike
\(1,100.58\)
Blessing, 30 feet south of railroad, 20 feet south of road; iron post stamped " 1101 "

1, 101.215
Jeffersonville, 2.9 miles northwest of, at road crossing; top of west
rail \(1,093.8\)
Jeffersonville, 2.8 miles northwest of, in southeast corner of road
crossing, in base of telephone pole; spike_--087. 71
Jeffersonville, 1.3 miles north of, in southwest corner of crossroads, 60 feet southwest of road crossing, on south end of concrete culvert; chiseled square 1, 058.26
Jeffersonville, 60 feet north of center of road crossing, 20 feet west
of railroad tracks; iron post stamped " 1047 ".--. \(1,047.230\)
Jeffersonville, southeast corner of Main and High streets, on northwest corner of stone curbing of pump; chiseled square

1,055. 47

Jeffersonville, 2.3 miles south of, 1.1 miles north of Parrott, 100 feet east of road crossing, on west abutment northwest end of steel highway bridge over Sugar Creek; chiseled square

1, 035. 39
Parrott, 50 feet west of railroad, 20 feet south of road, southeast corner of wagon scales; painted square

1, 040.77
Parrott, road crossing Detroit, Toledo \& Ironton Ry: ; top of west rail_ 1, 041.1
Parrott, 0.3 mile east of, northwest corner of crossroads, on top of concrete drain pipe; chiseled square
\(1,055.54\)
Parrott, 1.5 miles east of, on north side of road, at \(T\) road south; iron post stamped " Prim. Trav. Sta. No. 59, 1023 "
\(1,023.375\)
Parrott, 1.8 miles east of, northeast corner of \(T\) road north, in base of
fence post; spike
From Blessing west along highway to point 4.5 miles southeast of Cedarville, thence southwest to Junker schoolhouse.

Blessing, 0.8 mile west of, at crossroads, on Moon and Evans pike,
on north end of steel drain under pike; highest part
Blessing, 1.8 miles west of, on Moon and Evans pike, on north end of stone culvert ; chiseled square.

1, 085.94

Shady Grove, 0.9 mile west of, 600 feet west of Green-Fayette county line. on north end of stone culvert; chiseled square
\(1,100.92\)
Shady Grove, 0.9 mile west of, 600 feet west of Green-Fayette county line, 30 feet east of stone culvert, on north side of road; iron post Feet. stamped ' 1101 " 1, 101. 271
Shady Grove, 1.9 miles west of, northeast corner of \(\mathbf{T}\) road east, on south side of \(3 \frac{1}{2}\)-foot black-locust tree; in base; iron bolt
Shady Grove, 2.6 miles west of, on south side of road, on highest point on granite bowlder 4 feet in diameter; painted square ..... 1, 098. 80
Belle Center, 0.2 mile south of, southeast corner of crossroads, on south end of stone culvert; chiseled square ..... \(1,072.88\)
Bell Center, 50 feet southeast of schoolhouse, on southwest corner of water trough at northwest corner of \(\mathbf{T}\) road west; chiseled square ..... 1, 079.61
Bell Center, on east side of road at T road west; iron post stamped " 1078 " ..... 1, 078.419
Bell Center, \(\mathbf{1 . 8}\) miles west of, northeast corner of \(\mathbf{T}\) road east, on north end of 10 -inch tile drain pipe; highest point ..... 1, 065.09
Cedarville, 4.5 miles southeast of, northwest corner of \(\mathbf{T}\) road south-west, on north end of 10 -inch tile; highest point\(1,062.03\)
Cedarville, 4.3 miles northwest of, on Jamestown pike, thence 0.5mile southwest of, in northeast corner of T road southeast, in baseof fence post; spike\(1,060.29\)
Jamestown, 2.5 miles northwest of, 600 feet southwest of \(\mathbf{T}\) roadsouthwest, north abutment west end of bridge over North Branch ofCaesars Creek; chiseled square1,048. 98
From point near Jamestown east along highway to Jefferson.

Jamestown, 1.5 miles northwest of, on Xenia pike, on northeast corner of stone drain 200 feet west of \(\mathbf{T}\) road south, at schoolhouse (district 1, Silver Creek township) ; chiseled square
Jamestown, in northwest corner of cross streets, 350 feet west of United Presbyterian Church, on sontheast corner of concrete walk; chiseled square
Jamestown, southeast corner of cross streets, in center of town, on large stone; chiseled square
Jamestown, 2 feet east of south entrance to public school building; iron post stamped " 1064 Ohio"-
Jamestown, 0.6 mile east of, in southwest corner of road forks, on top of stone drain; chiseled square
Jamestown, 1.25 miles east of, in southwest corner of \(\mathbf{T}\) road south, in base of telephone pole; spike
Jamestown, 1.9 miles east of, in southeast corner of T road south, in base of telephone pole; spike
Jamestown, 3.2 miles east of, on Jeffersonville pike, in northwest corner of school yard (district 6, Silver Creek Township) ; iron post stamped " 1087 " \(1,087.546\)
Jamestown, 3.7 miles east of, on north side of road at \(\mathbf{T}\) road south, in base of telephone pole; spike

1,080. 63
Jeffersonville, 4 miles west of, 200 feet west of crossroads, on south end east abutment of small iron bridge; chiseled square
Jeffersonville, 3.1 miles west of, on Jamestown pike, 280 feet west of steel bridge over Rattlesnake Creek; iron post stamped " 1057 ".-. 1, 056.973
Jeffersonville, 2.7 miles west of, in northeast corner of crossroads, on concrete base of fence post; chiseled square

1, 081. 18
Jeffersonville, 1.5 miles west of, in northeast corner of T road north, Feet.in base of fence post; spike1, 074.54
Jeffersonville, 1 mile west of, in southwest corner of road forks, in base of fence post; spike ..... 1, 065.92
From Parrott station west along highway to point 2 miles south by 1 mile west of Jamestown.
Parrott, 0.8 mile west of, southeast corner of \(T\) road east, on concrete base of fence post; chiseled square ..... \(1,033.79\)
Cunningham, 1.5 miles north of, in southwest corner of crossroads, inbase of telephone pole; copper nail\(1,035.39\)
Milledgeville, 1 mile north by 1.2 miles southeast of, on south side of road at \(T\) road north, in base of telephone pole; spike ..... 1, 040,41
Milledgeville, 1 mile north of, in southeast corner of T road south, on base of concrete fence post ; chiseled square ..... 1, 049.97
West Lancaster, 0.6 mile southeast of, road crossing Detroit, Toledo \& Ironton R. R.; top of west rail ..... \(1,059.0\)
West Lancaster, in southwest corner of \(T\) road south; iron post stamped "Prim. Trav. Sta. No. 581909 Ohio 1063 " ..... 1, 063. 482
West Lancaster, 0.5 mile south of, northwest corner of \(T\) road west, on north end of iron drainpipe; chiseled square ..... \(1,046.45\)
Edgefield, 0.25 mile north of, in southwest corner of crossroads, on south end of iron drainpipe; painted square ..... 1, 063.75
Edgefield, 0.75 mile west of, road crossing Cincinnati, Hamilton \& Dayton R. R. ; top of north rail ..... \(1,068.0\)
Pearson, 1.25 miles northwest of, in northeast corner of T road north- east, in base of fence post; spike ..... \(1,064.05\)
learson, 1.25 miles northwest of, in northwest corner of \(T\) road northeast; iron post stamped " 1065 Ohio" ..... 1, 064.930
Pearson, 2.2 miles northwest of, at T road south, on east end of first step to entrance of Pleasant Valley schoolhouse; chiseled square__ 1,075. 48Jamestown, 2 miles south by 2 miles east of, in northwest corner ofcrossroads, on top of stone drain; chiseled square\(1,077.97\)
Jamestown, 2 miles south by 1.5 miles east of, on north side of road at \(T\) road south, in base of fence post; spike ..... \(1,085.95\)
Jamestown, 2 miles south by 0.4 mile east of, south end of vitrified pipe drain at \(T\) road north; painted square ..... 1, 085.64
Jamestown, 2 miles south of, in southeast corner of crossroads; iron post stamped " Prim. Trav. Sta. No. 55 Ohio 1909, 1068 " ..... 1,068. 288
Jamestown, 2 miles south by 0.6 mile west of, west abutment north end of steel bridge ; chiseled square ..... 1, 054.78
From point near Cunningham south along highway to point 1.85 miles south ofCunningham, thence west to point near Bowersvile.
Cunningham, 1.2 miles north of, northwest corner of north abutment of steel bridge; chiseled square ..... 1, 027.86
Cunningham, road crossing Cincinnati, Hamilton \& Dayton R. R.; top of north rail ..... 1, 033.7
Cunningham, in southwest corner of road crossing, in base of tele- phone pole; spike ..... \(1,032.66\)
Cunningham, 0.5 mile south of, in southeast corner of T road east; iron post stamped " 1030 " ..... 1, 029.987
Cunningham, 1.85 miles south of, in northeast corner of crossroads, in east end of wooden drain; nailhead painted white ..... 1, 029.12
Plymouth, 1.7 miles southeast of, southeast corner of T road east, in ..... Feet.base of fence post ; copper nail1, 037. 42
Plymouth, 1.5 miles south by 0.5 mile west of, south end of west abutment of large steel bridge over Rattlesnake Creek; chiseled square, painted " 1029.8 " ..... 1,029.94
Rattlesnake Creek; surface of water, November 15, 1913 ..... 1, 017
Plymouth, 1.5 miles south by 1.6 miles southwest of, northwest corner of crossroads, at Crab-apple Church and schoolhouse; iron post stamped " 1030 " ..... 1,030. 176
Center, 0.5 mile southwest by 2 miles southeast of, in southwest cor- ner of road forks, in base of fence post ; copper nail ..... 1, 039.36
Center, 1.8 miles southwest by 1 mile southeast of, in south end of wooden culvert over creek; nail head painted white ..... 1, 043.93
Center, 1.8 miles southwest of, in south corner of crossroads at brick schoolhouse; iron post stamped " 1056 " ..... \(1,055.722\)
Bowersville, 3 miles southeast by 1 mile northeast of, in south corner of \(T\) road southwest, in south end of iron drain pipe; painted square ..... 1, 061.19
Bowersville, 2 miles southeast by 0.9 mile northeast of, top of stone culvert in east corner of crossroads; chiseled square ..... \(1,065.97\)
Bowersville, 2 miles southeast of, south corner of crossroads at brick schoolhouse, in base of fence post; spike ..... 1, 069. 61
Bowersville, 2.25 miles south of, in northwest corner of crossroads; iron post stamped " 1079 " ..... 1,079. 082
Bowersville, 1 mile south of, on west side of road at bend, in base of telephone pole; spike ..... 1, 082. 24
Bowersville, at road crossing Detroit, Toledo \& Ironton R. R., at sta- tion; top of north rail ..... 1, 088.1
Bowersville, northwest corner of Maysville and Xenia streets, on concrete curbing; chiseled square ..... 1, 088.81
Bowersville, 0.4 mile west of, 300 feet east of T road south, on north- east corner of stone culvert; chiseled square ..... \(1,064.81\)
Bowersvilk, 0.9 mile west of, in northeast corner of T road north, in base of fence post; spike ..... \(1,054.58\)
Bowersville, 1.25 miles west of, on west end of iron drain pipe insouthwest corner of \(T\) road south ; painted square\(1,047.00\)
From point 1.8 miles south of Cunningham south along highway to Glendon, thence southwest along Pennsylvania and Baltimore \& Ohio railroads to Sabina, thence northwest along highway to point 2 miles north of Reesville.
Cunningham, 2.5 miles south of, in northwest corner of T road north in base of fence post; spike ..... 1, 027.70Glendon, 2.1 miles northwest of, on east side of road forks at school-house (subdistrict 2, Concord Township), on concrete base of fencepost brace; chiseled square1, 026. 16
Glendon, 1 mile northwest of, on west side of road opposite S. Treiten-berger's residence, first fence post south of gate; spike in base_\(1,030.53\)
Glendon, 300 feet north of highway bridge over Baltimore \& Ohio andCincinnati \& Muskingum Valley railroads, on west side of road, innorthwest corner of drive to elevator ; iron post stamped " 1032 "-1,031. 677
Glendon, 0.6 mile southwest of, in base of telegraph pole between Cin-cinnati \& Muskingum Valley and Baltimore \& Ohio railroads, atroad crossing; spike1, 012.02
Glendon, 1.4 miles southwest of, northeast corner of north end of concrete culvert on Cincinnati \& Muskingum Valley R. R.; chiseled square \(\qquad\) Feet. 1, 015.89
Sabina, 1.8 miles northwest of, 170 feet northwest of private road northeast, on west end of south abutment of small iron bridge; chiseled square
Reesville, 2 miles north by 0.8 mile northeast of, on south end of west abutment of small iron bridge; chiseled square
Reesville, 2 miles north of, 2.5 miles southeast of Bloomington, northwest corner of T road west; iron post stamped " 1086 "
\(1,085.899\)
From point 2 miles north of Reesville west along highway to point near Deserted Camp.
Bloomington, 2 miles south of, 2.5 miles northwest of Reesville, on top of ridge south side of road, in gate post of O. H. Howard's farm ; copper nail painted "1110.8 T. B. M." \(\qquad\) \(1,110.84\)
Reesville, 2.5 miles northwest of, 2.5 miles southwest of Bloomington, in telephone post opposite D. H. Johnson's house ; copper nail painted " 1051.7 T. B. M."
Deserted Camp, 3.5 miles northeast of, 40 feet east of junction of Bloomington and Port William pikes; south end of stone culvert; chiseled square painted " 1038.2 T. B. M."
Deserted Camp, 2.6 miles northeast of, at crossroads of Bloomington and Melvin pikes, south end of stone culvert ; chiseled square painted " 1047 T. B. M."
\(1,046.98\)
From point 3.5 miles northeast of Deserted Camp northwest to point 3.5 miles southeast of Port William
Port William, 3.5 miles southeast of, 2.5 miles southwest of Bloomington, in southwest corner of crossroads; iron post stamped "1044, Ohio"

From point near Port William east and north along highway to point 1 mile west of Bowersville.

Bowersville, 1.5 miles southwest of, 3.16 miles northeast of Port William, in southwest corner of concrete floor of steel bridge over Love Creek ; chiseled square painted "1042.5 T. B. M." 1,042. 65

\section*{OTTAWA QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]

\section*{Precise leveling by the Coast and Geodetic Survey.}

From Leipsic southwest along Cincinnati, Hamilton \& Dayton Ry. to Ottawa.
Ottawa Township, Putnam County, on line of Cincinnati, Hamilton \& Dayton Ry., about 0.5 mile below G. W. Miller's residence and 492 feet north of milepost 50 T , on southeast quarter of stone culvert 54, on bridge seat course, 6 inches north of east end of stone above and 2 feet 10 inches east of wing angle; chiseled square (C. \& G. S. b. m. M \({ }_{1}\) )
Ottawa, south side of Mainleron Street, about 170 feet west of railroad, on large stone step of foundation, 5 feet east of east side of east pillar of stairway entrance; chiseled square (C. \& G. S. b. \(\mathrm{m} . \mathrm{N}_{1}\) )
Precise leveling by C. H. Semper in 1906.

\section*{From Ottawa west along Cincinnati, Hamilton \& Dayton Ry. to Dorninton.}

Ottawa, in front of station ; top of rail
Feet.
Predor, in front of station ; top of rail
730. 1

Predor, 1.36 miles west of, northeast corner of foundation of Barney Rosenbaum's farmhouse; aluminum tablet stamped " 733 "
735.4
733.383

Predor, 4.5 miles west of ; 0.5 mile east of avenue, railroad culvert, on north side of track, aluminum tablet stamped " 726 "
Avis, road crossing at station ; top of rail
726.348

Croswell, in front of station; top of rail
728.9

Croswell, 0.5 mile west of, culvert on north side of track, opposite George Bassinger's farmhouse ; aluminum tablet stamped "726"-
Porninton, grade crossing of Cincinnati, Hamilton \& Dayton Ry. with Ohio Electric R. R. ; top of rail
729.2
726. 260
728. 6

Primary leveling by R. C. Seitz in 1907.
At Ottawa.
Ottawa, southeast corner of sec. 21, T. 1 N., R. 7 E., in water table of Hotel Dumont, 2 feet south of side entrance; aluminum tablet stamped " 731 Adj 1903 "
731. 028

From Leipsic west along New York, Chicago \& St. Louis R. R. to Continental.
West Leipsic, in front of station ; top of rail \(\qquad\)
West Leipsic, 2.55 miles west of, west side of highway crossing, 400 feet north of railroad, in top of concrete catch basin; aluminum tablet stamped " 756 "
Miller City, 490 feet north of railroad, in top of south guard of concrete culvert over Miller cut-off, 3 feet from west end; aluminum tablet stamped " 733 " \(\qquad\)
Miller City, in front of station; top of rail
Kieferville, 300 feet east of station, 75 feet south of railroad and 15 feet west of highway, in concrete catch basin; aluminum tablet stamped "721" \(\qquad\)
Kieferville, in front of station; top of rail
From Leipsic north along Detroit, Toledo \& Ironton Ry. to Hamler, thence northeast along Baltimore \& Ohio R. R. to Holgate.

Prentiss, in northwest corner of foundation of elevator; aluminum tablet stamped " 745 "
Gallup, in west face of retaining wall under south approach to elevator; aluminum tablet stamped " 735 "
Gallup, at road crossing ; top of rail
Hamler, crossing of the Baltimore \& Ohio R. R., and the Detroit, Toledo \& Ironton Ry . ; top of rail
Hamler, 900 feet west of Baltimore \& Ohio R. R. station, at west end of south coping of masonry culvert; aluminum tablet stamped "714"
Hamler, 2.42 miles west of, at highway crossing, at west side of concrete culvert about 30 feet south of railroad, in elliptical name plate; crosscut stamped " 710 "
732. 909
744. 665
735. 248
732.5
715. 7
765. 0
756. 267
734.1
720.719
726.0
713. 950
709. 622

\section*{Near Holgate.}

Holgate, 0.75 mile southeast of railroad station, 100 feet north of Bal-
timore \& Ohio R. R., in southeast corner of forks of road; primary traverse post stamped " Prim. Trav. Sta. No. 10, 1905, 710 " \(\qquad\)
Feet.
710.297
712.146
735.0
739.534
743.6
721.0
717. 535
722.1
722.518

OTWAY QUADRANGLE.
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Precise leveling by W. H. Monahan in 1906 along the Norfolk \& Western Ry.
From Sargents to Clifford.
Sargents, 2.47 miles south of, railroad bridge over creek, on west side of north abutment; aluminum tablet stamped " 551 "
550.931

Wakefield, 3.07 miles south of, stone culvert on east side of track, southwest corner of stone abutment; aluminum tablet stamped " 556 "
Clifford, in front of station; ton of rail
553.9
539.33

\section*{Primary leveling by C. B. Shaw, Howard Clark, and C. E. Mills in 1910.}

From Rushtown along Norfolk \& Western Ry. to Rarden.
Rushtown, 600 feet north of station, northwest corner of road crossing, in front of George Russel's residence ; iron post stamped " 539 "-
McDermott, 120 feet east of station, 15 feet west of road at crossing; iron post stamped " 575 "
Arion, 35 feet south of railroad, opposite station, 15 feet east of road, 1 foot west of post-office building ; iron post stamped " 587 " \(\qquad\)
Henley, road crossing at station, 30 feet north of railroad and 10 feet east of road; iron post stamped " 574 " \(\qquad\) Otway, north side of station platform, 20 feet west of station; iron past stamped " 585 " \(\qquad\)
Young, 0.3 mile northwest of, about 150 feet west of road crossing, 5 feet south of highway; iron post stamped " 598 "
539. 265
574. 609
587.091
574.255
584. 728
598.392

Rarden, \(\mathbf{1 7 5}\) feet west of station, north of track, 75 feet west of creek, on north side of right of way line; iron post stamped " 613 "-....-

Feet.
612. 755

From Wakefield west along public roads via Camp and Ladd to Duke, thence south to Rarden.

Wakefield, a little north of town, 2.2 miles south of Sargents, on west side of north abutment of railroad bridge over creek; aluminum tablet stamped " 551 "
550.931

Coopersville, 2.2 miles west of, northeast corner of \(\mathbf{T}\) road north, 50 feet from center of road; iron post stamped " 582 "
581.627

Camp, 1.2 miles west of, southwest corner of crossroads, near fence corner, 50 feet west of road north; iron post stamped "Prim. Trav. Sta. No. 80, 1909, Ohio, 665 "
665. 194

Camp, 2.7 miles west of, top of stone on north side of road; chiseled cross painted " 779.3 " \(\qquad\)
Ladd, southwest corner of crossroads, 30 feet from center of roads; iron post stamped " 1105 "
\(1,104.770\)
Duke, 200 feet east of road forks in center of town, south side of road opposite schoolhouse; iron post stamped " 1237 "

1,237. 149
Duke, 3.2 miles southwest of, west of road on south side of large hill, in base of stump; spike painted " 1107.5 "
\(1,107.47\)
Duke, 3.8 miles southwest of, 2.7 miles northwest of Rarden, at foot of Wallace Hill, 250 feet northwest of Clark Foster's residence, 20 feet west of center of road; iron post stamped " 705 "
705. 190

From Baptist Church on Pond Creek north along public road via Arion and Crabtree to Camp.

Pond Creek Baptist Church, first road crossing west of, T road at Pond Creek, about 20 feet south of road running east-west and 10 feet west of road running north-south; iron post stamped " 725 "--
Pond Creek, second road fork west of Baptist Church, in root of sycamore tree; spike marked " 781.111 "
724. 772
781.01

Arion, 2.6 miles south of, road crossing at Flats school, on GalenaPortsmouth pike, in corner of field belonging to Frank Johnley, south of road running east-west and east of road running northsouth; iron post stamped " 722 "
Arion, 1.3 miles south of, east of road on summit of hill, 679 feet north of residence belonging to James Castor, in root of small black-oak tree; spike painted " 925.128 "

Arion, 1 mile north of, at road crossing, about 30 feet west of road running north-south and 6 feet south of road running east-west, on stone; chiseled square painted " 703.004 "
Arion, 2.4 miles north of, on east side of road, 589 feet north of residence and about halfway down large hill, on rock; chisel mark painted " 764.005 "
763. 85

Crabtree, 220 feet west of T. F. Crow's general merchandise store, northwest abutment of small wooden bridge over East McCullock Creek; bronze tablet stamped " 728 "
728. 080

Sedan, 1 mile south of, west of road and about 20 feet north of mail box at lane, on small rock; chisled square painted " 824.490 "
Sedan, 0.4 mile west of, at \(T\) road, north side of road running eastwest and about 15 feet west of road running north-south; iron post stamped " 801 "

\section*{Primary leveling by J. W. Janssen in 1910. \\ From Henley south along public roads to Turkey Creek.}

Henley, 30 feet north of track, 20 feet east of road; iron post stamped Feet. " 574 "
T roads, point on stone at southwest corner; painted " 590.875 ".-.
T roads, Portsmouth-Galena Pike and Bear Creek Road; point on large stone in center of roads ; painted " 586.133 " \(\qquad\) 586. 26

T roads, point chiseled on rock at northeast corner; painted "666.285"

\subsection*{666.42}

Sycamore tree opposite schoolhouse; top of nailhead in root, painted " 722.934 "
723. 08

Henley, 4 miles south of, at northeast corner of schoolhouse; iron post stamped " 724 " \(\qquad\)
Road forks, north side of south fork, 15 feet from point of intersection of center line; top of nailhead in root, painted " 742.380 "
724. 414
742.53

Road forks, at northeast corner of northeast fork to Spruce, southwest fork to Harbors Fork; nailhead near base of hickory tree, painted " 787.710 "
787.87

T roads at Morgan's farm, in root of cedar tree opposite; top of nailhead, painted " 788.173 "
788.34

Road forks, near base of poplar tree, 20 feet north of road; top of nailhead, painted " 856.717 "
856.98

T road, Turkey Creek pike and road from Bear Creek, in root of stump opposite; nail, painted " 756.576 "
756. 77

From Portsmouth north along Norfolk \& Western Ry. (Cincinnati division).
Portsmouth, 3.5 miles northwest of, north end of switch at Wharton station, 50 feet west of railroad, 25 feet southwest of southwest corner of canal bridge, 15 feet south of private road east and 20 feet east of Portsmouth and Galena pike; iron post stamped " 529 "
528. 775

\section*{OXFORD QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Primary leveling by H. B. Hoel in 1908.
From Eaton south via Camden to Sevenmile.
Eaton, southwest corner sec. 35, T. 8 N., R. 2 E., at southwest corner of North Barron and East High streets, in west face of water table at northwest corner of public-school building; aluminum tablet stamped " 1055 Adj 1905 " \(\qquad\) 1,054. 881
Eaton, 2.6 miles south of, in west side of south abutment stone-arch railroad bridge over east-west road; aluminum tablet stamped " 984 "
Eaton, 6.1 miles south of, in west end of south abutment of iron railroad bridge over Sevenmile Creek; aluminum tablet stamped " 903 "
903.171

Camden, 70 yards east of railroad station, in north side of west abutment of iron county bridge over Sevenmile Creek; aluminum tablet stamped " 841 "
841.022

Camden, 3 miles south of, in east side of south abutment of iron railroad bridge over Sevenmile Creek; aluminum tablet stamped " 790 "
789.976

Somerville, in front of station; top of rail, marked " 762.0 "
Somerville, 1.28 miles south of, in east side of bridge seat of bridge over Pleasant Run; aluminum tablet stamped " 735 ".
734. 788

Collinsville, in front of station; top of rail, marked " 699.4 "

Collinsville, 0.9 mile south of, in east side of north abutment of iron
railroad bridge over Sevenmile Creek; aluminum tablet stamped "691"

Feet. 690.381

From Collinsville west to Oxford, thence north via Morning Sun to point 5.5 miles west of Eaton.

Collinsville, 2.35 miles west of, south of road, 30 feet from lane leading to residence of J. Harris, on large rock ; chiseled square marked " 862.01"
861. 71

Collinsville, 2.74 miles west of, in northwest corner at north side of foundation of residence of Cornelius Irwin, 1 foot above ground; aluminum tablet stamped " 816 "
815.566

Darrtown, 0.75 mile north by 2.09 miles west of, on rock at \(T\) road north ; chiseled square
888.80

Oxford, 1.82 miles east of, in northwest corner at north side of foundation of residence of C. Hoffman, 1.4 feet above ground; aluminum tablet stamped " 809 "
808. 256

Oxford, in water table in southwest corner at west side of foundation to city hall; aluminum tablet stamped " 953 "
952.264

Oxford, 3 miles north of, on large rock at \(\mathbf{T}\) road east; chiseled square marked " 929.8 "
929.56

Oxford, 3.6 miles north of, in west side at south end of foundation wall to residence of Charles P. Pfister ; aluminum tablet stamped " 991 "
990.915

Morning Sun, 1 mile south of, in northeast corner at east side of foundation to brick residence of E. E. Elliott; aluminum tablet stamped " 1025 "

1,024. 686
Morning Sun, on stone walk in front of United Presbyterian Church; chiseled square marked " 999.9 "
999. 74

Morning Sun, 2.1 miles north of, at cross roads, in northwest corner at west side of foundation to Ramsey schoolhouse (district 2); aluminum tablet stamped " 1038 "

Morning Sun, 5.15 miles north of, on large rock at crossroads; chiseled square marked " 1086.9 " (reported destroyed)
Morning Sun, 5.65 miles north of, at east-west crossroads, in east side of north abutment of small concrete bridge; aluminum tablet stamped " 1093"
- 1,093. 046

Morning Sun, 9.25 miles north of, in west side of south abutment of wooden bridge over stream ; aluminum tablet stamped " 1119 "
\(1,118.908\)
From point near Morning Sun northeast via Camden and Gratis to point near Farmersville.

Camden, 2 miles west of, 100 yards west of crossroads and north of road, in southeast corner at east side of foundation to Lowe Church; aluminum tablet stamped " 1011 "
Camden, 3.25 miles east of, in south side of east abutment to wooden bridge over Aukerman Creek; aluminum tablet stamped " 914 "
914. 166

Gratis, at southwest corner of Franklin and Main streets, in northeast corner at east side of foundation to general store of E. H. Carr ; aluminum tablet stamped " 876-1908"
875.965

Gratis, 5 miles north by 1.5 miles east of, at T road north, on stone culvert opposite Dunkard Church; chiseled square marked " 803.27 "
Farmersville, 4 miles west of, at crossroads, on southwest corner of concrete floor of small iron bridge; chiseled square marked " 875.9 "-
803.02
875. 63

\section*{PARKERSBURG QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(81^{\circ} 30^{\prime}-81^{\circ} 45^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Belpre west along Baltimore \& Ohio Southwestern R. R. to Little Hocking.
Belpre, on wing wall of second pier from west end of Baltimore \& Ohio Southwestern R. R. bridge across Ohio River; chiseled square marked B M (C. \& G. S. b. m. XL)

Feet. 621.030

Little Hocking, southwest corner of abutment of railroad bridge over Little Hocking Creek, near its junction with Ohio River; chiseled square marked B M (C. \& G. S. b. m. XLI)
623. 398

\section*{Primary leveling by J. W. Hodges in 1902.}

From Marietta west along Marietta, Columbus \& Cleveland R. R. to Dunbar.
\begin{tabular}{l} 
Marietta, 2 miles south of, on northeast foundation of building west \\
of track; chiseled square \\
\hline
\end{tabular}
Fleming, in north foundation of William Thomas Fleming's dwelling, 150 feet southeast of post office and station; bronze tablet stamped " 796 Grafton 1902 " \(\qquad\)
Napier, in front of station; top of rail
796.148

Napier station, north of track, at overhead bridge, in face of rock; bronze tablet stamped " 803 Grafton 1902 "
802. 472

\section*{From Dunbar south along highway via Fillmore to Little Hocking.}

Dunbar, 3 miles south of, on southeast abutment of small bridge; chiseled square
747.76

Little Hocking, northeast corner of water tank of Baltimore \& Ohio Southwestern R. R.; bronze tablet
626.695

From Napier north along highway to Browns Mill, thence east to Willow Farm.
Browns Mill, 1 mile northeast of, in foundation stone of W. J. M. Slottar's barn, near center on south side; aluminum tablet stamped " 814 Grafton 1902 " \(\qquad\)
Browns Mill, 13.3 miles northeast of, on top of northwest abutment of covered highway bridge over Rainbow Creek; bronze tablet stamped " 636 Grafton 1902 "

\section*{PAULDING QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Primary leveling by A. D. Duck, C. R. French, and C. E. Mills in 1911.
From point 0.5 mile east of Latty south along highway to point 1 mile northeast of Scott.
Latty, 0.5 mile east of, at T road west; iron post stamped " 729 Ohio" \(\qquad\)
Latty, 0.5 mile east by 0.5 mile south of, at crossroads, in southeast wing of small iron bridge, 20 feet north of crossroads; top of bolt, painted " 727.5 " and marked with circle
Latty, 0.5 mile east by 1.5 miles south of, on southwest wing wall of bridge over Blue Creek; chiseled circle, painted " 729.4 " \(\qquad\)
Latty, 0.5 mile east by 2.5 miles south of, at northeast corner of crossroads; iron post stamped " 732 Ohio"
635. 893
814.202
729.512
727.51
729.51
732.272

Latty, 0.5 mile east by 3.5 miles south of, 80 feet south of United Brethren Church, at southeast corner of crossroads; spike in telephone pole, painted " 735.1 "

Feet.
735.20

Scott, 0.5 mile east by 1 mile north of, southeast corner of crossroads; iron post stamped " 737 Ohio"
736. 891

From Paulding west and south along highways via Briceton to point 1 mile east of Tipton.

Paulding, 90 feet south of station, at street crossing ; top of east rail, painted "T. B. M. 724.3"
724.30

Paulding, 0.25 mile west of, at T road intersection; spike in electriclight pole, painted "T. B. M. 727.2 "
727.16

Paulding, 2.5 miles west of, at southeast corner of crossroads, quarter section corner; iron post stamped "Prim. Trav. Sta. No. 45, 1910, Olio, 731 "
730.839

Paulding, 3 miles west of, at northwest corner of crossroads; spike in telephone pole, painted "T. B. M. 731.864 "
731. 854

Paulding, 3.25 miles southwest of, 80 feet northwest of district No. 1 school, northwest corner of crossroads ; spike in corner fence post, painted "T. B. M. 730.6 "
730.64

Briceton, 1.5 miles north of, at southwest corner of crossroads; spike in telephone pole, painted "T. B. M. 731.4"
731.42

Briceton, 0.5 mile north of, at southwest corner of crossroads, 80 feet south of Briceton School; spike in corner fence post, painted "T. B. M. 734.9 "
734.92

Briceton, 30 feet north of railroad at crossing; iron post stamped " 739 Ohio"
738. 786

Briceton, 0.5 mile south of, at southwest corner of crossroads; spike in telephone pole, painted "737.0"
737. 06

Briceton, 0.5 mile south by 1 mile west of, at southeast corner of \(T\) road south; spike in corner fence post, painted "T. B. M. 740.9 "--
Briceton, 1.5 miles south by 1 mile west of, at southeast corner of crossroads; spike in telephone pole, painted "T. B. M. 740.7 "----
Briceton, 2.5 miles south by 1 mile west of, at northwest corner of crossroads; iron post stamped " 745 Ohio"
740.98
740.71
744. 565

Briceton, 3.5 miles south by 1 mile west of, at southeast corner of crossroads; spike in telephone pole, painted "T. B. M. 741.5 "
741. 59

Tipton, 1 mile east of, 100 feet south of crossroads ; top of north rail, painted " 747.6 "
747. 70

From Broughton west and north along highways via Paulding to Emmett, thence to point 2.5 miles northeast of Emmett.

Broughton, 0.2 mile north of, southeast corner of crossroads, at northwest corner of M. E. Church; iron post stamped " 726 "
725.998

Broughton, 0.2 mile north by 1 mile west of, at northeast corner of crossroads; spike in base of fence post, marked " 727.4 "
727. 46

Latty, 0.5 mile east by 0.5 mile north of, northeast corner of crossroads; spike in base of post, marked " 729.503 "
729.54

Paulding, 0.3 mile east by 2 miles south of, on west side of road at T road east and lane west, on top of south wall of concrete culvert; chiseled square marked " 728.5 "
728.52

Paulding, 0.3 mile east by 1.5 miles south of, northwest corner of \(T\) road west, on north wall of concrete culvert; chiseled square marked " 729.1 "
729. 07

Paulding, 0.3 mile east of, on Charloe road, southwest corner of crossroads; spike in base of telephone pole marked " 724.51 " \(\qquad\)
Paulding, 0.25 mile east of courthouse, northwest corner of Perry Street and Junction road, 500 feet east of Perry Street bridge; iron post stamped " 719 " \(\qquad\)
Paulding, northwest corner of Perry Street and Emmett pike; chiseled square on stone curbing marked " 720.840 "

Feet.
724. 50
719.143
720.81

Paulding, 1.6 miles northeast of, northeast corner of crossroads; chiseled square on top of concrete culvert marked " 724.7 "
724.64

Paulding, 2 miles northeast of, northwest corner of crossroads; spike in base of telephone pole marked " 723.4 "
723.33

Paulding, 3 miles northeast of, northeast corner of crossroads; spike in base of telephone pole marked " 722.3 "
722. 22

Paulding, 4.2 miles northeast of, on south bank of east-west canal, north side of road and east side of private road at road forks ; iron post stamped " 721 " \(\qquad\)
Emmett, 1.5 miles south of, northeast corner of T road east; spike in base of telephone pole marked " 721.7 "
721. 386

Emmett, 0.5 mile north of, northwest corner of crossroads at schoolhouse; iron post stamped " 718 " \(\qquad\)
Emmett, 0.5 mile north by 1 mile east of, northeast corner of crossroads; spike in base of fence post marked " 717.8 " \(\qquad\)
Emmett, 0.5 mile north by 2 miles east of, southwest corner of crossroads; chiseled square on concrete drain marked " 718.62 " \(\qquad\) 718. 40

From point 3 miles west of Paulding north along highways to point 4.7 miles northeast of Antwerp.
Paulding, 3 miles west of, in northwest corner of crossroads; spike in base of telephone pole marked " 731.864 " \(\qquad\) Paulding, 3 miles west by 1 mile north of, west side of crossroads, in southeast corner of small wooden bridge; painted spike head marked " 730.6 " \(\qquad\)
Paulding, 3 miles west by 2 miles north of, at southeast corner of crossroads, on north end of concrete culvert; chiseled square marked " 730.2 " \(\qquad\)
Antwerp, 4.7 miles east by 1 mile south of, 50 feet southeast of crossroads ; iron post stamped " 731 " \(\qquad\)
Antwerp, 4.7 miles east of, southeast corner of crossroads, on south end of concrete culvert; chiseled square marked " 728.1 "
From point 3 miles south of Mark Center southwest along highway to point 4.7 miles northeast of Antwerp.
Mark Center, 3 miles south of, northeast corner of crossroads, southwest corner of Dunakin's residence; iron post stamped " 722 "-
Mark Center, 3 miles south by 1 mile southwest of, on north bank of Maumee River, on south side of road, in road forks; spike in base of mail-box post, marked " 721.9 " \(\qquad\)
Mark Center, 3 miles south by 1.8 miles southwest of, 100 feet southwest of road forks, northeast corner of small wooden bridge; top of iron bolt painted white, marked " 698.7 " \(\qquad\)
Cecil, 1.6 miles west by 0.7 mile north of, on south side of road at forks; spike in base of telephone pole, marked " 718.8 "
Cecil, 2.5 miles west by 0.25 mile north of, on north side of road at \(\boldsymbol{T}\) road south; spike in base of corner fence post, marked " 720.5 "--
721.825
722.13
698.97
731. 854
730.60
730.19
731.057
728.12
718. 78
720. 52

Antwerp, 3 miles southeast by 1 mile east of, northwest corner of crossroads; chiseled square on concrete culvert, marked " 737.2 "--
Antwerp, 3 miles southeast of, northeast corner of crossroads on Payne pike, in southwest corner of school yard; iron post stamped "Prim. Trav. Sta. No. 44, Ohio 1910737 "
Antwerp, 4 miles southeast of, 3 miles north of Payne, 50 feet southeast of crossroads, in northwest corner of field; iron post stamped " Prim. Trav. Sta. No. 2, 1905, 743 " \(\qquad\)
Payne, 2 miles north of, northwest.corner of crossroads; spike in base of telephone pole, marked " 744.3 " \(\qquad\)
Payne, 1 mile north of, northeast corner of crossroads; spike in base of telephone pole, marked " 746.7 "
Payne, 1.6 miles northeast of, southwest corner of crossroads; spike in base of telephone pole, marked " 743.9 "
Payne, 1.25 miles northeast of, northwest corner of road forks, at north end of gate to field; iron post stamped " 743 "
Payne, 0.8 mile east of, at road crossing; top of north rail, marked " 747.1 " \(\qquad\)
Payne, northeast corner of Main and Marion streets; chiseled square on stone curbing, marked " 750.5 "
Payne, 1.1 miles south of, southeast corner of crossroads; spike in base of fence post, marked " 750.0 " \(\qquad\)
Payne, 2.2 miles south of, northeast corner of crossroads; iron post stamped " 754 " \(\qquad\)
Payne, 3.2 miles south of, southwest corner of crossroads; chiseled square on south wall of concrete culvert, marked " 756.3 "
"---------
Batson, 1 mile east of, southwest corner of crossroads; chiseled square on south wall of concrete culvert, marked " 758.2 "
Batson, 1 mile east of, at road crossing; top of south rail, marked * 760.0 "

From Antwerp north along highways to Erter schoolhouse.
Antwerp, 100 feet east of Wabash R. R. station; top of south rail of main track
Antwerp, 1.3 miles north of, north end of bridge over Maumee River; copper nail in circle painted " 724.4 "
Antwerp, 2 miles north of, northwest corner of crossroads, 100 feet northwest of Stinger School (district 2) ; spike in telegraph pole, painted " 735.8 "
Antwerp, 2.5 miles north by 1 mile east of, at northeast corner of \(T\) road east; spike in base of fence post
Carryall Township, corner of secs. \(10,11,14,15\), northwest corner of crossroads, 3 feet west of fence corner; iron post stamped " 730 Ohio"
Carryall Township, corner of secs. 11, 12, 13, and 14, northeast corner of crossroads; spike in base of 6 -inch elm tree
737.27
737. 541
742. 860
744.45
746. 88
744.04
733.3
724. 44

Feet.
723. 429
726. 05
743. 528
747. 29
750.66
750.12
753. 838
756. 51
758. 49
760.33
735.87
734.33
729.624
730.62
Carryall Township, corner of secs. 1, 2, 11, and 12, northwest corner of crossroads, 75 feet scutheast of Erter schoolhouse; spike in telephone pole
Feet. 722.83
From point 0.5 mile south of Knoxdale south along highways to point 2.5 miles southeast of Antwerp.
Knoxdale, 0.5 mile south of, on south side of road at T road north; spike in base of fence post, marked " \(\tau 28.3\) "
728.36
Antwerp, 2.7 miles northeast of, 50 feet south of crossroads, in bed of canal; iron post stamped " 728 "
728.214
Antwerp, 1.7 miles northeast of, on north end of west wall of concrete culvert over canal at crossroads; chiseled square marked " 729.9 "
Antwerp, 0.7 mile northeast of, southeast corner of crossroads; spike in base of telephone pole, marked " 735.4 " \(\qquad\)
Antwerp, at forks of Canal road and Payne pike, 140 feet south of center of forks, 10 feet west of Payne pike; iron post stamped " 732 "
732. 140
Antwerp, 1 mile southeast of, northeast corner of crossroads; spike in base of telephone pole, marked " 736.3 "
736. 40
Antwerp, 2 miles southeast of, northeast corner of crossroads; spike in base of telephone pole, marked " 734.6 "
734. 71

From St. Paul Church, 6 miles north of Convoy, east along highway to point 1.5 miles northeast of Scott.

Tipton, 3 miles west by 1 mile south of, 6 miles north of Convoy, 80 feet northeast of St. Paul Church, at crossroads; iron post stamped " Prim. Trav. Sta. No. 18, Ohio 1909759 " \(\qquad\)
Scott, 4.5 miles west by 1 mile north of, at southeast corner of crossroads, 100 feet southeast of Blue Creek Township school (district No. 6) ; painted circle on concrete wall culvert, painted " 752.3 "--
Scott, 3.5 miles west by 1 mile north of, at northeast corner of crossroads; spike in telephone pole, painted " 748.3 " \(\qquad\)
Scott, 1 mile north by 2.5 miles west of, 150 feet east of crossroads, north side of road; iron post stamped " 747 Ohio" \(\qquad\)
Scott, 1 mile north by 1.5 miles west of, at northeast corner of crossroads; spike in telephone pole, painted " 744.7 " \(\qquad\)
Scott, 0.5 mile west by 1 mile north of, on west side of crossroads; chiseled circle in stone culvert, painted " 740.5 "
759. 541

Scott, 0.5 mile east by 1 mile north of, at southeast corner of crossroads; iron post stamped " 737 Ohio"

PEEBLES QUADRANGLE.
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\). ]
Primary leveling by C. B. Shaw, J. W. Janssen. Howard Clark. and C. E. Mills In 1910.

From Rarden west to point 2 miles west of Lawshe along Norfolk \& Western Ry.
Rarden, 2.1 miles west of, milepost "C \(80-\mathrm{P} 27\)," side of track on top of stone culvert; chiseled square painted " 616.2 "
616.31

Jaybird (Mineral Springs station), southeast corner of road crossing at station, 5 feet southeast of warning post; iron post stamped " 629 "

Peebles, 2.4 miles northeast of, 15 feet north of railroad, 10 feet east of road, in marl-bank switch road crossing; iron post stamped " 760 " \(\qquad\)
Peebles, 500 feet east of station, 25 feet east of center of road and 10 feet north of railroad at road crossing ; cut on stone wall

Feet.
760.315

Lawshe, 250 feet east of station, 75 feet west of road and 20 feet south of railroad at road crossing; iron post stamped " 648 "
813. 480
648.310

\section*{From Jaybird via Mineral Springs, Wamsley, and Blue Creek to Pink.}

Mineral Springs, 1.3 miles northeast of, south of road at bend, north side of hill near bottom, on top of stone; chisel mark painted " 868.3 "
868. 47

Mineral Springs, 1 mile northeast of, in northwest corner of road forks on top of hill, at private road northwest ; iron post stamped " 1127 " \(\qquad\)
Mineral Springs, 300 feet north of Mineral Springs Hotel, 20 feet east of forks, south end of west stone abutment of bridge in top; chisel mark painted " 758.780 "
Mineral Springs, 2.1 miles southeast of, southeast corner of \(T\) road south, 30 feet east of forks, south of road, opposite Antioch Church and school ; iron post stamped " 671 "
671.208

Mineral Springs, 2.6 miles southeast of, on stone south of road; chisel mark painted " 640 "
640.10

Wamsley, 1.3 miles southwest of, west of road, 20 feet north of McClellan Jones's store, 150 feet north of T road west; iron post stamped " 619 "
618. 934

Blue Creek, W. S. Newman's store, 15 feet north of road forks, east of road and at \(T\) road east; iron post stamped " 641 "
641.679

Pink, 75 feet east of stone, north of road in fence corner; iron post stamped " 899 Prim. Trav. Sta. No. 10, 1910 "
898. 683

Pink, 0.2 mile east of, 50 feet northwest of Kidder's store, in southwest corner of forks, on stone ; chiseled mark painted " 874.8 "
875.00

\section*{From Wamsley west via Cedar Mills to West Union.}

Cedar Mills, T road, Peebles and Wamsley pikes, north side of road, opposite fork; iron post stamped " 564 "
564. 509

Cedar Mills, 2.3 miles west of, northeast corner of \(T\) road east, in root of hackberry tree; nail head painted " 535.600 "
536.03

Cedar Mills, 3.6 miles west of, at road crossing, in root of red oak at northeast corner; nail head painted " 606.828 "
607.33

Cedar Mills, \(\overline{\text { }} .3\) miles west of, opposite Blue Creek Pike, near telephone pole; iron post stamped " 905 "
905. 590

From Peebles south via Fawcett and Cedar Mills to Tulip.
Peebles, 2.7 miles southeast of, 0.25 mile north of school building, on northwest corner of stone abutment of culvert at \(T\) road; chiseled circle
Peebles, 3.1 miles southeast of, east of pike and about 0.25 mile south of school building, on rock at \(\mathbf{T}\) road, east side of pike; chiseled circle
825. 80

Fawcett, 2.3 miles north of, 40 feet south of pike at T road, on northwest corner of stone abutment of building; chiseled circle

Fawcett, about 30 feet west of store, near telephone pole at road
Feet.
836.870

Cedar Mills, 1 mile north of, on east side of highway, in front of Ce dar school building, in root of large white-oak tree; spike
787.08

Cedar Mills, 3.6 miles south of, northeast corner of stone abutment of iron bridge on pike, west of Linx store; chiseled circle \(\qquad\)
Tulip, 3.1 miles north of, 70 feet south of \(\mathbf{T}\) road west, about 0.25 mile north of house, mark on limestone rock ; chiseled circle
765.58

\section*{From Blue Creek southwest to Tulip.}

Blue Creek, 3.1 miles west of, southeast corner of \(\mathbf{T}\) road south, in base of sycamore tree; nailhead
686. 24

Blue Creek, 5.9 miles west of, on high hill, junction with lane passing through farm to road leading to Tulip, in base of pignut tree at northwest corner ; top of nailhead
\(1,150.79\)

\section*{PERRY QUADRANGLE.}
[Latitude \(41^{\circ} 45^{\prime}-42^{\circ}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\). ]
Primary leveling by C. H. Moore in 1903.
From Painesville along North Ridge road to Lake-Ashtabula county-line road, thence south along same to point 1.75 miles south of Unionville, thence west along highways and South Ridge road to Painesville.
Painesville, 5.75 miles northeast of, 100 feet east of \(\boldsymbol{T}\) road north, south side of east-west Ridge road, at northwest corner of large frame house, in face of foundation wall, north side; aluminum tablet stamped " 686 Cleveland "
686. 461

North Madison, 200 feet northeast from center of crossroads, at northwest corner of foundation wall of First Congregational Church, in foundation wall; aluminum tablet stamped " 676 Cleveland" \(\qquad\) 676.196

Unionville, at southwest corner of crossroads, at front entrance to dry-goods store, on 4 by 4 foot sandstone step; chiseled circle \(\qquad\) 744.35

Unionville, \(\mathbf{1 . 7 5}\) miles south of, 2.75 miles west of Harpersfield, LakeAshtabula county-line road, southwest corner of crossroads, northeast corner of brick house of J. H. Fowler, in face of foundation wall, east side, 1 foot above ground; bronze tablet stamped " 856 Cleveland " 856. 198

Madison, on west side of northwest corner of foundation of town hall; bronze tablet stamped " 744 Cleveland".
743. 511

Madison, 2 miles west of, at crossroads on south side of east-west road, at west end of 2.5 by 4 foot sandstone over culvert ; chiseled circle
730.54

\section*{PERRYSVILLE QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).] From Mansfield southeast to Pennsylvania, R, R. bridge 152.
Mansfield, 1.70 miles east of, northeast corner of east abutment of bridge 152 ; chisel mark (Pennsylvania R. R. b. m.) 1, 189. 799

Primary leveling by E. C. Bibbee in 1911-12 and Philip Flitman in 1911.
From Mansfield via public road and Lucas to Bellville, thence to Butler, thence southwest along Baltimore \& Ohio R. R. to point near Ankenytown.
Mansfield, 2.5 miles southeast of, east side of railroad at crossing; spike in base of telephone pole
\(1,138.94\)
Lucas, 2.3 miles west of, in top of concrete pier 35 feet west of signal tower 1706; top of iron rod 1 inch in diameter
\(1,159.08\)

Lucas, 1.3 mites west of, 100 feet west of crossing, 250 feet south of Feet. signal tower 1696 ; chiseled square on granite rock at \(\mathbf{T}\) road south 1,136 . 82
Lucas, at southeast corner of station yard, near railroad right of way ; iron post stamped "1104 Ohio"
Lucas, 0.5 mile west of, on corner of north coping stone of small culvert; chiseled square
\(1,106.8\)
Lucas, 1.5 miles southwest of, on top of hill on east side of public
road; chiseled square on sandstone rock
Washington, 1 mile east of, northwest corner of crossroads; bolthead in west end of culvert
\(1,337.81\)
Washington, southwest corner of crossroads, west end of stone cul-
vert; chiseled square on large stone_-_-_-_-_-_-_-_-_-_-_-_-_-_-_
Washington, 1 mile south of, center of crossroads, highest point on
section corner stone
Washington, 2.2 miles south of, 25 feet north of lane east, on east side of road; highest point on sandstone rock
\(1,424.99\)
Washington, 2.5 miles south of, south end of culvert under wagon
road at T road east ; chiseled square on granite rock
Washington, 3.2 miles south of, 3.5 miles north of Bellville, at northeast corner of Ebenezer Church, near crossroads; iron post stamped "1203 Ohio"

1, 202. 662
Bellville, 2.5 miles north of, on north side of road at \(T\) road north;
nail in root of sugar-maple tree 3 feet in diameter-1, 453.90
Bellville, 1.5 miles north of, on north end of small stone bridge under wagon road; chiseled square \(1,284.27\)
Bellville, 2 miles east of, 25 feet west of second railroad crossing
south of Bellville, on south abutment of small concrete culvert
under railroad; chiseled square_-----11.35
Bellville, 2 miles southeast of, 260 feet west of railroad crossing, at southeast corner of \(T\) road east, 2.8 miles north of Butler ; iron post stamped "1102 Ohio"

1, 101.559
Gatton Rock, 60 feet south of station, on east side of railroad; spike in base of telegraph pole

1,097. 94
Butler, 1.4 miles north of, 20 feet south of public road at crossing, on east side of track; spike in base of telegraph pole

1, 082. 11
Butler, 0.4 mile north of station, 60 feet north of crossing, on con-
crete signal tower on west side of track; chiseled square............ \(1,069,79\)
Butler, 520 feet north of station, 20 feet east of track, 20 feet north of public road, on railroad right of way; iron post stamped "1070 Ohio"

1,069.933
Butler, 2.1 miles southwest of, 25 feet south of railroad at crossing, on coping stone of north abutment east side of small bridge; chiseled square
\(1,128.87\)
Butler, 3.4 miles southwest of, 25 feet east of railroad at crossing, on railroad right of way; nail in top of corner post
\(1,137.72\)
Butler, 4.2 miles southwest of, 1.7 miles north of Ankenytown, on east
side of road, 25 feet south of crossing, near line between Richland
and Knox counties; iron post stamped " 1126 Ohio"--..-- 1, 125. 682

From Butler south along highways to point near Amity.
Butler, 2 miles south of ; north end of concrete step of Henry Brokaw's house
Butler, 3 miles south of; top of bowlder at upper end of wooden box ..... Feet. culvert ..... 1,329. 60
North Liberty, 0.5 mile north of, at southwest corner of \(T\) lane; spike in telephone pole ..... \(1,295.42\)
North Liberty, 50 feet south of M. E. Church; iron post stamped "1305 Ohio" ..... \(1,305.071\)
North Liberty, 0.5 mile south by 0.5 mile east of, on northwest corner of east abutment of small bridge ; top of masonry ..... \(1,210.78\)
North Liberty, 1.25 miles south by 1 mile east of, cast-iron pipe cul- vert 18 inches in diameter; top of lower end ..... 1, 262.77
Amity, 2.8 miles north of, cast-iron pipe culvert 12 inches in diame- ter; top of lower end ..... \(1,244.94\)
From point 3.5 miles northwest of Danville north along highway to Perrysville.Jelloway, 3.2 miles south of, at northeast corner of crossroads; ironpost stamped " Prim. Trav. Sta. No. 65, 989 "988.892
Jelloway, 2.2 miles south of, 60 feet north of T road west, on south abutment east side of small stone bridge ; chiseled square ..... 1, 017. 62
Jelloway, 0.9 mile south of, on east end of tile culvert under wagon road at \(T\) road west; highest point ..... 1, 046. 48
Jelloway, in southwest corner of public-school yard; iron post stamped " 1092 " ..... 1, 092. 268
Jelloway, 1.3 miles north of, 150 feet south of crossroads, on west sideof concrete culvert under wagon road; chiseled square\(1,114.25\)
Jelloway, 2.2 miles north of, on east side of road, 75 feet south of \(\mathbf{T}\) road, on large sandstone rock; chiseled square ..... 1, 133, 38
Jelloway, 3.7 miles northeast of, 75 feet east of T road north, on west abutment east side of iron bridge over creek; chiseled square_ ..... \(1,150.23\)
Perrysville, 5.8 miles south of, at northeast corner of Free Metho-dist Church at T road north; iron post stamped " 1190 "1, 189. 500
Perrysville, 4.9 miles south of, 25 feet northeast of center of cross-roads, on south end east side of abutment of bridge; chiseledsquare\(1,218.14\)
Perrysville, 3.5 miles south of, 300 feet south of \(\boldsymbol{Y}\) road, on north abutment west side of small bridge; chiseled square ..... 1, 076.07
Perrysville, 2.6 miles south of, 320 feet north of bridge over Clear Fork of Mohican River, in stiffener on north end east side of bridge over mill race; first nail head ..... \(1,002.26\)
Perrysville, 1.1 miles south of, on north end of cast-iron drain under wagon road at \(T\) road east; highest point ..... 1, 078.41
Perrysville, 95 feet north of T road west, on wing wall of bridge over Black Fork of Mohican River, south end east side ; chiseled square_ ..... 967.36
post stamped " 999 " ..... 999.184
Perrysville, 0.5 mile west of, on northeast corner of east abutment of bridge 142 of Pennsylvania R. R.; chiseled square ..... 989.04
PHILO QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\). ]
Precise leveling by W. H. Monahan in 1906.
From Zanesville along Baltimore \& Ohio R, R. to Sundale.
Zanesville, in top step at south side of courthouse; aluminum tablet stamped " 725 " ..... 725. 721

Zanesville, south side of courthouse, 12 feet east of doorstep, at southwest corner of pillar, in top step of portico; aluminum tablet stamped " 725 "

Feet. 725. 697

Zanesville, on upper river wall of Lock 10 (U. S. Engineer Corps bench mark 1) ; cut "U.S. \(\square\) B. M. 699.73 " \(\qquad\)
Zanesville, on upper river wall of Lock 10 (U. S. Engineer Corps bench mark 2) ; cut "U. S.B. M. 699.92 " \(\qquad\)
Zanesville, 3.94 miles northeast of, in east side of concrete culvert; aluminum tablet stamped " 778 "
778. 516

Sonora, 40 feet northeast of Baltimore \& Ohio R. R. station ; iron post stamped " 808 "
808.637

Sonora, in front of station; top of rail
Sonora, 1.99 miles northeast of, in concrete railroad culvert, south side; aluminum tablet stamped " 778 "
808.0
778. 596

Sonora, 4.13 miles northeast of, in southwest corner of stone foundation of water tank; aluminum tablet stamped " 770 " \(\qquad\)
Sonora, 6.96 miles northeast of, 30 feet north of track; iron post
- stamped " 886 "
770.162
886.055
886.1

\section*{Primary leveling by E. C. Bibbee and H. W. Peabody in 1908.}

From South Zanesville southeast along Baltimove \& Ohio R. R. to Durant.
Buckeye, in front of station; top of rail (marked " 713.2 ") \(\qquad\)
Buckeye, 0.25 mile south of station, in wing at east side of county bridge, 50 feet east of Baltimore \& Ohio R. R.; aluminum tablet stamped " 688 "
Frazier (formerly Brush Creek) station, in northeast corner of A. M. Shylock's field, 24 feet from Baltimore \& Ohio R. R., 31 feet from center of north-south road; iron post stamped "Prim. Trav. Sta. No. 63, 701 "
700.958

Government lock at Philo, chiseled square marked " 688.5 "
687.897
693.933 aluminum tablet stamped " 694 "
bridge over Muskingum River ;
Philo, in front of station; top of rail (marked " 701 ")
701.0
684.943
690.033
676.419

From Zanesville southeast via Ohio River \& Western Ry. to Freeland.
Zanesville, on northwest corner of curb approach to Fifth Street Bridge ; chisel mark
707.55

Mill Run station; 1 mile east of Zanesville, on northwest corner of stone bridge over Mill Run ; chisel mark
723.55

Mill Run, 2.5 miles southeast of, 200 feet north of railroad, in southwest corner wing wall of small dirt-road bridge, 2 feet below bridge floor; aluminum tablet stamped " 805 "
804.835

Carlwick, 700 feet west of station, at road fork, in bridge seat at southeast corner of bridge over Boggs Creek; aluminum tablet stamped " 740 "
739. 598

Chandlersville, at southeast corner of T road to south, in west face
of stone stile block by I. O. O. F. building; aluminum tablet
stamped " \(734-1908\) "--ant.
Freeland, 152.2 feet southwest of station, in George Thorla's field,
on top of 12 by 12 inch rock post; chisel mark ("Prim. Trav.
Sta. No. 69,766 ")
From Rowland north to Freeland.
Rowland, 0.5 mile north of former post office, at \(T\) road west, in northeast corner of Walton Blackledge's field; iron post stamped "Prim. Trav. Sta. No. 68, 738 "
737.300

Rowland, 2.17 miles north of, on large rock east of road at \(T\) road east ; chiseled square marked " 756.64 "
755.80

Rowland, 3.81 miles north of, 80 yards east of private road leading to Oakland Church, on west side of south abutment of bridge over creek; aluminum tablet stamped "757"
755.946

Rowland, 5.77 miles north of, on rock at \(T\) road west; chiseled square painted "1047.21"
\(1,046.37\)
Rowland, 6.72 miles north of, on large rock east of road; chiseled square painted " 1157.76 "
\(1,156.92\)
Rowland, 7.26 miles north of, in third stone step at south door at east side of Highhill Presbyterian Church; aluminum tablet stamped "1198"
\(1,197.276\)
Highhill, in front of N. J. Bell's store, on large rock; chiseled square marked "1189.8"

1, 188.97

\section*{From Zanesville north 5 miles.}

Zanesville, 3 miles north of, just west of Zanesville-Gilbert road, between the Baltimore \& Ohio and the Cincinnati \& Muskingum Valley railroads, in southeast corner of field of Mrs. Marguerite Clark, in stone post; aluminum tablet stamped "Prim. Trav. Sta. No. 62, 705 "
705.210

Zanesville, 3.6 miles north of, in ground on west side of track opposite milepost "T-13;" top of rail set vertically (marked " B. M. 723 ") --
Zanesville, 4.6 miles north of, in ground on west side of track opposite milepost "T-12;" top of rail set vertically (marked "B. M. 721 ") -
722.98
720.60

Near Sonora.
Sonora, 40 feet northeast of Baltimore \& Ohio R. R. station; iron post stamped " 809 "
808. 637

Sonora, 1.34 miles west of, on concrete bridge; chiseled square marked " 805.4 "
805.35

Sonora, 1.52 miles west of, in field at northeast corner of \(\mathbf{T}\) road; top of iron post painted " 848.2 "
848.16

PIKETON QUADRANGLE.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Precise leveling by N. A. Campbelt and W. H. Monahan in 1906 along the Norfolk and Western Ry.

From Piketon to Sargents.

571.8

Piketon, United Brethren Church, northwest corner of foundation; aluminum tablet stamped " 578 "

Piketon, 2.21 miles south of, west side of bridge over creek, north abutment, top of retaining wall; chiseled square \(\qquad\)
Piketon, 3.83 miles south of, southwest corner of Mrs. Sargent's farm, east side of railroad ; primary traverse tablet stamped " 580 "
Sargents station, in front of ; top of rail

\section*{Primary leveling by S. R. Archer and S. L. Parker in 1914 and E. C. Bibbee in 1915.}

From point near Bainbridge south along highways near west border of quadrangle. (Disconnected portions of line; see Bainbridge quadrangle.)

Rainbridge, 1.5 miles northeast of, at crossroads, on south side of east road at fence line, 10 feet east of fence corner ; iron post stamped " 711 Ohio" (as reset Oct. 16, 1914)

Bainbridge, 1.5 miles northeast by 0.82 mile south of, at stream crossing road, 390 feet south of Lewis Taylor's residence, on east side of road, on south bank of stream, 10 feet west of fence corner, on top of rock; chiseled square marked " 720.9 " \(\qquad\)
Bainbridge, 1.5 miles northeast by 1.5 miles south of, at southeast corner of road forks, at top of south concrete wing wall of east end of small concrete culvert under road; chiseled square marked " 755.1 " \(\qquad\)
Bainbridge, 1.5 miles northeast by 2 miles south of, 60 feet north of rogd forks, on east edge of road, in front of house standing on east side of road, in root on road side of apple tree 1 inch in diameter; copper nail marked " 810.3 "
Morgantown, 3.5 miles northwest of, at Green Brier schoolhouse on Green Brier Ridge, on northeast corner of building, at foot of foundation, on top of rectangular stone; chiseled square marked "1211.9"
i-
Morgantown, 2.8 miles northwest of. on Green Brier Ridge, at residence of S. T. Creamer standing on east side of road, in front of house on east side of road, in root on road side of poplar tree 2.5 feet in diameter; copper nail marked " 1247.7 " \(\qquad\)
Morgantown, 2.3 miles northwest of, on top of Green Brier Hill, 60 feet south of residence of John F. Vincent standing on east side of road, on west side of road, in root on road side of locust tree 8 inches in diameter; copper nail marked " 1257.5 " \(\qquad\)
Morgantown, 1.5 miles northwest of, at \(T\) road northwest leading to Green Brier Ridge, in northeast corner of road forks, 50 feet north of center of roads, on east side of north road, on west bank of branch, in root on west side of locust tree 12 inches in diameter ; copper nail marked " 711.2 "
Morgantown, 2.4 miles northwest of, at \(T\) road southwest, on north side of road forks; iron post stamped "Prim. Trav. Sta. No. 78 1909750 Ohio" \(\qquad\)
Latham, on south edge of town, at T road west and street to east, diagonally opposite Reed \& Son's store, on east side of south road, 10 feet south of fence corner; iron post stamped " 634 Ohio" \(\qquad\) Latham, 0.32 mile south of, at steel highway bridge over Sunfish Creek, on top of west end of south stone abutment ; chiseled square marked " 620.3 "
\(1,247.65\) \(1,257.49\)

Feet.
558. 33
579. 656
578.7
711. 659
720. 61
754. 86
810.04
\(1,211.86\)
711.13
750.038
634.414
620.34

Latham, 2.66 miles southwest by 2.05 miles southeast of, 60 feet east of \(T\) road north, at foot of south side of ridge between Grassy Fork and Chenoweth Fork of Sunfish Creek, at northwest corner of bridge over branch from north, in root on south side of oak stump 2 feet in diameter ; cpper bench-mark tack marked " 764.6 "

Feet.
764.68

From Waverly northwest along Detroit, Toledo \& Ironton R. R. to point near Bainbridge.

Waverly, in northwest corner of courthouse yard; iron post stamped "Prim. Trav. Sta. No. 16, 590 "
589.382

Waverly, 1.8 miles northwest of, on north side of track, on northwest corner of stone culvert under railroad; chiseled square marked " 617.6 "
617. 56

Waverly, 2.9 miles northwest of, in southeast corner of wooden abutment of viaduct, south side of track; copper nail marked " 649.7 "649. 73

Waverly, 2.9 miles northwest of, at northwest corner of Peck schoolhouse yard; iron post stamped " 615 "
614. 750

Waverly, 4 miles northwest of, at railroad crossing, in north end of box culvert under road, 4 feet south of track; copper nail marked "697.7"
697. 65

Denver, 0.58 mile southeast of, on south side of track, in sandstone ledge; chiseled square painted " 789.2 "
789.16

Denver, 70 feet north of railroasd crossing, on southeast abutment of iron bridge over Crooked Creek; chiseled square marked " 833.0 "-
Denver, 175 feet north of, at southwest corner of \(T\) road south, on iron bridge over Crooked Creek; iron post stamped " 836 " \(\qquad\)
Denver, 1.38 miles northwest of, 40 feet west of railroad crossing, on north side of track, in base of telegraph pole; railroad spike marked " 899.7 "
899.63

Denver, 2.64 miles northwest of, 25 feet north of center of crossing, in base of telegraph pole; railroad spike marked " 987.0 "
Summithill, 0.8 mile southeast of, at south side of track, on west end of stone culvert under public road; chiseled square marked " 1059.0 "

1, 058.96
Summithill, at southwest corner of station platform; copper nail painted " 1085.2 "
\(1,085.10\)
Summithill, 0.76 mile southwest of, on north side of track, 30 feet northwest of center of railroad crossing, in base of telegraph pole 8 feet north of tracks; railroad spike marked " 1070.3 " \(\qquad\) \(1,070.21\)
Harris, 700 feet east of station, 60 feet south of railroad crossing on west side of public road, in root of white-oak tree 2 feet in diameter; copper nail marked " 1010.5 "
Harris, 700 feet east of station, at railroad crossing, in southeast corner of public road, 1 foot south of railroad property line; iron post stamped " 1008 "

1,008. 174
Harris, 0.9 mile west of station, on north side of track, at point where track makes sharp curve to south, in base of telegraph pole; rail spike marked " 926.9 "
926. 78

Spargursville, 700 feet north of station, on southeast abutment of iron bridge over Sulphur Lick; chiseled square marked " 708.9 "
708.77

Spargursville, 700 feet north of station, on southeast abutment of iron bridge over Sulphur Lick, 1 foot west of the preceding temporary bench mark; aluminum tablet stamped " 709 "

Storms station, 225 feet north of railroad station, at northeast corner of crossroads, in root on west side of willow tree 4 feet in diameter ; copper nail marked " 689.7 "

Feet.
689.61

Storms station, 1.52 miles northwest of railroad crossing; top of north rail painted " 710.4 "
710.2

Storms station, 1.72 miles northwest of, on north side of road and railroad crossing, 15 feet north of center of crossing, in base on north side of telephone pole; railroad spike marked " 711.5 "
711. 40

Bainbridge, 2.5 miles northeast of, on east end of covered bridge over Paint Creek, on stone ; chiseled square marked " 714.6 " (Bull. 518, p. 23, value by McNulta equals 713,23 feet)
714.53

\section*{From point near Summithill north to Bibbee and McNulta line.}

Summithill, 1.3 miles northeast of, on west side of road at T road south, on west end of stone culvert under road; chiseled square marked " 1079.4 "

1, 079. 35
Summithill, 2.4 miles northeast of, at southwest corner of crossroads, in root on north side of white-oak tree 18 inches in diameter; copper nail marked " 1024.9 " (Bull. 518 , p. 23, value by McNulta equals \(1,022.15\) feet)

From Waverly west along highway to point 1.9 miles southwest of Buchanan.
Waverly, at northwest corner of courthouse yard; iron post stamped "Prim. Trav. Sta. No. 16, 590 Ohio"
589.382

Waverly, at Detroit, Toledo \& Ironton R. R. crossing highway just north of station; top rail
592.1

Waverly, 1.14 miles northwest of, 40 feet east of T road north, on south side of road inside of fence, in root on north side of oak tree 2 feet in diameter; copper nail marked " 758.8 " \(\qquad\)
Waverly, 1.87 miles northwest of, at T road north, on south side of road, 40 feet southwest of center of roads, in root on east side of oak tree 2.5 feet in diameter ; copper nail marked " 768.1 " \(\qquad\)
758. 832
768. 06

Waverly, 2.83 miles west of, at T road northwest, in northeast corner of road forks, on top of north end of east stone abutment of bridge over Hodges Run; chiseled square marked " 581.4 "
581. 41

Daleyville, 1.5 miles east of, at private road south, at southwest corner of road forks, in root on east side of walnut tree (two forked) 7 inches in diameter; copper nail marked " 569.7 " \(\qquad\)
Daleyville, 0.53 mile east of, at T road north, 50 feet east of road forks, on east and west road, in southwest corner of plank bridge over drain from north, in top of 2 -inch plank; copper nail marked "611.7" \(\qquad\)
Daleyville, at road forks, at highway bridge over Peepee Creek, on east side of road at forks, 30 feet north of Deisbaugh's store, at fence line; iron post stamped " 599 Ohio" \(\qquad\)
Daleyville, 1.17 miles north of, at T road west, at Peepee M. E. Church, on east edge of north and south road, in line with center of road, on west top of flat rock; chiseled square marked " 626.7 "-
Daleyville, 1.85 miles north of, at T road northeast, 180 feet northwest of road forks, in top of west end of wing wall of north stone abutment of highway bridge over Long Branch; chiseled square marked " 642.4 "
Daleyville, 2.57 miles northwest of, 0.35 mile southeast of \(T\) road southwest, at drain under road, on top of south end of west stone abutment; chiseled square marked " 657.4 "


Daleyville, 2.92 miles northwest of, 150 feet northwest of T road southwest, at bridge over branch from southwest, on top of east stone wing wall of north abutment; chiseled square marked " 675.5 "

Feet.
675.46

Buchanan, 1.88 miles southeast of, at road forks, on top of east wing wall of north stone abutment of steel highway bridge over Wolf Run; chiseled square marked " 685.2 "
Buchanan, 0.7 mile east of, 120 feet west of farmhouse standing on north side of road owned by Mr. Mary, 10 feet west of hickory tree 4 inches in diameter, in line with east end of stable standing 100 feet north of road, on north side of ditch, on north side of road, 6 feet northeast of telephone pole, on top of sandstone outcrop; chiseled square marked " 871.7 "
871.64

Buchanan, at southeast corner of crossroads; iron bench-mark post stamped "Prim. Trav. Sta. No. 771909 Ohio 910 "
909.801

Buchanan, 1.25 miles southwest of, at T road east, in center of road forks, in root on north side of oak tree 2.5 feet in diameter; copper nail marked " 1017.1 "

1, 017.01
Buchanan, 1.8 miles southwest of, at T road north, on south side of east and west road at forks, at foot of corner fence post, on top of rock; chiseled square marked " 998.0 "
997. 89

Buchanan, 1.9 miles southwest of, 300 feet west of residence of H. Dewitt standing on north side of road at top of hill, on north side of road at fence line, in root on east side of hickory tree 8 inches in diameter ; copper nail marked " 1003.6 "
\(1,003.436\)
From point 1.9 miles southwest of Buchanan west along highways to point 1.5 miles northwest of Morgantown.
Morgantown, 2.72 miles east of, directly opposite \(T\) road south, in the root of black-oak tree 2 feet in diameter on north fence line; copper nail and washer, " 1077 " painted on telephone pole opposite_
Morgantown, 2 miles southeast of, on top of hill opposite \(\mathbf{T}\) road south, 90 feet northeast of Mount Holy Church, on north fence line; iron post stamped " 1082 Ohio," painted on telephone pole \(\qquad\) 1, 081.930
Morgantown, 0.95 mile south of, at forks of road, on east abutment north side of iron bridge over Morgan's Fork of Sunfish Creek; chiseled square, " 612-01" painted on britge girder
612.20

Morgantown, in the southeast part of town, about 300 feet southeast of post office, on north abutment east side of bridge; chiseled square, " 629-21" painted on bridge
628. 53

Morgantown, 0.86 mile west of, 20 feet south of south fence line of public road, in root of leaning oak tree 3 feet in diameter; copper nail and washer, " 652 " painted on gatepost opposite
652.20

\section*{From Piketon west along highway.}

Piketon, United Brethren Church, northwest corner of foundation; aluminum tablet stamped " 578 Ohio" (Bulletin 411, p. 14) \(\qquad\) 578.257

Piketon, 0.84 mile west of, on Piketon-Jasper road, at the southwest corner of Joseph Beacham's yard, on north fence line of road, in root of maple tree 28 inches in diameter; copper nail and washer, " 559 " painted on tree 2 feet east_
558.94

Piketon, 1.95 miles west of, at northwest corner of bridge over Scioto River, on the most eastern rivet head on inside of fishplate; highest point, " \(563-31\) " painted on bridge girder

Scioto River; surface of water under above bridge 9 a. m., June 12, 1915

Feet.
Jasper, 2.65 miles southwest of Piketon, 100 feet south of bridge over canal at T road north, 10 feet east of corner fence post, 1 foot south of fence line ; iron post stamped " 556 Ohio," " 556 " painted on post opposite
Jasper, 1.17 miles northwest of, on west side of road, 2 feet south of entrance to M. E. Blazer's blacksmith shop, on sandstone rock; chiseled square, " 570 " painted on shop \(\qquad\)
Jasper, 2.01 miles northwest of, at Charley Petry's residence, at east end of north parapet to small concrete culvert, at northeast corner of T road north ; chiseled square, " 601 " painted on parapet_-
Jasper, 2.93 miles northwest of, at T road south, 10 feet north of northwest corner of Sioux post office (abandoned), on large sandstone rock; chiseled square, " 624 " painted on old post-office building
Jasper, 3.72 miles northwest of, on south side of road, at forks, 150 feet west of Stony Ridge schoolhouse, in root of beech tree; copper nail and washer, " 613 " painted on tree
Jasper, 4.66 miles west of, 0.38 mile east of Tennyson M. E. Church, on south side of road, in center of large rock on south end of culvert ; chiseled square, " 589 " painted on fence near \(\qquad\)
Jasper, 5.22 miles northwest of, about 700 feet west of Tennyson M. E. Church, 100 feet west of iron bridge over Sunfish Creek, at southeast corner of \(T\) road east; iron post stamped " 572 Ohio," " 572 " painted on fence post opposite
571. 728

Jasper, 6.29 miles northwest of, 0.4 mile north of bridge over Chenoweth Fork of Sunfish Creek, at forks of road, on east abutment south side of wooden bridge; chiseled square, " \(585-82\) " painted on bridge \(\qquad\)
Chenoweth Fork of Sunfish Creek; surface of water under above bridge, June 15, 1915
Elmgrove, 300 feet west of post office, directly in front of C. of C. Church, on east abutment north side of small wooden bridge; chiseled square, " 614 " painted on bridge
Elmgrove post office, 1.2 miles west of, on Chenoweth Creek, 800 feet west of Elmer William's residence, on east abutment south side of small bridge, 450 feet east of \(\mathbf{T}\) road north; chiseled square, " 635 " painted on bridge
Elmgrove post office, 1.6 miles west of, in forks of road, at junction of Chenoweth Fork of Sunfish Creek and Georges Run; iron post stamped " 629 Ohio," painted on telephone pole 2 feet north__
Elmgrove post office, 2.45 miles west of, on Chenoweth Creek, 100 feet west of Talmage Smith's residence, on large stone at southwest corner of small wooden bridge; chiseled square, " \(665-58\) " painted on bridge \(\qquad\)
Arkoe post office (abandoned), 1,100 feet east of, on north fence line of road at southwest corner of cemetery, in root of white-oak tree 30 inches in diameter; copper nail and washer, " 704 " painted on tree
703. 51

Arkoe, 0.75 mile west of, 20 feet south of south fence line, on road along Chenoweth Fork, 1,200 feet west of Newton Gregg's residence, in root of walnut tree 1 foot in diameter, on north side; copper nail and washer, "724" painted on telephone pole opposite_-...

Feet. 724.01

From point near Bainbridge east along highways to point near Waller. (Releveling of old line along north boundary of quadrangle; see also Roxabell quadrangle.)

Bainbridge, 3.5 miles northeast of, at center of road crossing; top of north rail
Bainbridge, 3.5 miles northeast of, 15 feet directly north of railroad crossing, in base of telegraph pole; rail spike painted " 711.5 "-
711.31

Newingburg (old post office), 2.04 miles southeast of, on top of hill, 100 feet south of John Knoch's residence, on east side of road, 4 feet east of east wheel track; highest point on limestone rock, " 1088 " marked on rock 1, 088.25
Chillicothe, 11.5 miles south of, southwest corner of crossroads, in root of tree; copper nail, " 1025 " painted on tree (McNulta bench mark recovered)
Yankeetown, about 200 feet east of Huntington Town Hall, in north corner of road fork; iron post stamped " 888 " (McNulta bench mark recovered)
Waller, 1.15 miles south by 2.87 miles west of, on top of hill at southeast corner of crossroads, in top of oak stump 5 feet south of wheel track; copper nail and washer, " 993 " painted on tree near_
Waller, 1.15 miles south by 1.92 miles west of, at southwest corner of lane south, opposite \(T\) road north, in corner fence post; 60 -penny spike 2 inches above ground, " 829 " marked on post
993. 73
829.94

Near Bainbridge.
Bainbridge, 3.12 miles south by 2.11 miles southeast of, at Green Brier Church and Cemetery, on west side of road, in front of church, in root on east side of oak tree 14 inches in diameter; copper nail marked " 1241.8 "

1, 241. 76
Primary leveling by J. J. McNulta in 1911.
Bainbridge, 3.5 miles northeast of, at center of road crossing; cross cut on top of north rail
711.05

Near Newingburg.
Newingburg, about 200 feet west of old post office; iron post, stamped "Prim. Trav. Sta. No. 72, 1135 "

1, 135.912

\section*{PIONEER QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).] Primary leveling by C. R. French, A. D. Duck, and C. W. Howell in 1911.
From point 4.7 miles northwest of Bryan north and east along highways to Montpelier.
Bryan, 4.7 miles northwest of, northwest corner of crossroads; spike in base of fence post.
882.60

Bryan, 6 miles west by 2 miles north of, at road fork; iron post stamped " 849 Ohio"
849.179

Bryan, 6 miles west by 2.4 miles north of, at crossroads, southwest end of sidewalk from Mount Olive Church, on concrete corner stone; chiseled square

Feet. 871. 24

Montpelier, 4 miles south by 3 miles west of, at southeast corner of T
road east; spike in base of fence post, painted " 854.3 "
Montpelier, 3 miles south by 3 miles west of, at east side of \(\mathbf{T}\) at \(\mathbf{T}\) road south, on top of concrete culvert; chiseled square, painted " 849.3 "
849.57

Montpelier, 3 miles south by 3.5 miles west of, at southwest corner
of crossroads; spike in fence post, painted " 853.2 "------------ 853.39
Montpelier, 3.5 miles west by 2.3 miles south of, at railroad crossing; top of south rail of Wabash R. R. track, painted " 856.2 "
856. 42

Montpelier, 3.5 miles west by 2.3 miles south of, at railroad crossing, 80 feet north of track ; iron post stamped " 856 Ohio" 855.839

Montpelier, 2 miles south by 3.5 miles west of, at southwest corner of crossroads; spike in fence post, painted " 863.3 " \(\qquad\)
Montpelier, 3.5 miles west by 1 mile south of, at southeast corner of \(\mathbf{T}\) road south; spike in telephone pole, painted " 871.9 "
863.57

Montpelier, 3 miles west by 1 mile south of, at head of \(T\) road north; spike in telephone pole, painted " 861.1 "
872.17

Montpelier, 3 miles west of, at northeast corner of crossroads; iron post stamped " 880 Ohio "
861.31

Montpelier, 2 miles west of, at southwest corner of T road south; spike in fencepost, painted " 873.8 "
880.447

Montpelier, 1 mile west of, at crossroads, 40 feet east of center of cross, on south side of road; spike in telephone pole, painted " 871.2 "
871.36

Montpelier, at northeast corner of city hall building; iron post stamped " 861 Ohio"
860.839

From point 1.5 miles east of Montpelier to point 5 miles east of Montpelier.
Montpelier, 2 miles east of, at southwest corner of crossroads; iron post stamped " 894 Ohio"
894.071

Montpelier, 3 miles east of, 1 mile north of Jefferson, at southeast corner of crossroads ; spike in telephone pole, painted " 909.8 "----
909.95

Montpelier, 4 miles east of, at southwest corner of crossroads; spike in telephone pole, painted " 852.2 "
858.28

From point 2.5 miles northwest of Bryan north along highways to Montpelier, thence north, east, and south along highways to point 5 miles east of Montpelier.

Bryan, 2.5 miles northwest of, 100 feet northwest of Brown Cemetery, at northwest corner of crossroads ; spike in telephone pole, painted " 805.323 "
805.56

Bryan, 2.5 miles west by 1.5 miles north of, at southwest corner of crossroads; spike in telephone pole, painted "T. B. M. 831.0 "
Bryan, 2.5 miles west by 2.5 miles north of, at northwest corner of crossroads, 220 feet west of Lick Creek Church; iron post stamped " 827 Ohio"
831.25

Bryan, 2.5 miles west by 3.5 miles north of, at northwest corner of crossroads, in bridge planking; copper nail, painted " 835.9 "
\[
45281^{\circ}-\text { Bull. } 651-17-20
\]
Montpelier, 2.8 miles south by 0.5 mile east of, 250 feet east of West Bethesda Church, at southwest corner of crossroads, in small box culvert; copper nail, painted "T. B. M. 866.0 " and marked with circle
Feet. 866.25
Montpelier, 1.8 miles south by 0.5 mile east of, at southeast corner of crossroads ; iron post stamped " 900 Ohio"
900.619
Montpelier, 0.8 mile south by 0.5 mile east of, at southwest corner of T road south; spike in fence post, painted "T. B. M. 875.5 "
876. 74
Montpelier, northeast corner of city hall public square; iron post stamped " 861 Ohio"
Montpelier, 0.7 mile east of, at end of Main Street, north side of street, on top of concrete curb ; chiseled square, painted " 860.2 "--
Montpelier, 1.5 miles east of, at head of \(T\) road north; spike in fence post, painted " 875.958 "

Montpelier, 1.5 miles north by 1.5 miles east of, at southeast corner of T road east; spike in telephone pole, painted "T. B. M. 866.8 "--
Montpelier, 2.5 miles north by 1 mile east of, 50 feet north of \(\mathbf{T}\) road west; spike in telephone pole, painted " 856.875 "

Montpelier, 2.5 miles north by 1 mile east of, at head of \(T\) road west; iron post stamped " 856 Ohio"
860.839
860.41
876.14
867.00
857.04
856.543
Pioneer, 2.5 miles south by 2 miles west of, at northeast corner of crossroads; piece of wrought iron driven in fence post, painted " 872.4 "

Pioneer, 1 mile south by 2 miles west of, at northwest corner of cross-
roads; copper b. m. nail in root of oak tree, painted " 890.268 "----
Pioneer, 1 mile south by 2 miles west of, at southwest corner of crossroads; iron post stamped " 890 Ohio"
890.529
Pioneer, 1 mile west of, at center of crossroads; top of section-corner stone, painted " 886.2 "
886.31
Pioneer, in front of A. H. Shaffer's lunch rooms, on Main Street; chiseled square on crossing stone, painted " 879.3 "
879.45
Pioneer, 0.9 mile east of, at northwest corner of \(T\) intersection; top of granite bowlder, painted " 873.228 "
873.37
Pioneer, 0.9 mile east of, at northwest corner of T intersection; iron post stamped " 873 Ohio"
872. 660

Pioneer, 2.2 miles east of, at northeast corner of T road; spike in base of post, marked "T. B. M. 889.9 "
889.99

Pioneer, 2 miles east of, at southwest corner of T road south; spike in fence post, painted " 877.873 "
878.01

Pioneer, 2 miles east by 1 mile south of, at northeast corner of crossroads; spike in fence post, painted " 888.479 "
888.61

Pioneer, 2 miles east by 2 miles south of, at northwest corner of crossroads; spike in telephone pole, painted " 884.5 "
Pioneer, 2 miles east by 3 miles south of, at southwest corner of crossroads; spike in fence post, painted " 878.836 "
884.64
878.96

Pioneer, 2 miles east by 3 miles south of, at southwest corner of crossroads ; iron post stamped " 879 Ohio"
879.227

Pioneer, 2 miles east by 4 miles south of, at head of \(T\) intersection; spike in telephone pole, painted " 883.6 "
883.75

Pioneer, 2 miles east by 5.5 miles south of, at northwest corner of crossroads; spike in fence post, painted "T. B. M. 862 "
862.14

Montpelier, 5 miles east of, at crossroads, at southwest corner of schoolhouse lot; iron post stamped " 859 Ohio "
859.394

\section*{From Pioneer north and west along highways 5 miles, thence south to point 3 miles west of Montpelier.}

Pioneer, 1 mile west by 1 mile north of, at southwest corner of \(T\) road west; iron post stamped " 906 Ohio"

Feet. 906. 276

Pioneer, 1 mile north by 2 miles west of, at crossroads, on northeast corner of wall of concrete bridge; chiseled square, painted "T. B. M. 898.3 " \(\qquad\)
Pioneer, 1 mile north by 3 miles west of, at southwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 927.0 "
Pioneer, 1 mile north by 4 miles west of, at northwest corner of crossroads; iron post stamped " Prim. Trav. Sta. No. 18, 939 " \(\qquad\)
927.13
939. 353

Pioneer, 1 mile north by 5 miles west of, at northeast corner of \(T\) road north; spike in corner fence post, painted "T. B. M. 949.0 "--
Pioneer, 1 mile north by 6 miles west of, at southwest corner of crossroads; spike in base of telegraph pole, painted "B. M. 961.690 "---
Pioneer, 1 mile north by 7 miles west of, at head of \(T\) road south, on north side of road; iron post stamped " 953 Ohio"
Pioneer, 6 miles west by 0.25 mile north of, at bridge over St. Joseph River, in northwest corner of bridge; copper nail, painted "T. B. M. 911.013"
949.13
961. 77
954. 254

Bridgewater Center, 2 miles west by 1.5 miles north of, at southeast corner of crossroads; spike in fence post, painted "T. B. M. 931.8 "
Bridgewater Center, 2 miles west of, at crossroads, 10 feet west of northwest corner of church; iron post stamped " 935 Ohio" \(\qquad\)
Bridgewater Center, 2 miles west by 1.25 miles south of, at northwest corner of crossroads; spike in base of fence post, painted "T. B. M. 913.9 " \(\qquad\)
Montpelier, 3 miles west by 2.25 miles north of, at corner of \(T\) road north, at northwest corner of school lot; iron post stamped " 905 Ohio" \(\qquad\)
Montpelier, 3 miles west by 1.5 miles north of, at southeast corner of T road; spike in base of post, marked "T. B. M. 886.2"
911.10
931.96
934.906
914. 00
905.318
886. 32

From point 0.4 mile east of Pulaski southwest along highways to point 1 mile south of Pulaski.
Pulaski, at southwest corner of German Reformed Church; iron post stamped " 762 Ohio"
761. 563

Pulaski, 1 mile south of, at northeast corner of crossroads; spike in telephone pole, painted "T. B. M. 754.9"
755.00

From Pulaski north along highways to point 5 miles east of Montpelier.
Pulaski, 0.3 mile west of, in corner on north side of bridge over Beaver Creek; nail painted "T. B. M. 744.3 "
744. 40

Pulaski, 1 mile west of, at northwest corner of \(T\) road north; chiseled square on granite bowlder, painted "T. B. M. 773.7 "
773. 74

Pulaski, 1 mile west by 1 mile north of, at northeast corner of crossroads; spike in base of telephone pole, painted "T. B. M. 800.3 "
800.36

Pulaski, 1 mile west by 2.1 miles north of, at T road east, at southeast corner of bridge over Beaver Creek; copper nail in plank painted "T. B. M. 778.1 "

Pulaski, 0.5 mile west by 2 miles north of, 70 feet west of southwest corner of \(T\) road; copper nail in top of stump, painted "T. B. M. \(801.483^{\prime \prime}\)
778.20

Pulaski, 0.3 mile west by 2 miles north of, at head of T road north; iron post stamped " 801 Ohio"
801.54

Montpelier, 5 miles east by 1 mile south of, southeast corner of crossroads; spike in base of telephone pole, painted "T. B. M. 822.1 "---

Feet.
822. 23
856. 74
"T. B. M. 856.635 "
From point 1.25 miles south of Blakeslee north along highways via Cooney and Nettle Lake to point 3 miles northeast of Cooney.

Blakeslee, 1.25 miles south by 0.5 mile west of, at southwest corner of T road south; spike in base of 2 -foot fence post, marked " 858.9 "
Blakeslee, south edge of town, northeast corner of \(T\) road east; chiseled square on cement walk, marked " 860.5 "
858. 99
860.56

Blakeslee, Wabash R. R. crossing, west side of highway, north side of railroad; nail in tie supporting signal block, marked " 869.243 "--
Blakeslee, on Wabash R. R. right of way, 60 feet east of railroad crossing, south side of track; iron post stamped " 868 Ohio " \(\qquad\)
869.32
868. 505

Blakeslee, north edge of town, southeast corner of crossroads; chiseled square on cement walk, marked " 873.9 "
873.98

Blakeslee, 1.3 miles north of, at northwest corner of crossroads; spike in base of fence post, marked " 876.6 "
876. 68

Edon, 2 miles east of, southeast corner of sec. 15, northwest corner of crossroads; spike in base of telephone pole, marked " 881.050 " \(\qquad\) 881.11
881.048
901. 73
905. 08
891.30
885.01
910.13
899.930
918. 24
931. 89
949. 31
940.410
952.93
post, marked " 951.9 "
๖52. 93

Cooney, 1 mile south of, at northwest corner of T road west; spike in base of fence post, marked " 961.8 "

Cooney, 0.5 mile south of, at southwest corner of T road west; painted square on top of stone in road, marked " 982.9 "
Cooney, at southwest corner of crossroads; iron post stamped " 978 Ohio"
Cooney, 1 mile north of, at southeast corner of T road east, at side of road; painted square on top of stone, marked " 986.0 " \(\qquad\)
Cooney, 2.5 miles north of, at northwest corner of crossroads, in fence corner ; iron post stamped "Prim. Trav. Sta. No. 19, 1905, 980 "
Cooney, 2.5 miles north by 0.8 mile east of, at T road south, north side of east-west road opposite \(T\) road; spike in base of fence post, marked " 956.9 " \(\qquad\)
Nettle Lake, surface of water; August 3, 1911
Cooney, 2.5 miles north by 1.5 miles east of, at northwest corner of T road north, 100 feet northwest of Nettle Lake Church; spike in base of butternut tree, marked " 978.9 "
Nettle Lake Church, 0.5 mile east of, at northeast corner of \(\mathbf{T}\) road north; spike in base of corner fence post, marked " 950.8 "

\section*{POINT PLEASANT QUADRANGLE,}
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by E. L. McNair in 1898, R. S. Blinn in 1904, and George L. Gordon in 1905.

From Gallipolis north to State Epileptic Home.
Gallipolis, at northwest corner of Gallia County jail, on water table; chiseled square (U. S. Engineer Corps precise-level bench mark 269 A )
578.329

Gallipolis, Gallia County jail, at northwest corner west face ; aluminum tablet stamped " 578 Adj 1903"
577. 862

Gallipolis, 1.5 miles north of courthouse, Ohio Epileptic Home grounds, in foundation at southwest corner of women's dining room and chapel building, third course of stone above pavement; bronze tablet stamped " 606 A "
604. 775

\section*{At Middleport.}

Middleport, 3-story brick schoolhouse at corner of Fourth and Mill streets; aluminum tablet stamped " 580 Adj 1903 "
578.130

From Gallipolis southwest along highway to Thivener,
Gallipolis, 2.3 miles southwest of, on Mercerville pike, northwest wing wall of county bridge; bronze tablet stamped " 562 Adj 1903 "----

Feet. 983.92
979.250
987. 06
981.440
957.87

944
979.90
951.84
561. 969

From Spilman across Ohio River, thence southwest along highway to Cheshire, thence northwest to point 4 miles west of Kyger.
Cheshire, north face of stone foundation of academy at northwest corner ; aluminum tablet stamped " 573 Adj 1903"
573.036

Cheshire, 2.5 miles northwest of, on west face of rock west of road; aluminum tablet stamped " 573 Adj 1903 "
573.000

Kyger, 0.86 mile west of, iron bridge over Kyger Creek, top of east abutment, south end; aluminum tablet stamped " 597 Adj 1903"--
596. 891

Kyger, 4 miles west of, bridge over small stream, west abutment, north end; aluminum table stamped "707 Adj 1903"

\section*{From Kerr southeast along highway to Gallipolis.}

Mills station, 0.4 mile south of, 4 miles southeast of Evergreen, iron bridge over Little Chickamauga Creek, north abutment, east end; aluminum tablet stamped " 567 Adj 1903"

Feet.
569.9
566.960

\section*{POMEROX QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Primary leveling by E. O. Garvin and R. S. Blinn in 1904.
From Hebbardsville south along Toledo \& Ohio Central Ry, to Langsville, thence east to Pomeroy.

Albany, J. H. Cline's drug store, in east wall of foundation near south end, aluminum tablet stamped " 773 Adj 1903 " \(\qquad\)
Carpenter, 1.5 miles north of, 250 feet west of railway, in northeast corner of foundation of white frame schoolhouse; bronze tablet stamped " 656 Adj 1903 " \(\qquad\)
Carpenter, 200 feet east of railway track, in top stone at west end of north abutment of wagon bridge south of town; bronze tablet stamped " 628 Adj 1903" \(\qquad\)
Dyesville, wagon bridge over Leading Creek northwest of station, in east abutment at north end; aluminum tablet stamped " 607 Adj 1903 " \(\qquad\)
Dexter, 400 feet west of railroad track, in east wall of schoolhouse near north end; aluminum tablet stamped "604 Adj 1903" \(\qquad\) 604.142

Langsville, 0.75 mile north of, in back wall at east end of north abutment of bridge; aluminum tablet stamped " 587 Adj 1903 "---
Rutland, 150 feet from railway station, in northwest corner of brick outhouse; bronze tablet stamped " 575 Adj 1903 " \(\qquad\)
Rutland, in front of station; top of rail \(\qquad\)
Hobson, 2.5 miles north of, in south abutment of railroad overhead crossing to public road; aluminum tablet stamped " 571 Adj 1903 ".
Pomeroy, in northwest corner of jail, in foundation stone, 1.72 feet below U. S. Engineer Corps bench mark 249A; aluminum tablet stamped " 581 Adj 1903 "
579.403

From Pomeroy north along highway to Judson.
Rock Springs, 50 feet south of road crossing, in rock ledge outcrop opposite store building; aluminum tablet stamped " 652 Adj 1903 ".
Midway (Kingsbury post office), 400 feet north of store, on hillside in natural ledge of rock; aluminum tablet stamped " 754 Adj 1903 "
Millersburg, in southeast corner of foundation of schoolhouse; aluminum tablet stamped " 760 Adj 1903 "
Burlingham, north abutment, county bridge; square cut in parapet_
Pratts Fork, 0.6 mile north of, on Judson road, in front of house, in ledge outcrop; aluminum tablet stamped " 729 Adj 1903 "

\section*{At Pleasanton (by Athens levels).}

Pleasanton, in northeast corner of sandstone foundation of Methodist Church; bronze tablet stamped " 855 Columbus"

From Burlingham northwest along highway to Albany.
Burlingham, 1.7 miles west of, at crossroads, on natural ledge of rock; aluminum tablet stamped " 691 Adj 1903 " \(\qquad\)
752. 275
758.184
663.071
727.258
954.873
650.173
-
689.316

Woodyards, 4 miles east of Albany, at \(T\) road on Pagetown road, 300 feet east of white house, on parapet stone of bridge; aluminum tablet stamped " 766 Adj 1903 ".

Feet.
764.443

\section*{PUT-IN-BAY QUADRANGLE. \\ [ \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]}

Primary leveling by A. F. Freundburg in 1901.
Scattered bench marks set from water level of Lake Erie, 571.7 feet.
Put-in-Bay, South Bass Island, at north corner of Hotel Victory, in foundation 1.6 feet above ground; aluminum tablet stamped " 643 "-
Middle Bass Island, in center of foundation on club grounds, west of pavilion ; on northeast corner of square stone
642. 000

North Bass Island, west of post office, at church, at northeast corner of \(T\) road; highest point of limestone bowlder
589. 29

Sugar Island, on bottom of capstan near south dock; cross
595.06

Rattlesnake Island, 3 feet from northwest corner of stone addition to solitary frame house, 2.6 feet above ground; cross

RAVENNA QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\). .]
Primary leveling by R. C. Seitz. G. M. Dimmick. and H. W. Peabody in 1905, and E. I. Shea in 1903.
From Wayland north along highways to Windham, thence west to Shalersville.
Wayland, in east face of northeast corner of Bethany Church; T. 3 N., R. 6 W., aluminum tablet stamped " 964 Adj 1903 " \(\qquad\) 964. 430

Windham, 700 feet north of crossroads, in southeast corner of foundation of town hall; aluminum tablet stamped "997 Adj 1903 "--
Freedom (center), in northeast corner of foundation of church; aluminum tablet stamped " 1175 Adj 1903 "

1, 175. 341
Shalersville, in northwest corner of foundation of town hall; aluminum tablet stamped " 1245 Adj 1903 "

1, 245. 359
From Baltimore \& Ohio R. R. bench mark 415 north to Charlestown and return.
Charlestown station, northeast corner sec. 22, T. 3 N., R. 7 W., 300 feet north of overhead bridge, in bridge seat at northwest corner of iron bridge over Hinkley Creek; aluminum tablet stamped "1041 Adj 1903"

1, 041.100
From Baltimore \& Ohio R. R. bench mark 415 south along highway to Atwater Center, thence east to Deerfield, thence north to Wayland.
Edinburg, southeast corner sec. 25, T. 2 N., R. 7 W., 300 feet north of main crossroads, in east face of northeast corner of Congregational Church; aluminum tablet stamped " 1181 Adj 1903 ".-. \(1,180.957\)
Atwater Center, T. 1 N., R. 7 W., 300 feet south of crossroads, in northeast corner of column support of Congregational Church; aluminum tablet stamped " 1165 Adj 1903 "

1, 164. 736
Deerfield, northeast corner sec. 32, T. 1 N., R. 6 W., in north face of northeast corner of M. E. Church ; aluminum tablet stamped " 1072 Adj 1903"
\(1,072.477\)
Palmyra, northwest corner sec. 25, T. 2 N., R. 6 W ., in west face of stone guide post at center of crossroads; aluminum tablet stamped "1037 Adj 1903" (probably removed 1913)

1,037. 526

\section*{From Atwater wast along highway to Randolph and return.}

Randolph, at northeast corner of square, at southwest corner of post-office building, in south face of foundation; bronze tablet stamped " 1153 Cleveland 1903 "

Feet.

\section*{From Ravenna south along highway to Randolph.}

Ravenna, at main entrance to courthouse, in stone floor at southeast corner of veranda; bronze tablet stamped " 1140 Cleveland 1903 " \(\qquad\) \(1,140,164\)
Rootstown, on west side at southwest corner of post-office building, in face of stone foundation wall; bronze tablet stamped " 1126 Cleveland 1903 "

1, 126. 109

\section*{RAVENSWOOD QUADRANGLE.}
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Primary leveling by F. W. Hughes in 1904.
From Pomeroy southeast along highway to Syracuse, thence east to Spiller.
Syracuse, in southwest corner of foundation of public school; aluminum tablet stamped " 580 Adj 1903 "
Cross's mill, 1.3 miles east of, 600 feet north of crossroads, 400 feet south of V. L. Morrison's house and sawmill, 80 'feet west of center of Racine-Bashan road at watering trough, in bluff 10 feet north of spring; aluminum tablet stamped " 656 Adj 1903 "
655.981

Spiller, 500 feet west of post office, on stepping stone of J. W. Bush's residence; aluminum tablet stamped " 710 Adj 1903 "
710.254

\section*{RICHWOOD QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\). .]
Primary leveling by Carleton McRae in 1901.
From Prospect northwest to Woodland and return.
Woodland, in stone entrance to schoolhouse; bronze tablet stamped " 948 C"

Primary leveling by E. C. Bibbee in 1912, C. E. Mills and S. L. Parker in 1913. From Science Hall schoolhouse south, east, and southwest to Lunda.

West Mansfield, 2.3 miles northwest of, southeast corner of T road south, 100 feet south of residence of C. R. Ballinger, on east end of steel drain under pike; highest point
West Mansfield, 2.2 miles southwest of, southeast corner of crossroads, 100 feet northwest of residence of D. H. Skidmore, in base of telephone pole; spike
West Mansfield, 3 miles southwest of, southeast corner of \(T\) road south, in top of 14 -inch elm stump; copper nail \(\qquad\)1,068. 05

York Center, 1.5 miles south by 1 mile west of, northeast corner of crossroads, at West Cahill schoolhouse, north end of iron drain pipe under pike
Lunda, 2.5 miles east of, 200 feet north of T road west, 125 feet south of residence of J. W. Davis, in root of 3 -foot swamp-oak tree; copper nail
\(1,078.94\)
Lunda, 1.4 miles east of, northwest corner of T road west, 250 feet north of residence of C. W. Rea, in root of 2.5 -foot hickory tree; copper nail

From bench mark 1 mile north of Lybrand west to Magnetic Springs, thence
south and west to New Dover.

Magnetic Springs, 2.3 miles south of, 2 miles east by 1 mile south of Pharisburg, southwest corner of \(\mathbf{T}\) road west, in base of fence post; copper nail
953.58

Pharisburg, 2 miles east by 2 miles south of, northwest corner of \(T\) road west, in base of gatepost; spike
955.54

Pharisburg, 2 miles east by 3 miles south of, southwest corner of \(T\) road west; iron post stamped " 954 "-
Pharisburg, 2 miles east by 3.3 miles south of, southeast corner of \(T\) road east, in base of fence post ; staple painted white
New Dover, 2.1 miles northeast by 1.3 miles north of, southeast corner of stone curbing of walk in front of Springdale Baptist Church; chiseled square
949.53

New Dover, 2.1 miles northeast by 1 mile north of, in southeast corner of T road east, on bowlder; chiseled square
980.93

New Dover, 2.1 miles northeast of, 200 feet west of crossroads, northeast corner of stone drain; chiseled square
961. 40

New Dover, 0.6 mile east of, northwest corner of crossroads, in base of fence post; staple painted white
965.68

\section*{From Magnetic Springs north along highway to Essex.}

Magnetic Springs, northeast corner of cross streets in center of town, on corner of concrete walk; chiseled square
935.48

Magnetic Springs, 0.7 mile north of, northwest corner of crossroads, on stone drain; chiseled square
935.39

Magnetic Springs, 2.2 miles north of, T road south at road crossing of Delaware, Magnetic Springs \& Northern Electric R. R., in base of switch stand; spike head painted white
942.75

Richwood, 2.2 miles south of, on Delaware, Magnetic Springs \& Northern Electric R. R., at Claibourne Cemetery, northwest corner of walk from waiting room; chiseled square
940.68

Richwood, 1.8 miles south of, at road crossing on Delaware, Magnetic Springs \& Northern Electric R. R.; top of north rail
938.3

Richwood, southeast corner of Franklin and Tawa streets, on stone curbing; chiseled square
941. 63

Richwood, northeast corner of Franklin and Bomford streets, 15 feet north of northwest corner of town hall ; iron post stamped " 950 "--
Richwood, crossing of Franklin street and Erie R. R.; top of north rail
950.320

Richwood, north end of pavement on Franklin street, north end of curbing on west side of street, at T road east ; chiseled square.-
945.7

Richmond, 2.3 miles north of, northwest corner of crossroads, in base of telephone pole; spike
949.03

Richwood, 2.9 miles north of, southwest corner of T road west, in base of telephone pole; spike
951. 69
Richwood, 3.7 miles north of, southeast corner of \(\mathbf{T}\) road east; iron

Feet.post stamped " 944 "
944.202
Essex, southeast corner of concrete step to F. E. Moshier's store; chiseled square
948. 82
Essex, 1 mile northwest of, at T road east at Price's cemetery, on west side of road, on stone culvert; chiseled square
935.57

From point 2.2 miles north of Magnetic Springs west along highways to point 1.5 miles south by 1 mile west of York Center.

Magnetic Springs, 0.5 mile north by 1.5 miles west of, southwest
corner of T road west; iron post stamped " 944 "-..-....-- 944.467
Magnetic Springs, 0.5 mile north by 2.25 miles west of, northeast corner of \(T\) road east, on stone culvert; chiseled square
952.29

Magnetic Springs, 3 miles west of, southwest corner of T road west, at Elliot schoolhouse, in base of telephone pole; spike
961.24

Claibourne, 1 mile south of, northwest corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 811910981 "
981.173

Claibourne, 1.5 miles southwest of, at road crossing Erie R. R.; top of west rail
995.3

Claibourne, 1 mile south by 1 mile west of, in southwest corner of crossroads, northwest corner of second concrete step to entrance of Hull schoolhouse ; chiseled square
Somersville, 1.5 miles southeast by 0.8 mile east of, 300 feet west of \(T\) road north, northwest corner of east abutment of steel bridge; chiseled square
997. 12

Somersville, 1.5 miles southeast of, on Marysville pike, northeast corner of crossroads, in base of fence post; spike

Somersville, 1.5 miles south by 0.8 mile west of, northwest corner of T road north, in base of telephone pole at schoolhouse ; spike_.......
York Center, 1.25 miles south of, southwest corner of \(T\) road west, in base of fence post; spike
York Center, 1.5 miles south by 1 mile west of, northeast corner of crossroads, north end of cast-iron drain pipe at Cahill schoolhouse ; painted square
\(1,060.21\)
From point 1.5 miles southeast of Somersville north along highway to point 1.6 miles north of Arbela.

Somersville, 0.4 mile south of, northwest corner of road forks, in base of telephone pole ; copper nail
Somersville, 5 feet south of southwest corner of school building; iron post stamped " 1003 "
\(1,003.52\)
Somersville, 0.6 mile north of, southeast corner of T road east, in base of fence post; copper nail

1, 003. 71
Somersville, 2.8 miles north of, 400 feet north of crossroads at Miller school, south abutment west end of steel bridge over Fulton Creek; chiseled square
985. 81

Somersville, 3.6 miles north of, northeast corner of crossroads on Greenville treaty line; iron post stamped " 990 "
990.261
\(\begin{array}{cc}\text { Arbela, } 1.3 \text { miles south of, southwest corner of } T \text { road south, in base } \\ \text { of fence post ; copper nail } & 996.09\end{array}\)
Arbela, 0.3 mile south of, 400 feet south of road forks, north abutment east side of small steel bridge; chiseled square
Arbela, northwest corner of crossroads at store, west end of wooden drain; nail head painted white
Mount Victory, 8.8 miles southeast of, 30 feet northeast of center of T
road south, 800 feet northwest of Henry Greencamp's residence;
iron post stamped " 994 "--.-.--.-.
From point 3.6 miles north of Somersville west along highway to bridge over
Bokes Creek.

Feet. 982.57
988. 41

Byhalia, 3 miles east of, southeast corner of T road east on Greenville treaty line, on top of red-granite bowlder ; painted square
999. 31
\(\qquad\) \(1,008.35\)
Byhalia, northwest corner of crossroads, in center of town; chiseled square on stone

1, 031.67
Byhalia, 1 mile southwest of, northwest corner of road forks; iron
post stamped " 1052 "
Byhalia, 1.7 miles southwest of, on Boundary road, southeast corner of \(T\) road south, in base of telephone pole; copper nail

1, 064.51
Byhalia, 2.3 miles southwest of, on Boundary road, northeast corner of \(T\) road north at schoolhouse, in base of fence post ; copper nail__ 1, 058. 34
Walnut Grove, 6.1 miles east of, at T road south, 400 feet west of bridge over Bokes Creek, on 10 -inch steel drain under pike; highest point

1,050. 80
From point near Marysville north along highway to point near Somersville.
Marysville, 2.9 miles north of, on Somersville pike, southeast corner of crossroads, in base of fence post; spike
997.99

Marysville, 3.8 miles north of, on Somersville pike, in southwest corner of crossroads, northeast corner of yard to John Scheiderer's residence; iron post stamped " 1010 "

1,010. 578

Broadway, 1 mile east by 2.2 miles south of, southwest corner of \(T\) road southwest, in base of telephone pole; spike
\(1,026.97\)
Broadway, 1 mile east by 1.8 miles south of, at crossroads, south abutment west end of small wooden bridge; chiseled square__-... 1, 011.03
Broadway, 1 mile east by 0.5 mile south of, southeast corner of \(T\) road east, in base of telephone pole; spike

1,012. 80

Broadway, 1 mile northeast of, center of road crossing Erie R. R.; top of north rail
\(1,014.0\)
Broadway, 1 mile east by 1.8 miles north of, in northeast corner of crossroads, in base of fence post; spike
\(1,008.67\)
Somersville, 1.5 miles southeast of, on Marysville pike, northeast
corner of crossroads, in base of fence post ; spike
From point 1.7 miles northwest of Marysville northwest along highway to Pottersburg.
Marysville, 2.8 miles west of, northwest corner of crossroads, on granite bowlder ; chiseled square

1, 039.23
Marysville, 3.5 miles west of, on Bellefontaine pike, northeast corner of T road east; iron post stamped " 1048 "
Marysville, 4.1 miles west of, in base of telephone pole at crossroads ; Feet.spike1, 070.32
Marysville, 5.8 miles west of, northeast corner of crossroads, in base of telephone pole; spike ..... 1, 080.60
Pottersburg, 1.5 miles east of, southwest corner of crossroads, on end of drain; painted square ..... \(1,082.25\)
Allen Center, 1.2 miles northeast of, east end of south abutment ofsmall steel bridge; chiseled square1, 055.11
Pottersburg, 0.25 mile north of, southeast corner of crossroads, 125feet east of road crossing of Erie R. R. ; iron post stamped " 1084 "- 1, 084. 181Pottersburg, 0.7 mile west by 0.7 mile northeast of, northeast cornerof \(T\) road northwest, in top of stump of tree; nail1, 095. 76From point 4 miles southeast of Mount Victory east 3 miles along highway.Mount Victory, 4 miles south of, 3 miles north of Byhalia, at roadeast, 35 feet east by 20 feet south of center of intersection; ironpost, stamped "Prim. Trav. Sta. No. 83 Ohio 1029 "1,029. 695
Mount Victory, 5.3 miles southeast of, 70 feet west of bridge overRush Creek, in top of fence post on property line ; copper nail_-\(1,009.00\)
Mount Victory, 7 miles southeast of, at T road north, on section cor- ner stone in center of road; chiseled square ..... 1, 015.27
Mount Victory, 7.8 miles southeast of, on Youkum Road, at north- west corner of crossroads, in bottom of fence post; copper nail ..... \(1,004.51\)
From point 1 mile northwest of Essex east to point 3 miles west of Green Camp.
Fissex, 1 mile northwest of, on Essex and Larue pike, at \(T\) roadeast, at Price's cemetery, on west end of small stone culvert;chiseled square935. 57
Essex, 1.25 miles northeast of, on west end of doorsill at entrance to schoolhouse (district 5, Jackson Township) ; chiseled square_.....- ..... 965. 00
Essex, 2.5 miles northeast of, on State road, 100 feet west of resi-dence and large barn, on large rock on north side of road;chiseled square952. 69
Green Camp, 3 miles west of, at junction of State road and Green Camp-Mount Olive pike, 60 feet north of center of pike, in root of ash tree; copper nail ..... 940.72
ROXABELL QUADRANGLE.
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Chillicothe west along Baltimore \& Ohio Southwestern R. R. to Musselman.
Musselman, Ross County, about 1.25 miles east of, on west abutmentof railroad bridge over branch of Paint Creek; chiseled squaremarked " B M" (C. \& G. S. b. m. LVI) \({ }^{1}\)
Musselman, about 0.25 mile west of, on east abutment of railroadbridge over branch of Paint Creek; chiseled square marked "B M"(C. \& G. S. b. m. LVII) \({ }^{1}\)712. 186

Primary leveling by J. J. McNulta in 1911.
From Egypt Church along highways southwest to Rowe School, thence south near west border to southwest corner of quadrangle.

Egypt Church, northeast corner of church yard ; iron post stamped "870 Ohio"869. 400

\footnotetext{
\({ }^{1}\) Not found.
}

Egypt Church, 1 mile southwest of, in top of fence post at northeast corner of road and driveway leading to house of Ben Ackley; copper nail and washer

Feet.
878.93

Austin, 3.5 miles north of, at T road south, north side of road, on north wall of road culvert ; square cut
North Paint Creek; crossing
829.67
779.8

Austin, 2.5 miles northwest of, on Dogtown pike, in front of A. Rowe's barn, in board along north side of concrete platform; copper nail and washer
811.45

Austin, 1.2 miles north of, Cincinnati, Hamilton \& Dayton R. R.; top of rail
Austin, 1 mile northwest of, at intersection of Washington and Dogtown pikes, at northwest corner of pikes, in top of fence post; copper nail and washer
778. 49

Austin, in northeast corner of Washington pike and \(T\) road running south; iron post stamped " 764 Ohio".
Austin, 1 mile southwest of, on northeast corner of stone abutment of road bridge; square cut
764.209
774.38

Harper station, 1.5 miles east and 0.5 mile north of, on northeast corner of abutment of iron bridge over Little Creek; square cut_-.-.-
Culps Bridge and road, Baltimore \& Ohio Southwestern R. R. crossing
862.23
870.12

Harper station, 1.5 miles east of, 400 feet south of Baltimore \& Ohio Southwestern R. R., in northwest corner of crossroads and \(T\) road runuing southwest; iron post-
860.643

Harper station, 1.5 miles east of, on Greenfield and Lattaville pike, southwest corner of pike and \(T\) road running north, in top of fence post; copper nail and washer
960.13

Lattaville, 0.5 mile west of, on Lattaville and Greenfield pike, on southwest corner of wing wall of concrete culvert; square cut
850.31

Lattaville, 0.5 mile west of, thence 1 mile southwest of, on Porter Hollow road, in floor of small road bridge ; copper nail \(\qquad\)
Lattaville, 2.5 miles south of, on Lower Twin pike, east side of driveway leading to L. Steven's house, about 500 feet east of Beach Grove Church, in top of fence post; copper nail and washer \(\qquad\)
Lattaville, 1.5 miles west and 2.5 miles south of, on Lower Twin pike, in northwest corner of pike and \(T\) road running south; iron post stamped " 820 Ohio" \(\qquad\)
Lattaville, 1.5 miles west of and 3.5 miles south of, on Steiner Hill road, along west side of road leading to \(O\). A. Storts' house, in root of locust tree; copper nail and washer
996. 47

Bourneville, 5 miles west of, on Upper Twin pike, in southeast corner of pike and \(T\) road running south; iron post
767.983

Bainbridge, 5 miles northeast of, on Farrell Hill road, on large stone at extreme top of divide; square cut
\(1,218.60\)

Primary leveling by F. L. Whaley in 1914.
From Adamsville west along highway and Baltimore \& Ohio Southwestern R. R. to point 1.5 miles east of Harper station.

Chillicothe, 2 miles northwest of court house, in southwest wing wall of concrete bridge over small drain at Adamsville; chiseled square, marked "637.8 T.B.M." (new b. m.)

Chillicothe, 3.2 miles northwest of, 850 feet north of Frankfort and Egypt pike junction, southeast corner of concrete abutment of bridge on Egypt pike; chiseled square marked "661.8 T. B. M." (new b. m.)

Feet. 661.78

Chillicothe, 4.5 miles northwest of, on northeast corner of stone step at entrance to Briggs schoolhouse (South Union Township, district 3) ; square cut (McNulta b. m. recovered)
772.22

Chillicothe, 3.5 miles northwest of, 2.8 miles east of Anderson, on wooden pier of steel highway viaduct over Baltimore \& Ohio Southwestern R. R., in painted square; spike, marked " 747.2 T. B. M." (new b. m.)
747. 20

Anderson, 1.5 miles east of, southwest corner of coping of stone culvert on Baltimore \& Ohio Southwestern R. R.; chiseled square, marked " 702.1 T. B. M." (new b. m.)
702.15

Anderson, 0.25 mile west of, on west abutment of overhead railroad bridge; square cut (McNulta b. m. recovered)
696. 52

Anderson, 1.5 miles west of, in northwest corner of intersection of land and pike, 150 feet north of. Baltimore \& Ohio Southwestern R. R. ; iron post stamped "728" (Prim. Trav. 1909) (McNulta b. m. recovered)

\section*{727. 407}

Musselman, 1.8 miles east of, at intersection of Cincinnati, Hamilton \& Dayton and Baltimore \& Ohio Southwestern railroads; top of rail
707.2

Musselman, 1.25 miles east of, on west abutment of railroad bridge over Paint Creek; chiseled square (McNulta b. m. recovered) ----
Musselman, 0.25 mile west of, on east abutment of bridge over Paint Creek; square cut (McNulta b. m. recovered)
702.90
711. 87

Musselman, 1.25 miles west of, 1.5 miles east of Roxabell, in east abutment of railroad bridge; chiseled square marked "723.8 T. B. M." (new b. m.)
723.83

Roxabell, in northeast corner of town-hall yard; iron bench mark post stamped "752 Ohio 1911" (McNulta b. m. recovered and old value retained)
751.555

Roxabell, 1.25 miles west of, west end of stone culvert at dim road crossing with Baltimore \& Ohio Southwestern R. R.; chiseled square marked "800.2 T. B. M." (new b. m.)
800.19

Harper station, 1.5 miles east of, in northwest corner of \(T\) road southwest, 400 feet south of railroad; iron post stamped " 860 " (McNulta b. m. recovered)
860.643

\section*{Primary leveling by J. J. McNulta in 1911.}

\section*{Chillicothe north and west along highways to Clarksburg.}

Chillicothe, 5.5 miles northwest of, west side of pike, in root of large tree; copper nail
894.05

Chillicothe, 6.6 miles northwest of, 200 feet south of small store, in root of large walnut tree ; copper nail
942. 02

Chillicothe, 5 miles north of, northwest corner of intersection of pike and lane to infirmary, in root of large locust tree; copper nail
691. 30

Chillicothe, 7 miles northwest of, in southwest corner of \(T\) road northeast and pike intersection; iron post stamped " 752 "
751. 422

Andersonville, 2 miles west of, northwest corner of crossroads (T road southeast), in root of large elm tree; copper nail
711. 78

Chillicothe, 10 miles north of, northwest corner of \(T\) road west, in side of telephone pole; copper nail.
641.63
Yellow Bud, 2.5 miles south of, in northwest corner of crossroads;

Feet.iron post stamped " 689 Ohio " 688.854

680.17
Yellow Bud, 3 miles southwest of, northeast corner of crossroads; copper nail in top of fence post ..... 680.17
Clarksburg, 6.5 miles southeast of, northeast corner of T road north, in side of fence post ; copper nail ..... 710.13
Clarksburg, 3.5 miles south by 1 mile east of, northeast corner of crossroads, in top of fence post ; copper nail ..... 694.21
Clarksburg, 4.0 miles southeast of, in southeast corner of crossroads; iron post stamped " 740 Ohio " ..... 739. 656
Clarksburg, 3 miles southeast of, southwest corner of intersection of pike and \(T\) road west, in side of telephone pole; copper nail ..... 730.10
Clarksburg, 1 mile southeast of, at \(T\) road west, in side of large oak tree; copper nail ..... 741.52
From point near Clarksburg south along highway to Roxabell.
Frankfort, 5 miles north of, southwest corner of crossroads; square cut on large stone ..... 799.66
Frankfort, 4 miles north of, southwest corner of intersection of pike and T road east, in root of elm tree; copper nail ..... 784.73
Frankfort, 3 miles north of, northwest corner of crossroads; iron post stamped " 772 Ohio" ..... 772.363
Frankfort, 1 mile north of, in northwest corner of crossroads, in east side of telephone pole; copper nail ..... 745. 78
Frankfort, in northeast corner of school yard; iron post stamped "740 Ohio" ..... 740.234
Roxabell, in northeast corner of town hall yard; iron post stamped "752 Ohio 1911" ..... 751. 555 ..... 750.8
Leveling by J. J. McNulta, 1911, and S. R. Archer, 1916.
From Anderson along highways southeast to Slate Mills, thence southwest topoint near Bourneville, thence west and north to Roxabell.
Slate Mills, 1.5 miles northwest of, in stringer over west abutment of small iron bridge over creek; copper nail ..... 673.56
Slate Mills, 0.5 mile northwest of, at crossroad, in side of railroad crossing sign; spike ..... 666.18
Slate Mills, 0.8 mile east of, at intersection of T road west and pike; iron post stamped " 674 " ..... 674.00
Slate Mills, 0.8 mile west of, northwest corner of crossroads; top of lower hinge on gate ..... 686.44
Slate Mills, 1.8 miles west of, northeast corner of crossroads; copper nail ..... 700.11
Ebush, opposite general store of W. T. Miller, on concrete founda- tion of barn; square cut ..... 676.78
Bourneville, 3.5 miles northeast of, in northeast corner of \(T\) road east; iron post stamped " 702 " ..... 701. 652
Bourneville, 2.5 miles northeast of, at \(T\) road west, in root of elm tree ; copper nail ..... 678.37
Bourneville, 5.5 miles north of, at top of Broaddes Hill, southwest corner of intersection of road and drive, in root of maple tree; copper nail ..... \(1,064,71\)
Slate Mills, 6 miles west of, southeast corner of \(T\) road south, in top of fence post ; copper nail ..... 808.06


From point near Clarksburg south along highway to Anderson.
Clarksburg, 5.5 miles southeast of, 75 feet west of nike at crossroads, in root of large oak tree; copper nail
794.73

Greenland, 2 miles east of, 0.5 mile north of Egypt pike, west side of road, in stump of old tree; copper nail
946.73

Greenland, 2 miles southeast of, on stone step of Dry Run schoolhouse; square cut
924.91

Anderson, 4.5 miles north of, on stone at intersection of roads in front of S . Norris's farm ; square cut

1,008. 94
Anderson, 4 miles north of, at intersection of T road in front of J. S. Bundle's house, in stump of tree; copper nail
948.91

Anderson, 2 miles north of, southwest corner of crossroads, in top of fence post; copper nail (McNulta line, 1911, checked by Archer, 1916)
793. 82

Chillicothe to Huntington town hall. ( 0.8 -foot error adjusted in this line.)
Chillicothe, 3 miles southwest of, boundary of Scioto and Huntington townships, on concrete township line post; square cut
654. 73

Chillicothe, 5 miles southwest of, at southeast corner of T road south, in side of telephone pole; copper nail
649.92

Chillicothe, 6 miles southwest of, northwest corner of crossroads; iron post stamped " 648 " \(\qquad\)
Chillicothe, 7.5 miles southwest of, in telephone pole; copper nail
647. 300
739. 78

\section*{From point near Roxabell west to point near Lattaville.}

Lattaville, on concrete wall in front of J. Given's general store; square cut

From point 2.8 miles north of Bourneville southwest to point 6 miles northeast of Bainbridge.

Bourneville, 1 mile northeast of, southeast corner of crossroads, in side of telephone pole; copper nail \(\qquad\)
Bourneville, on concrete culvert in front of post office; square cut
682.12
680.67
699.10
707.22

Bourneville, 1.1 miles southwest of, in southeast corner of intersection of Cincinnati pike and \(T\) road south; iron post stamped " 686 Ohio" (McNulta bench mark recovered)

Feet.
687. 724

Bourneville, 1.1 miles southwest thence 1 mile southeast of, at northeast corner of \(T\) road east, in base of corner fence post; 60 -penny spike 2 inches above ground, " 692 " marked on post \(\qquad\)
Bourneville, 3.4 miles south of, at southeast corner of Marion Johnson's yard, on fence line, in south root of walnut tree 20 inches in diameter; copper nail and washer, " 743 " marked on fence \(\qquad\) 692. 02 742. 90

Bourneville, 1.1 miles southwest thence 3 miles southeast of southwest corner of \(T\) road south, about 100 feet south of Baum Schoolhouse, in side of post; copper nail, " 913.9 " painted on post (McNulta bench mark recovered)
915.69

Newingburg (old post office), 1.5 miles southwest of, northwest corner of \(T\) road west, in top of corner fence post ; copper nail (McNulta bench mark recovered)
716. 47

Newingburg (old post office), 1.3 miles southwest of, on large hill, 1,000 feet southwest of Milburn Gire's mail box, in root of hickory tree 1 foot in diameter on east side of road; copper nail and washer, " 903 " marked on tree
902.89

Newingburg, about 200 feet north of old post office ; iron post stamped "Prim. Trav. Sta. No. 7211351909 " (McNulta bench mark recovered)
Newingburg (old post office), 0.97 mile southeast of, on sandstone corner stone in center of road, 100 feet north of James Hannon's residence; highest point, marked on fence opposite \(\qquad\) \(1,108.78\)

\section*{Leveling in 1916 by S. R. Archer.}

From Slate Mills southeast along Cincinnati, Hamilton \& Dayton Ry. 2.8 miles, thence southwest to point on Huntington pike 6.2 miles southwest of Chillicothe.
Slate Mills, 1 mile southeast of, 25 feet north of road crossing, south end of Cincinnati, Hamilton \& Dayton Ry. bridge 123, top of east end of 12 by 12 inch bent, 2 feet lower than track; copper nail_-.
Slate Mills, 2.3 miles southeast of, on east side of Cincinnati, Hamilton \& Dayton Ry., in post on west side of milepost 186 D77; copper nail
Slate Mills, 2.81 miles southeast thence 0.5 mile west of, west abutment of highway bridge over north fork of Paint Creek, top of north end of bridge seat; chiseled square \(\qquad\)
Slate Mills, 2.8 miles southeast thence 1.2 miles southwest of, 420 feet southeast of road forks, about 0.3 mile southeast of Shady Grove school, 350 feet northwest of bend in road to southwest, on east side of road, in root on west side of \(2 \frac{1}{2}\)-foot walnut tree; copper nail
Slate Mills, 2.8 miles southeast thence 2.1 miles southwest of, on north side of Paint Creek, at Vopps crossing, at right angle to north in road at private road west, on south side of road, in root of 8-inch elm tree; copper nail
From point 7 miles northwest of Chillicothe northwest along Clarksburg road to point 5.5 miles southeast of Clarksburg.
Chillicothe, 7.7 miles northwest of, on Clarksburg road, at T road to southwest, on top of east end of parapet wall, south abutment of highway bridge over Dry Run; chiseled square
Chillicothe, 8.7 miles northwest of, on Clarksburg road, 0.5 mile northwest of Mona School, at foot of hill, on south abutment of concrete culvert over drain, on top of south end of east wing wall; chiseled square
Feet. 781. 86
Chillicothe, 9.5 miles northwest of, on Clarksburg road, 275 feet east of front of residence of Isaac S . Cook, at private roads to north and south, top of south end of stone culvert over drain; chiseled square
797. 70

\section*{SABINA QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by C. W. Ogle in 1905, C. E. Mills in 1913, and R. G. Clinite and F. L. Whaley in 1914.
From point 1.8 miles south of Cunningham south along highway to Glendon, thence southwest along Pennsylvania and Baltimore \& Ohio railroads to Sabina, thence northwest along highway to point 2 miles north of Reesville.
Sabina, 1.7 miles northeast of, on Baltimore \& Ohio R. R., west end of vitrified pipe drain under private road crossing, on north side of railroad; painted square
Sabina, 1 mile northeast of, on Baltimore \& Ohio R. R., in northwest corner of road crossing, in base of telephone pole; spike.....
Sabina, road crossing Baltimore \& Ohio R. R. at station; top of south rail
1,031. 94 1,043. 6
Sabina, 1,900 feet west of station, 50 feet north of Cincinnati \& Muskingum Valley R. R. tracks, 25 feet west of road; iron post stamped " 1045 " 1, 045.485

Sabina, 0.7 mile northwest of, on south side of road at \(T\) road north
east, in base of fence post; spike

1,045. 30
From Clinton east along Pennsylvania and Baltimore \& Ohio railroads to
Washington Court House (part of 1905 line by C. W. Ogle).
Melvin, in east end of cribbing that forms platform of station; top of driftbolt head
1, 061. 99
Melvin, 0.75 mile east of, on south end of east abutment of Baltimore \& Ohio R. R. bridge ; chiseled square
1,068. 85
Melvin, 1.4 miles east of ; Paltimore \& Ohio R. R. summit_-............... 1, 097. 4
Reesville, in northeast corner of crib platform of station; top of driftbolt head
\(1,075.20\)
Reesville, 1.6 miles east of, on south end of east abutment of Balti-
more \& Ohio R. R. bridge ; chiseled square
Sabina; northwest corner of curbing of station platform

From Glendon southeast along highway to point near Staunton.
Glendon, 2.1 miles south of, in northwest angle of the intersection of Snow Hill pike and Miami-Trace road, on west end of plank drain; copper nail in washer

1, 015. 02
Glendon, 3.8 miles south of, in southwest angle of intersection of Miami-Trace road and Worthington pike, 15 feet west by 18 feet south of center of road intersection; iron post stamped "Ohio 1019 "
Staunton, 1.3 miles west of, 25 feet east by 20 feet south of center of road forks, in root of hickory tree; copper nail in washer

1, 001. 58
Buena Vista, 2 miles northwest of, 16 feet west of center of intersection of Leesburg pike and Miami-Trace road, on top of rock; bottom of chiseled square

1, 025.52

\section*{Near Olive Church.}
East Monroe, 1.25 miles northwest of, on west side of Barger pike, at road to northeast ; iron post stamped " Prim. Trav. Sta. No. 61, 1909, Ohio 1026 "
Feet.
Olive Chapel, 500 feet west of, in northeast angle of crossroads, on north end of tile drain ; painted square 1, 025.977
1, 018.92

> New Martinsburg, 2.5 miles west of, in northeast angle of road forks, on north end of culvert; painted square

From Sabina along highway south 3.5 miles, thence southwest 4.5 miles,
 thence north and east to Sabina.

Sabina, 1,900 feet west of station, 50 feet north of Cincinnati \&Muskingum Valley R. R. tracks, 25 feet west of road; iron post stamped " 1045 Ohio" \(1,045.485\)
Sabina, 1 mile south of, south corner of \(\mathbf{T}\) road west, on white lime- stone rock; painted circle marked " 1048.2 " ..... 1, 048.18
Sabina, 2.5 miles south of, northwest wing wall of concrete bridge; chiseled square marked " 1053.5 " ..... \(1,053.49\)
Sabina, 3.5 miles south of, 100 feet north of T road east, southwest wing wall of bridge; chisoled square marked "1049.6" ..... 1,049. 65
Sabina, 4.5 miles south of, 2.2 miles east of Centerville, northwest corner of crossroads ; iron post stamped " 1069 Ohio" ..... 1, 069.163
Centerville, 1.25 miles east of, 60 feet east of crossroads, in butt of telephone pole; copper nail marked " 1104.7 " ..... \(1,104.75\)
Centerville, 0.25 miles east of, south end of stone culvert; chiseled square marked " 1089.5 " ..... 1, 089.52
Centerville, 1 mile southwest of, 100 feet east of road forks, in butt of telephone pole; copper nail marked " 1092.8 " ..... 1, 092. 86
Centerville, 2 miles southwest of, 4.4 miles northeast of Snow Hill, southeast corner of crossroads ; iron post stamped " 1110 Ohio"--- 1, 109. 773Centerville, 2 miles southwest of, 3.75 miles east of New Antioch, eastend of stone culvert, 200 feet south of crossroads; chiseled squaremarked " 1097.1"1, 097.07
Centerville, 2.5 miles west of, 2.5 miles east of New Antioch, 400 feet north of \(T\) road west, west end of stone culvert; chiseled square marked " 1089.3 " ..... \(1,089.31\)
Centerville, 3 miles northwest of, 3.5 miles northeast of New Antioch, east end of stone culvert near Thomas Ragan's residence; chiseled square marked " 1087.4 " ..... 1, 087. 44
Melvin, 3 miles south of, northeast corner of T road north; iron post stamped " 1078 Ohio" ..... 1, 079.399
Melvin, \(\mathbf{1 . 5}\) miles south of, west end of stone culvert at \(T\) road west; chiseled square marked "1080.5" ..... \(1,080.48\)
Melvin, 0.75 mile south of, south end of entrance to schoolhouse (dis- trict 5, Richland Township) ; chiseled square marked " 1077.4 " ..... 1, 077. 32
Melvin, 0.5 mile south of, west end of north stone culvert at cross- roads; chiseled square marked " 1066.1 " ..... 1, 066.05
Reesville, 2 miles west of, 1 mile east of Melvin, south corner of east abutment of concrete bridge over Wilsons Fork; chiseled square marked " 1060.6 " ..... \(1,060.55\)
Reesville, 0.5 mile south of, west end of south drain tile at cross- roads; painted square marked "1097.7" ..... \(1,097.58\)
Sabina, 1. mile west of, south side of pike, in butt of telephone pole near Jim Roberts's residence ; copper nail marked " 1039.2 " ..... 1,039. 08

Sabina, 1 mile west of, north corner of west abutment of bridge; Feet. chiseled square marked " 1039.9 " 1, 039.74
Sabina, 1,900 feet west of station, 50 feet north of Cincinnati \& Muskingum Valley R. R. tracks, 25 feet west of road; iron post stamped " 1045 "
From New Antioch southeast along highway to New Vienna, thence west along Baltimore \& Ohio Southwestern R. R. to Farmers (leveled twice).
New Antioch, 1.5 miles south of, 200 feet north of T road west, southeast corner of stone abutment of bridge; chiseled square marked " 1056.6 "
New Vienna, 4.7 miles northwest of, 2.5 miles southeast of New Antioch, north end of stone step of red brick schoolhouse (district 8, Green Township) ; chiseled square marked " 1082.3 " \(\qquad\) 1, 082.92
New Vienna, 3.7 miles northwest of, 1.5 miles northwest of Snow Hill, east side of New Vienna and New Antioch pike at T road west; iron post stamped "Prim. Trav. Sta. No. 651130 Ohio"
New Vienna, 2.2 miles northwest of, 1240 feet southeast of Snow Hill, north end of stone culvert at \(T\) road west ; chiseled square marked " 1105.2 "
\(1,105.85\)
New Vienna, 1.3 miles northwest of, west side of stone bridge on New Vienna and New Antioch pike; chiseled square marked "1104.4"
New Vienna, northeast corner of Baltimore \& Ohio Southwestern R. R. street crossing at depot, in corner of M. Rice's lot; iron post, stamped " 1118 Ohio"
New Vienna, 0.6 mile west of, at Baltimore \& Ohio Southwestern R. R. crossing, turning point marked " 1132.6 "; top of south rail_- 1, 133.2

New Vienna, 1.5 miles west of, northwest corner of top of stone foundation of Baltimore \& Ohio Southwestern R. R. viaduct over wagon road; chiseled square marked "1086.7"
New Vienna, 2.4 miles west of, 1 mile east of Farmers station, southwest foundation stone of Baltimore \& Ohio Southwestern R. R. water tank; chiseled square marked "1055.7"

1, 056.25
From a point 2 miles southwest of Centerville southwest along highway to Snow Hill.
Centerville, 3 miles southwest of, 3.4 miles northeast of Snow Hill, on stone doorsill of schoolhouse (red brick) (district 4, Green Township) ; chiseled square marked " 1121.9 "-
Centerville, 3.8 miles southwest of, 2.4 miles northeast of Snow Hill, 4 miles southeast of New Antioch, north end of stone culvert, at crossroads; chiseled square marked " 1116.3 "
Snow Hill, 1.2 miles east of, 5 miles southwest of Centerville, south end of east abutment of bridge; chiseled square marked " 1102 "--
New Vienna, 2.2 miles northwest of, 0.25 mile southeast of Snow Hill, north end of stone culvert at \(T\) road west; chiseled square marked "1105.2"
\(1,105.85\)
From a point 4.5 miles south of Sabina southeast along highway to Olive Chapel.
Sabina, 4 miles south of, 2.2 miles northeast of Centerville, northwest corner of crossroads; iron post stamped " 1069 Ohio"
\(1,069.163\)
Centerville, 3.3 miles east of, 5 miles southeast of Sabina, at T road west, at northwest corner of plank bridge on large flat rock 3 by 4 feet; chiseled square marked " 1065.9 "
1. 066.00

Centerville, 4 miles east of, 1 mile northeast of Memphis, 200 feet
south of crossroads, on large rock at north end of plank bridge; Feet.
chiseled square marked " 1079.9 "-...-
Highland, 5.2 miles north of, 4.5 miles north of Leesburg, north corner of crossroads, of Morris and Barger pikes, at fence corner, in root of oak tree 30 inches in diameter; copper nail marked " 1076.7 "
\(1,076.77\)
Leesburg, 4.5 miles north of, southwest corner of crossroads; iron
post stamped " 1044 Ohio"
Leesburg, 4.25 miles north of, north stone wing wall east end of steel highway bridge over Lees Creek, on north end of third course ; chiseled square marked "1024.1" 1, 024.20
Leesburg, 4 miles northeast of, southeast corner of crossroads, in butt
of telephone pole; nail marked " 1042.1 "-------------. \(1,042.20\)
From Olive Chapel southwest along highway to Leesburg, thence east along Baltimore \& Ohio Southwestern R. R. to East Monroe.
Leesburg, 2.75 miles northeast of, southeast wing wall of steel
bridge; chiseled square marked " 992.5 "--............
Leesburg, 1.5 miles northeast of, 500 feet south of road east, north
end of stone foundation of wooden bridge; chiseled square marked
"991"
Leesburg, 0.75 mile north of, west end of east abutment of steel high-
way bridge over Lees Creek; chiseled square marked "939.4"--. 939.58
Leesburg, 0.75 mile north of, at bridge; water surface of Lees
Creek, July 15 , 1914
Leesburg, 1,100 feet east of Baltimore \& Ohio Southwestern R. R.
station, southwest corner of railroad crossing with Eastern Ave-
nue; iron post stamped " 1021 Ohio"
Leesburg, 1.1 miles east of, northeast stone pier foundation of private road viaduct over Baltimore \& Ohio Southwestern R. R.; chiseled square marked "990.2"
990.26

Leesburg, 1.8 miles east of, east end of railway bridge over Lees
Creek, 150 feet west of road crossing; chiseled square marked
" 960 "
East Monroe, 0.5 mile west of, west end of tile drain at private road crossing at west end of railway switch; painted square marked "958.5"
958. 54

East Monroe, in front of railway station, opposite semaphore; top of south rail
962.7

From Leesburg west along Baltimore \& Ohio Southwestern R. R. to New Vienna.
Leesburg, at railway depot, opposite semaphore; top of rail
Leesburg, 0.34 mile west of, northwest corner of railway concrete viaduct; chiseled square marked "1024.2"
Leesburg, 1.11 miles west of, 1 mile east of Highland station, west corner of south end of concrete viaduct under railway; chiseled square marked " 1050.4 "

1,050. 44
Highland, opposite west end of station; top of north rail_................. 1,078.3
Highland, 100 feet north of railway depot, north end of entrance step to Mrs. L. C. Horseman's store building; chiseled square, marked " 1085.3 "

1, 085.34

Highland station, 0.75 mile west of, 4.7 miles east of New Vienna, southwest corner of railway crossing with Highland and Hillsboro pike; iron post stamped " 1117 Ohio"
New Vienna, 3.43 miles east of, 1.75 miles west of Highland, west joint of north rail of railroad at road crossing painted " 1109 "--
\[
\text { 1, } 109.09
\]

New Vienna, 2.7 miles east of, north end of iron drain pipe under railroad track, at angle of road crossing; painted square, marked " 1123.5 "
\(1,123.57\)
New Vienna, 1.7 miles east of, 300 feet west of summit of grade over high ridge, in center of railroad track, on tie; nail in painted square, marked " 1169.5 "
\(1,169.55\)
New Vienna, 0.5 mile east of railway depot, southeast part of town, at pike crossing; west joint of north rail marked " 1135.8 "
\(1,135.84\)
New Vienna, northeast corner of railway street crossing at station, in corner of M. Rice's lot; iron post stamped " 1118 Ohio"
\(1,118.416\)
From point 5.2 miles north of Highland south along highway to Highland.
Highland, 4.4 miles north of, 200 feet east of T road south, top of county line stone between Clinton and Fayette counties, north side of road; chiseled square marked " 1089.1"
Highland, 3.5 miles northeast of, center of west steel guard rail of concrete bridge; painted square marked " 1062 " 1,062. 04
Highland, 3 miles north of, southeast abutment of covered bridge over branch of Lees Creek; chiseled square marked " 1040.9 ".... 1, 041. 02
Highland, 2.5 miles north of, east side of Highland and Reesville pike, at T road southwest, near T. Morrison's residence ; iron post stamped "Prim.Trav.Sta. No. 66, 1909 Ohio"

1,072. 133
Highland, 1.5 miles north of, west side of stone culvert; chiseled
square marked " 1055.2 "-.-. 055.31
Highland, 0.5 mile north of, east end of stone culvert on pike; chiseled square marked "1069.3"
Highland, south end of town, northwest corner of stone abutment of steel bridge over Lees Creek; chiseled square
\(1,035.57\)
From point near Leesburg southwest along highway toward Hillsboro to south border of quadrangle.
Leesburg, 2.2 miles southeast of, at road fording; water surface of Lees Creek
877.09

Leesburg, 2.9 miles southeast of, north end of stone culvert in front of S. B. Ree's residence, 400 feet west of crossroads; chiseled square marked " 973.6 "
973.62

Bridges, 1.8 miles northeast of, northwest corner of crossroads, top of large granite millstone buried in ground for guy anchor; chiseled square marked " 978 "
978. 02

Bridges, 0.7 miles northeast of, north corner of T road east; iron post
stamped " 963 Ohio"
Bridges, 500 feet south of T road east, 400 feet south of store, on northwest wing wall of bridge over Bridgewater Creek; chiseled square marked " 888.7 "
888.79

Bridges, 0.8 mile southwest of, southeast wing wall of bridge over Bridgewater Creek; chiseled square marked " 919.3 "
919.41

Bridges, 1.7 miles southwest of, west end of stone culvert, 300 feet south of crossroads ; chiseled square marked " 1021.3 "

Bridges, 2.9 miles southwest of, southwest wing wall of bridge, 800 feet north of schoolhouse (subdistrict No. 3, Penn Township) ; chisFeet. eled square marked "1037.9" 1, 038.00
East Monroe, 8.8 miles southwest of, southwest corner of pike intersection, near top of high ridge; iron post stamped " 1122 Ohio" \(1,122.314\)

From a point 4 miles north of Hillsboro north along highway to Highland.
Samantha, 1.5 miles south of, 5 miles north of Hillsboro, west end of drain tile culvert; painted square marked "1093.6" \(\qquad\) 1, 093.55
Samantha, 1.2 miles south of, large stone at foot of telephone pole near top of high hill ; painted circle marked " 1155.4 " \(\qquad\) \(1,155.36\)
Samantha, 0.75 mile south of, 5.75 miles north of Hillsboro, 10 feet south of barn driveway of O . W. McClara's residence, on large white limestone rock; chiseled square marked " 1163.9 "

1, 163.85
Samantha, south part of town, northwest corner of Friend's Church yard; iron post stamped " 1129 Ohio"
\(1,128.680\)
Samantha, 1 mile north of, on north end of concrete culvert at T road west; chiseled square marked " 1148.3 "
\(1,148.25\)
Samantha, 1.75 miles northwest of, 2.5 miles south of Highland, north end of concrete culvert at T road east; chiseled square, marked "1189.3"
Highland, 2 miles south of, east end of concrete culvert at T road south near schoolhouse (subdistrict 4, Penn Township) ; chiseled square marked "1152" \(1,151.93\)
Highland station, 0.75 mile west of, 4.7 miles east of New Vienua, southwest corner of railroad crossing with Highland and Hillsboro pike; iron post stamped " 1117 Ohio"
\(1,117.172\)

From New Vienna south along highway to south border of quadrangle.
New Vienna, northeast corner of railway street crossing at station, in corner of M. Rice's lot; iron post stamped " 1118 Ohio" \(\qquad\) \(1,118.416\)
New Vienna, 0.56 mile south of, southeast abutment of steel bridge; chiseled square marked " 1115.6 "
\(1,115.61\)
New Vienna, 1.5 miles south of, southwest corner of \(T\) road west, on white limestone rock; chiseled square marked "1134.1" \(1,134.16\)
New Vienna, 2.4 miles south of, west side of pike at T road east, in butt of telephone post; copper nail marked " 1128 "

1, 128.00
New Vienna, 3.2 miles south of, northwest corner of crossroads; iron post stamped " 1117 Ohio"
\(1,116.803\)
New Vienna, 4 miles south of, southeast corner of concrete floor of bridge over branch of Turtle Creek; chiseled square marked "1088.1"

1,088. 09

\section*{ST, CLAIRSVILLE QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by J. H. Wetzel in 1901 and B. J. Green in 1902.
From Unionvalle southeast to Dillonvalle.
Adena, 1,800 feet southeast of, on top stone of northwest abutment of iron bridge 199a; aluminum tablet stamped " 860 Steubenville"-
Dillonvale, 3,300 feet north of, on southeast wing wall of iron wagon bridge at intersection of roads; aluminum tablet stamped " 737 Steubenville"
859.690
736. 805
From Bridgeport along Cleveland, Lorain \& Wheeling Ry, to Bannock. \({ }^{1}\)
Wheeling Creek, on north end of west abutment of bridge 217, oneast side of creek; chiseled square

Feet. 656.16

Wheeling Creek, at west end of station, on south end of west abutment of bridge 214 ; chiseled square
Wheeling Creek, 1 mile west of, on south end of west abutment of bridge 213 ; chiseled square_ 687.91

Wheeling Creek, 1.5 miles west of, on north end of east abutment of bridge 212 ; chiseled square
702.25

Blaine (Pasco station), on south wall of east approach to stone bridge over Wheeling Creek on National road; chiseled square (recovered by Baltimore \& Ohio R. R.)
726. 59

Blaine, 1 mile west of, on south end of west abutment of bridge 208 ; tablet stamped " 742 Steubenville" (recovered by Baltimore \& Ohio R. R.)
Blaine, 2.2 miles west of, 660 feet east of Barton tunnel, on south side of west abutment of bridge 203 ; chiseled square \(\qquad\)
Barton, east end of, on south end of west abutment of bridge 200 ; chiseled square \(\qquad\)
Maynard, 1 mile east of, wooden covered county bridge over Wheeling Creek, on north side of east abutment, coping; aluminum tablet stamped " 842 Steubenville" (recovered by Baltimore \& Ohio R. R.)
841.567

Maynard, 2.9 miles west of, just east of Fairpoint tunnel, on north end of west abutment of bridge 185 ; chiseled square
888.24
\begin{tabular}{l} 
Fairpoint, 0.5 mile east of, on north end of west abutment of bridge \\
\hline 182 ; chiseled square
\end{tabular}
Fairpoint, 0.8 mile west of, on north end of west abutment of bridge 176; aluminum tablet stamped " 920 Steubenville" (recovered by Baltimore \& Ohio R. R.)
Bannock, just west of, on north end of west abutment of bridge 170 ; chiseled square
920.248

From St. Clairsville along railroad via Neffs to Bellaire.
St. Clairsville, on east end of main entrance to court house; bronze tablet stamped " 1284 Steubenville"
\(1,283.880\)
\(\begin{array}{ll}\text { North Neffs, county bridge over Little McMahon Creek, on south end } \\ \text { of west abutment; bronze tablet stamped " } 733 \text { Steubenville"----- } & 732.178\end{array}\)
St. Clairsville Junction, just west of station, south end of east abutment of bridge 38 ; chiseled square
721.98

Neffs siding, 2.1 miles east of, on center of west abutment of bridge 39 ; chiseled square
710.79

From Neffs siding west along Baltimore \& Ohio R. R. to Barnesville.
Neffs siding, 1 mile west of, on south side of center of stone-arch bridge, on coping; chiseled square
749.28

Glencoe, just east of station, on northwest corner of west abutment of bridge 34 ; chiseled square
831.77

Warnock, just east of station, north end of west abutment of bridge 30 ; bronze tablet stamped " 942 Steubenville"
941.347

Warnock, 1.8 miles west of, on north end of east abutment of bridge 28 , near center ; chiseled square

From point 3 miles southeast of Belmont northeast along highway via Galloway Knob to Baltimore \& Ohio R. R. bridge 31 at Marbletown.
Galloway Knob triangulation station, 5 miles east of Belmont, in top Feet. of marble monument; bronze tablet 1, 397.143
Marbletown, 0.12 mile north of Baltimore \& Ohio R. R., iron highway bridge, on top of stone of northwest abutment; chiseled square
912.23

\section*{ST. HENRY QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]
Primary leveling by H. W. Peabody in 1905.
From Thomas schoolhouse north and east along highway via North Star to Yorkshire, thence south to Versailles.

Rossburg, 6 miles west of, northwest corner sec. 34, T. 14 N., R. 1 E., in north face at northwest corner of brick schoolhouse (district 2) ; aluminum tablet stamped " 1022 Adj 1905 " \(1,022.151\)
Rose Hill, 1.5 miles northwest of, south of center of sec. 10, T. 14 N., R. 1 E., at diagonal road to southeast, at south end of small stone culvert over large ditch; aluminum tablet stamped " 1078 Adj 1905 "

1, 077. 638
New Weston, 1.5 miles southwest of, near center of south line of sec. 9, T. 14 N., R. 2 E., in west face of northwest corner of east abutment of bridge over Wabash River; aluminum tablet stamped " 1022 Adj 1905 "

1,021. 291
North Star, 2.5 miles west of, near southeast corner sec. 11, T. 14 N., R. 2 E., in bridge seat at northeast corner of bridge over Wabash River; aluminum tablet stamped " 986 Adj 1905 "
985.970

North Star, southwest corner sec. 9, T. 12 N., R. 3 E., about 130 feet north of crossroads and on east side of road, in west face at southwest corner of Wabash Township house; aluminum tablet stamped " 1007 Adj 1905 "
south of, center of north line of sec. 36, T. 12 N .,
Yorkshire, 3 miles south of, center of north line of sec. 36, T. 12 N., R. 3 E., 1 mile west by 3.5 miles north of Versailles, in bridge seat at southwest corner of bridge over Swamp Creek; aluminum tablet stamped "991 Adj 1905"
990.972

From Rose Hill north along highway to Victoria, thence northeast along Lake Erie \& Western R. R. to point near Coldwater, thence east to and southeast along Cincinnati, Hamilton \& Dayton Ry. to Chickasaw.

Fort Recovery, 3 miles south by 1.5 miles east of, near northeast corner sec. 34, T. 15 N., R. 1 E., at T road north, in water table in north face at northwest corner of Goulder schoolhouse ; aluminum tablet stamped " 1047 Adj 1905 "
\(1,046.485\)
Victoria, near center sec. 15, T. 7 S., R. 1 E., in west face at northwest corner of belfry tower over entrance to St. Joseph Catholic Church; aluminum tablet stamped " 987 Adj 1905 "
986.396

Victoria, 2 miles northeast of, southwest corner sec. 1, T. 7 S., R. 1 E., in west face of Oakland schoolhouse; aluminum tablet stamped " 964 Adj 1905 "

1, 006.385

Coldwater, 2 miles southeast of, near center of south line of sec. 35, T. 6 S., R. 2 E., in south face at southwest corner of brick schoolhouse; aluminum tablet stamped " 913 Adj 1905 "
912.643

Montezuma, 1.5 miles south of, 1 mile south by 3.75 miles east of Coldwater, near center of north line of sec. 6, T. 7 S., R. 3 E., in bridge seat at southwest corner of bridge over Beaver Creek; aluminum tablet stamped " 886 Adj 1905 "

Feet. 885.981

From New Weston north along Cincinnati Northern R, R. to point near Coldwater.

New Weston, center of south side of sec. 3, T. 14 N., R. 2 E., at north side of road, about 80 feet west of railroad, in east face at southeast corner of H. Schilling's store and dwelling; aluminum tablet stamped " 1015 Adj 1905 " \(\qquad\) 1, 014.719
St. Henry, 2 miles south of, 0.3 mile west of northeast corner sec. 33, T. 7 S., R. 2 E., 0.5 mile east of railroad, in north face of Gelhaus schoolhouse, at northwest corner; aluminum tablet stamped " 968 Adj 1905 "
967.873

St. Henry, north of center of sec. 21, T. 7 S., R. 2 E., in water table at north face of northeast corner of new schoolhouse; aluminum tablet stamped " 974 Adj 1905"
973.711

St. Henry, 1.75 miles north of, north of center of west line of sec. 9, T. 7 S., R. 2 E., 0.5 mile southeast of Philothea, near south line of Butler Township, in next to top coping stone at north corner of concrete culvert; aluminum tablet stamped " 927 Adj 1905 " \(\qquad\) 927.343

Primary leveling by H. Clark in 1911.
From point 1.5 miles south of Montezuma north along highway 2.2 miles.
Montezuma, 1.5 miles south of, 3.8 miles east of Coldwater, near center of N. \(\frac{1}{2}\) sec. 6, T. 7 S., R. 3 E., in bridge seat at southwest corner of bridge over Beaver Creek; aluminum tablet stamped " 886 Adj 1905"
885.981

Montezuma, 2.2 miles northwest of, on north side of road running east-west at T road, in front of John Puthoff's residence; iron post stamped " 877 "
877.334

In Tps. 14 and 15 N., R. 1 E.
T. 15 N., R. 1 E., near the northeast corner of sec. 34,3 miles south by 1.5 miles east of Fort Recovery, at \(\mathbf{T}\) road north, in north face, at northwest corner of Goulder schoolhouse, in water table; aluminum tablet stamped " 1047 "
T. 14 N., R. 1 E., at northwest corner of sec. 34,6 miles west of Rossburg, at northwest corner of brick schoolhouse, in north face; aluminum tablet stamped " 1022 Ohio"
\(1,022.151\)

\section*{ST. MARYS QUADRANGLE.}
[Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by G. L. Gordon in 1904.

\section*{At head of Cady Run.}

Archers Fork, 2.5 miles northeast of, near center of section 11, Grandview Township, 30.8 feet from northeast corner and 30 feet from southeast corner of Bell M. E. Church ; iron post stamped " 1146 Adj 1913 "

\title{
ST, PARIS QUADRANGLE. \\ [Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).] Primary leveling by J. J. McNulta in 1911. From point near Quincy south along highway to Christiansburg.
}

Quincy, 4 miles south of, at northeast corner of crossroads, 20 feet east and 20 feet north of corner of secs. \(19,20,25\), and 26, T. 3, R. Feet. 13 ; iron post stamped "Prim. Trav. Sta. No. 35, 1116 Ohio" --..-- 1, 116. 016
Carysville, on Quincy pike, northwest corner of \(T\) road west, in schoolhouse yard; iron post stamped " 1129 Ohio" (T. 3, R. 13, southeast corner of sec. 30)
\(1,129.073\)
Carysville, 3 miles south of, on pike, in southwest corner of \(T\) road east; iron post stamped " 1173 Ohio"

1, 173. 016
St. Paris, 1 mile west by 1.5 miles north of, southeast corner of crossroads; square cut on large stone.
\(1,217.74\)
St. Paris, 1.5 miles west of, on pike, southwest corner of crossroads ; iron post stamped " Prim. Trav. Sta. No. 42, 1226 Ohio" \(1,225.739\)
St. Paris, 1.5 miles west by 1 mile south of, near pike at northeast corner of crossroads; square cut on large stone \(\qquad\) 1, 218.79
Christiansburg, 1.5 miles east by 1.5 miles north of, on pike, in southeast corner of crossroads; iron post stamped " 1191 Ohio" = 1, 190. 942
Christiansburg, 1.5 miles east of, on pike, in center of crossroads; square cut on large stone
\(1,188.04\)
Primary leveling by C. E. Mills and S. L. Parker in 1913. From West Liberty west along highway to point 4 miles south of Quincy.
West Liberty, south end of town, center of road crossing Ohio Electric R. R., at T road east ; top of east rail \(1,086.8\)
West Liberty, 0.9 mile southwest of, southwest corner of crossroads, on Spring Hill road, on stone box culvert; chiseled square
\(1,102.97\)
West Liberty, 1.1 miles west of, on Spring Hill road, southwest corner of T road south, on end of vitrified drain pipe ; painted square__ 1, 135. 18
West Liberty, 1.7 miles west of, in northwest corner of crossroads, on west end of iron drain pipe ; chiseled square
\(1,124.76\)
West Liberty, 2.25 miles west of, 140 feet west of southeast corner of school grounds (subdistrict 6), at T road south, 2 feet from south end of concrete retaining wall of drain; chiseled square 1, 125. 20
West Liberty, 2.8 miles west of, on south side of road at \(T\) road north, in base of fence post; spike
\(1,103.21\)
West Liberty, 3.25 miles west of, southeast corner of T road south, on top of large granite bowlder ; chiseled square

1, 088.92
West Liberty, 3.3 miles west of, 200 feet west of T road south, 40 feet south of road, 35 feet northeast of Gladys Creek, at Christian Church; iron post stamped " 1091 "

1, 091. 303
Springhills, 2 miles east of, 200 feet west of \(T\) road north, on north end of stone box culvert; chiseled square
\(1,085.10\)
Springhills, 1.5 miles east of, on north side of road at \(T\) road south, in base of fence post ; spike

1,081. 02
Springhills, 7 feet west of northwest corner of town hall, northwest corner of concrete walk; iron post stamped " 1050 "

1, 049.916
Springhills, 0.2 mile south of, on east side of road at forks, in base of telephone pole; spike.
\(1,057.55\)
Springhills, 0.5 mile southwest of, on north side of road at \(\mathbf{T}\) road
south, inside fence, on bowlder; chiseled square

Springhills, 1 mile southwest of, on north side of road at road forks, Feet. in base of telephone pole; spike

1, 096.52
Springhills, 2 miles southwest of, northwest corner of west abutment of steel bridge over creek; chiseled square

1, 075.92
Springhills, 2.4 miles southwest of, southwest corner of T road south, on large bowlder ; chiseled square
\(1,103.15\)
Springhills, 2.8 miles southwest of, in southeast corner of crossroads, on stone drain; chiseled square
Quincy, 2.5 miles east by 3.6 miles south of, northeast corner of \(T\) road east, on east end of small wooden bridge, on south, abutment; chiseled square
Rosewood, 2 miles north by 1 mile east of, southwest corner of private road west at bend, on concrete base of fence post ; chiseled square
Rosewood, 1.7 miles north by 1 mile east of, northwest corner of \(T\) road west, on end of iron drain pipe ; chiseled square

1, 127. 42
Quincy, 4 miles south by 1 mile east of, northwest corner of crossroads, on bowlder ; chiseled square
\(1,124.10\)
Quincy, 4 miles south of, at road crossing Detroit, Toledo \& Ironton R. R. ; top of west rail
\(1,118.1\)
From point 3.2 miles north of Urbana west along highway 5.5 miles, thence north to Springhills.

Urbana, 3.25 miles north of, 270 feet north of crossroads, on West Liberty pike, on south abutment east end of small steel bridge; chiseled square

1, 057. 48
Urbana, 3.25 miles north of, at Big Four R. R. crossing; top of west rail

1, 043.9
Urbana, 3.25 miles north hy 2.1 miles west of, northeast corner of \(T\) road north, 700 feet east of Mad River bridge ; iron post stamped " 1025 "

1,024.960
Urbana, 3.25 miles north by 2.8 miles west of, on northeast abutment of small iron bridge over ditch; chiseled square

1,024. 66
Urbana, 3.25 miles north by 3.7 miles west of, opposite \(T\) road east, in top of brace to fence post; copper nail
\(1,028.07\)
Urbana, 3.25 miles north by 4 miles west of, on northwest concrete abutment of small iron bridge over small drain ; chiseled square__ \(1,024.15\)
Urbana, 3.25 miles north by 4.8 miles west of, southeast corner of crossroads, in base of fence post; spike

1, 075.02
Urbana, 3.25 miles north by 5.4 miles west of, southwest corner of Concord M. E. Church yard; iron post stamped " 1058 "

1, 058.196
Crayon, 3.5 miles southeast of, southwest corner of crossroads, in base of hickory tree 18 inches in diameter; spike

1, 095.96
Crayon, 3.5 miles southeast of, southwest corner of crossroads, in base of corner fence post; spike.
\(1,064.64\)
Crayon, 3.5 miles southeast by 1 mile north of, 600 feet south of iron bridge over Muddy Creek, northwest corner of NE. 1, sec. 17, Concord Township; iron post stamped " 1044 "
\(1,044.583\)
Crayon, 1 mile north by 3 miles east of, southwest corner of crossroads, on northwest corner of stone culvert ; chiseled square
\(1,053.33\)
Springhills, 3 miles southeast of, at southeast corner of small wooden culvert under road, on top of granite bowlder 18 inches in diameter ; chiseled square
Springhills, 1.5 miles southeast by 1 mile east of, 450 feet south of crossroads, northeast corner of concrete culvert under road; chis- Feet. eled square 1,094. 88

Springhills, 1.5 miles southeast of, southeast corner of \(\mathbf{T}\) road east, corner of secs. \(19,20,25\), and 26 ; iron post stamped "Prim. Trav. Sta. No. 97, 1069 " 1, 069.165
Springhills, 0.4 mile south of, northeast corner of \(\mathbf{T}\) road south, on 12 -inch granite bowlder; painted square
\(1,082.86\)
Springhills, 7 feet west of northwest corner of town hall, northwest corner of concrete walk; iron post stamped " 1050 "
\(1,049.916\)
From Urbana west along highway 10 miles, thence north to point 2.8 miles southwest of Springhills.

Urbana, Soldiers' Monument in center of public square, north end of stone curbing around monument; chiseled square 1, 054.00
Urbana, Main Street crossing of Big Four Route; top of west rail__ 1, 026.5
Urbana, Main Street crossing of Erie R. R.; top of west rail__....... 1, 024.1
Urbana, Main Street crossing of Pennsylvania R. R. ; top of east rail_ 1, 025.4
Urbana, 0.9 mile west of, in northwest corner of crossroads, on concrete curbing; chiseled square

1, 027.54
Urbana, 1.8 miles southwest of, on Westville pike, in southwest corner of crossroads, in base of telephone pole; spike
Urbana, 2.6 miles southwest of, on Westville pike, northwest corner of crossroads, on west bank of Mad River, 180 feet west of bridge over Mad River ; iron post stamped " 997 "
996.851

Urbana, 3.6 miles southwest of, on Westville pike, southeast corner of T road, in base of telephone pole; spike
997.37

Westville (Magrew post office), northeas corner of W. P. Ferst's store, on concrete walk; chiseled square
\(1,020.08\)
Westville, 1 mile west of, northwest corner of \(T\) road north; iron post stamped "Prim. Trav. Sta. No. 98 1065"
\(1,065.215\)
Westville, 1.2 miles west of, northwest corner of \(T\) road south, on stone drain ; chiseled square
\(1,045.00\)
Westville, 1.2 miles west by 1.2 miles northwest of, 400 feet west of road forks, at Nettleton, on west abutment, south wing wall of steel bridge over Nettle Creek; chiseled square_ 1, 053.54
St. Paris, 3.6 miles east of, on Urbana pike, 800 feet east of \(T\) road north, northeast corner of first step at entrance to Myrtle Tree Baptist Church; chiseled square
\(1,132.20\)
St. Paris, 3.2 miles east of, on Urbana pike, 200 feet west of \(T\) road south, on west abutment at north end of small wooden bridge; chiseled square
\(1,189.46\)
St. Paris, 2.3 miles east of, on Urbana pike, 150 feet east of steel
highway bridge over Pennsylvania R. R., on south end of stone box
culvert; chiseled square
St. Paris, 1.5 miles east of, on Urbana pike, southeast corner of crossroads ; iron post stamped " 1225 "

1,225. 356
St. Paris, 1.5 miles east by 1.2 miles north of, in southeast corner of crossroads, on concrete base of fence post; chiseled square......... 1, 234. 44
Millerstown, in northwest corner of crossroads, on top of stone; chiseled square
\(1,129.28\)
Millerstown, 0.4 mile west of, northwest corner of T road north; iron
post stamped "1111"---n-- 111. 409
Millerstown, 0.4 mile west by 1.5 miles north of, in center of cross- Feet.roads, on section stone ; chiseled square
\(\qquad\) 1, 215.91Rosewood, 2 miles east by 1 mile south of, in southeast corner ofcrossroads, on granite bowlder; chiseled square\(1,176.21\)
Rosewood, 2 miles east of, 35 feet east by 15 feet south of center of crossroads ; iron post stamped " 1128 " ..... 1,127.915
Rosewood, 2 miles east by 1 mile north of, in southeast corner of \(T\) road south; on granite bowlder; chiseled square ..... 1, 122. 42
From point 2 miles northeast of Christiansburg east along highway to point 5 miles east of Terre Haute, thence north to Urbana. \({ }^{1}\)
Christiansburg, 2 miles northeast of, on Dog Leg pike, in southeast corner of crossroads ; iron post stamped "1191 Ohio" ..... \(1,190.942\)
Christiansburg, 2 miles northeast by 0.8 mile east of, 50 feet west ofnorthwest corner of \(T\) road north, on top of 1-foot stump; copperb. m. nail1, 197. 58
St. Paris, 3 miles south of, northwest corner of crossroads, on north end of limestone culvert under pike; chiseled square ..... 1, 187.84
St. Paris, 3 miles south by 0.7 mile east of, 50 feet south of southeast corner of T road south, on 3 -foot granite bowlder; painted square_- 1, 179.09
Thackery, 2 miles northwest of, at Detroit, Toledo \& Ironton R. R.crossing; top of east rail1, 154.9
Thackery, 1.7 miles northwest by 0.2 mile west of, 150 feet east of crossroads, on northeast abutment of small wooden bridge; painted square ..... \(1,158.11\)
Thackery, 1.7 miles northwest of, southwest corner of T road south; iron post stamped " 1176 " ..... \(1,175.530\)
Thackery, southwest corner of crossroads, on east end of concrete hitching rack; chiseled square ..... \(1,119.23\)
Terre Haute, 0.4 mile west by 0.1 mile north of, southwest corner of T road west, on highest point of 3 -foot granite bowlder; painted square ..... 1, 115. 64
Terre Haute, northwest corner of crossroads; iron post stamped " 1083 " ..... 1, 082. 140
Terre Haute, 0.9 mile east of, 100 feet north of T road north, on highest point on east end of stone culvert; painted square ..... 1, 057.44
Terre Haute, 1.2 miles east of, 60 feet east of \(\mathbf{T}\) road east, on south- west corner of concrete culvert under pike; chiseled square ..... 1, 055.09
Terre Haute, 3.1 miles east of, northwest corner of crossroads, on northwest abutment of small wooden bridge over ditch; chiseled square ..... 984.77
Terre Haute, 3.5 miles east of, southwest corner of T road west, in base of corner fence post; spike ..... 973.49
Urbana, 4.6 miles south of by 1.8 miles west of, on east side of road at T road west, 60 feet east of iron bridge over east branch of Mad River ; iron post stamped " 967 " ..... 965.830
Urbana, 4.6 miles south by 0.9 mile west of, in base of telephone pole at southwest corner of \(T\) road south; spike ..... 969. 48
Urbana, 4.6 miles south of, at Big Four Route crossing; top of east rail ..... 975.7

\footnotetext{
\({ }^{1}\) The portion of this circuit between 1.2 and 5.2 miles west of Terre Haute was leveled twice and 0.5 foot was adjusted locally near beginning of line where a discrepancy occurred in notes.
}
Feet.
Urbana, 4.6 miles south of, top of east rail of Ohio Electric R. R.--- ..... 977.8
Urbana, 4.6 miles south of, at Dallas Roads, southwest corner of con- crete culvert under pike; chiseled square ..... 977.31
Urbana, 3 miles south of, northeast corner of crossroads, 100 feet east of Ohio Electric R. R. ; iron post stamped " 1070 " ..... \(1,069.235\)
Urbana, 2.3 miles south of, 300 feet north of \(T\) road east, on west end of limestone culvert under pike; chiseled square ..... 1, 043.68
Urbana, 1.8 miles south of, southeast corner of T road east, in base on west side of telephone pole; spike ..... \(1,055.65\)
Urbana, 1 mile south of, 20 feet west of Ohio Electric R. R., at road forks, in public square, on highest point of granite bowlder 18 inches in diameter; painted square ..... 1,069. 78
From point 4.6 miles south of Urbana east 1.1 miles, thence south 0.5 mile.
Urbana, 4.6 miles south by 1.1 miles east of, 50 feet west of north-west corner of \(T\) road west, in top of 12 -inch walnut stump; spike \(1,102.26\)Urbana, 5.1 miles south by 1.1 miles east of, southeast corner of \(T\)road east, in base of corner fencepost; iron bolt1, 095.45
SALINEVILLE QUADRANGLE.
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).]
Primary leveling by A. T. Bagley and B. G. De Frees in 1902.
From Irondale northwest along Pennsylvania R. R. to Kensington.
Irondale, 7.15 miles northwest of, 50 feet east of wagon road, 1,000feet west of coal tipple, in southeast abutment of railroad bridge41 ; chiseled circle847.82
Kensington triangulation station, 1 mile southeast of Kensington, in top of marble post; bronze tablet stamped " 1375 Stbnvl" ..... 1, 375.302
From Kensington east along road via Lisbon to Elkton.
Hanover, in northwest abutment of iron bridge over abandoned sandy canal ; chiseled circle ..... \(1,134.05\)
Dungannon, in front step of St. Phillip's Catholic Church; chiseled ..... 1, 171. 29
circle
circle
Dungannon, 2 miles east of, in second step of Point Pleasant M. E.
Dungannon, 2 miles east of, in second step of Point Pleasant M. E. Church; chiseled square ..... 1, 068. 12
From Salineville south via Berea Church to Bergholz.
Monroeville, 0.5 mile south of, at Elder triangulation station; bronze tablet stamped " 1388 Stbnvl" ..... 1, 387. 432
Monroeville, 2.8 miles south of, west side of road; top of county-line monument (Jefferson and Carroll counties) ..... 1, 204,35
Bergholz, in southeast corner of foundation of schoolhouse; bronze tablet stamped " 924 Stbnvl" ..... 924.206
From Bergholz west along highway to Harlem Springs.

Morgan Bridge, 2 miles west of, on Bergholz-Harlem road, 0.5 mile west of large brick house, in northwest wing wall of iron bridge; chiseled circle
Morgan Bridge, 2.5 miles west of, on Bergholz-Harlem road, 510 feet east of brick house at bend of road, in stone wall of iron bridge; chiseled circle
Feet.
925. 68
Morgan Bridge, 4.3 miles west of, 500 feet west of forks of road northwest to Carrollton, on northwest wing wall of iron bridge on road to Kilgore; bronze tablet stamped " 958 Stbnvl" \(\qquad\) 957.896
Morgan Bridge, 5 miles west of, 2 miles east of Harlem Springs, on center fork of road, 0.5 mile southeast of forks, on southwest wall of iron bridge; chiseled circle \(\qquad\)
Harlem Springs, 0.1 mile northeast of, 300 feet north of Bergholz road, at forks to Scroggsfield, and 0.25 mile west of road southwest to Harlem, on stone in northeast wall of wooden bridge on Scroggsfield road; chiseled circle
From Carrollton triangulation station east along road via Scroggsfield to Berea Church.
Scroggsfield, 1 mile east of, on Salineville road, at crossing of Bergholz-Mechanicstown road and Lake Erie, Alliance \& Wheeling R. R., 800 feet north of creamery, 10 feet west of iron bridge, on southwest abutment; bronze tablet stamped " 1025 Stbnvl" 1, 024.216
From Lisbon south along road via Gavers to Salineville.


SANDUSKY QUADRANGLE.
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(82^{\circ} 30^{\circ}-82^{\circ} 45^{\prime}\).]
Primary leveling by Philip Flitman in 1911.
From point near Norwalk north along highway 2 miles. \({ }^{1}\)
Norwalk, 2 miles north of, opposite lane to Crucible Steel \& Iron Co.'s plant; spike in root of elm tree
681.52

Norwalk, 3 miles north of, on Milan road, in stone parapet of culvert; bronze tablet stamped " 624 Toledo"
625. 334

Primary leveling by E. C. Bibbee in 1912.
From Norwalk north along highway to Avery. (Mean of two lines.)
Norwalk, 1 mile northeast of courthouse, on south side of Main Street at intersection of Main and Townsend streets; chiseled square on large stone
Norwalk, 1.9 miles northeast of court house, 100 feet north of T road west, 500 feet south of A. N. Barard's residence; chiseled square on first step to residence on west side of road
701. 10

Milan, 0.8 mile southeast of ; chiseled square on doorstep at front entrance of district 11 schoolhouse
681.88

Milan, 600 feet northwest of Catholic schoolhouse ; chiseled square on sidewalk at northwest corner of crossroads.

Milan, 0.6 mile south of, in southwest corner of bridge 700, 1,000 feet south of Erie-Huron county line; aluminum tablet stamped " 624 Toledo"

Feet. 625.334

Milan, 0.26 mile north of, large iron bridge over Huron River; chiseled square on north abutment west side \(\qquad\)
Avery, 0.7 mile south of ; rail spike in base of electric pole, first one south of stop 20
598.57
660.58

Avery, 2 feet southwest of New York, Chicago \& St. Louis R. R. and Lake Shore Electric crossing
653.81

Avery, 0.5 mile north of, near quarter corner of south side of sec. 2, T. 5 N., R. 22 W., at Spears corner, on west face of foundation at northwest corner of schoolhouse, about 1 foot above ground; bronze tablet (Bull. 411, elevation 650.726 feet)

Primary leveling by D. C. Witherspoon and A. C. Freundburg in 1901.
From Sand Hill east to Berlin Heights (double-rodded line).
Prout station, sec. 3, T. 5 N., R. 23 W. (Oxford Township), 500 feet east of Baltimore \& Ohio R. R. tracks, in east wall at northeast corner of frame schoolhouse (sub-district 6) ; aluminum tablet stamped " 700 Toledo" \(\qquad\)
Avery, 0.5 mile north of, near quarter corner at south side of sec. 2, T. 5 N., R. 22 W., at Spears corners, on west face of foundation at northwest corner of schoolhouse, about 1 foot above ground; bronze tablet stamped " 651 Toledo"
Berlin Heights, 2 miles west of, iron bridge over branch of Old Woman Creek, on stone at top of southeast abutment; bronze tablet stamped " 608 Toledo"

From Berlin Heights northwest to Shinrock (small circuit via Old Woman
Shinrock, at northwest corner of C. Hoffman's store; aluminum tablet stamped " 627 Toledo"
628. 194

From Prout station north through Perkins Township to Sandusky.
Sandusky, 2 miles south of NE. \(\frac{1}{4}\) SE. \(\frac{1}{4}\), sec. 3, T. 6 N., R. 23 W., in water table at northwest corner of schoolhouse; aluminum tablet stamped " 616 Toledo" \(\qquad\)
Sandusky, in south side of Government building, at southeast corner; aluminum tablet stamped " 597 Toledo"
598.561

From Avery south along highway via Milan to Norwalk Township.
Milan, 2 miles south of, in northern part of sec. 3, T. 4 N., R. 22 W., about 500 feet south of Huron-Erie county line, on top of south end of retaining wall of filled road over creek; bronze tablet stamped " 624 Toledo".

From Bloomingville along highway in a circuit to North Monroeville and return.
North Monroeville, Ridgefield Township, on east face of foundation at northeast corner of large frame school at crossroads in village; bronze tablet stamped " 727 "
727. 307

\section*{Leveling in 1916 by S. P. Archer.}

\section*{At Sandusky.}

Ssndusky, northwest corner of Water and Wayne streets, southeast corner of Kugel Building, occupied by Wells, Fargo \& Co., top corner of coping stone at base of column at corner entrance; chiseled cross (Lake Survey elevation, 585.21)

Feet. 585. 236

Sandusky, northwest corner of Water and Hancock streets, southeast corner of Groch Building, top of west side of coping stone at base of column, at corner entrance to coal office; chiseled cross
583.943

Sandusky, zero mark on Lake Erie water gauge (Lake Erie Survey elevation, \(572.80 ; 572.77\) is more often used)
572.705

Leveling in 1916 by S. R. Archer.
Near North Monroeville.
North Monroeville, 1.18 miles west of, 0.19 mile west of \(T\) road to south, at foot of railing, southwest corner of highway bridge over ditch, at junction of concrete retaining wall and bridge seat; chiseled square \(\qquad\)
North Monroeville, 0.96 mile southeast of, T road southwest at, 50 feet south of road forks, on west side of south road at fence line, in root on east side of 2 -foot maple tree; copper nail
730.81
733.90

North Monroeville, 1.96 miles southeast of, north abutment, top east wing wall of highway bridge over Seymour Creek; chiseled square_
Monroeville, 0.70 mile northwest of, at southwest corner of \(\mathbf{T}\) road west, 12 feet southeast of fence corner, 10 feet north of 4.5 -foot oak tree, in root on east side of 7 -inch maple tree; copper nail

SARDINIA QUADRANGLE.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\). ]
Primary leveling by C. E. Mills in 1911.
From Sardinia west along Norfolk \& Western Ry. through Mount Orab to Eastwood, thence south along highways to Locust Ridge.

Sardinia, 0.2 mile west of, southeast corner of road crossing over Norfolk \& Western Ry. and Ohio River \& Columbus Ry. tracks, 1 foot from warning post; iron post stamped " 961 " \(\qquad\)
Sardinia, 0.7 mile west of, at road crossing ; top of rail_
961. 431

Sardinia, 1.4 miles west of, rail rack at milepost " \(\mathrm{P}-61-\mathrm{C}-46\)," in top of east post ; copper nail marked " 950.6 " \(\qquad\)
Sardinia, 1.9 miles west of, southwest corner of road crossing, in base of cattle guard; spike marked " 951.85 "
Sardinia, 3.1 miles west of, southwest corner of road crossing, in base of cattle guard; spike marked " 933.2 " \(\qquad\)
White Oak, northeast corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 92, 1909, 951 " \(\qquad\)
Mount Orab, 1 mile east of, on south side of road, in base of telephone pole 2664 , spike marked " 953.15 " \(\qquad\) 953.21

Mount Orab, southeast corner of High Street and Broadway, on corner of concrete sidewalk; painted square, marked " 942.302 "
942. 36

Mount Orab, 0.7 mile south of, northeast corner of \(T\) road west and private road east, in base of telephone pole ; spike marked " 940.2 "-
Mount Orab, at station, northwest corner of road crossing, 15 feet north of railroad, 5 feet west of sidewalk; iron post stamped " 921 "
Milepost C-40 plus 4850, northeast corner of third course above bridgeseat course of bridge 2049, west abutment (no cross could befound) :
Feet.
Norfolk \& Western Ry. elevation ..... 923. 902
U. S. Geological Survey elevation ..... 923.31
Mount Orab, 1 mile west of station, southwest corner of private road crossing at signpost "Station 1 mile," in base of gate post; bolt marked " 947.6 " ..... 947. 64
Mount Orab, 1.25 miles west of, northwest corner of T road north, in north end of wooden culvert; spike head marked " 944.9 " ..... 944.93
Mount Orab, 2.5 miles west of, northeast corner of crossroads, in base of telephone pole 2814; spike marked " 942.184 " ..... 942.23
Eastwood, 0.7 mile south of, northwest corner of crossroads; iron post stamped " 922 " ..... 922.209
Eastwood, 2.25 miles south by 0.3 mile west of, southwest corner of crossroads, in base of fence post; spike marked " 920.5 " ..... 920.52
Locust Ridge, 1.5 miles north by 0.4 mile east of, on south side of road at \(T\) road north, in base of telephone pole; spike marked " 919.9 " ..... 919.94
Primary leveling by J. M. Perkins and S. L. Parker in 1914.
From point near Lerado east along electric railroad to point near Fairview.
Lerado, 1.2 miles east of, at northeast corner of crossroads, in root ofeak tree; copper nail939.67
Lerado, 1.8 miles east of, at highway and interurban crossing; top of rail ..... 910.3
Fayetteville, 1.7 miles west of, at highway and interurban crossing,on iron railway bridge over creek, at northeast corner of steelwork, 1 foot below top of rail; painted rivet head897.18
Fayetteville, 0.1 mile west of, at highway crossing; top of rail ..... 944.7
Fayetteville, at interurban crossing west of station; top of rail_...- ..... 924.4
Fayetteville, 45 feet east of railway station, in grounds of St. Aloysius Academy; iron bench-mark post stamped " Ohio 934 "- ..... 933.937Fayetteville, 0.5 mile east of \(T\) road south; top of rail
960.6
St. Martin, at station, at crossroads, on northwest corner of founda- tion pile; copper bench-mark nail ..... 975.00
St. Martin, 1 mile east of station, at T road north, in base of north- west corner fence post; iron spike ..... 997. 24
St. Martin, 1.8 miles east of station, at T road south, in base of trolley pole marked "Stop 65 ;" iron railroad spike ..... \(1,008.25\)
Dodsonville, 1.6 miles west of, at T road south, in northeast corner
of Damascus School yard (district 5) ; iron bench-mark post1, 014. 238
stamped " Ohio 1015 "
Dodsonville, at \(T\) road south, on sawn-off telephone pole; painted square ..... 1, 001.65
Dodsonville, in center of town, on northeast abutment of steel bridge over small creek, on top stone; chiseled square ..... 986. 08
Dodsonville, at T road south, near church, in telephone pole; spike.- ..... 1, 003.58
Dodsonville, 1 mile east of, at \(T\) road south, in southeast corner fence post; copper bench-mark nail ..... 1, 018. 74
Dodsonville, 1.1 miles east of, at \(T\) road north; top of rail ..... 1, 019.1
Allensburg, at T road north, near interurban railway building; top ofrail1, 081.9
Allensburg, in northwest corner of yard of district 1 school; iron bench-mark post stamped "Ohio 1024 "

Feet.
 1, 023.906

Allensburg, 1.1 miles east of, at T road south, in southeast corner
 post; spike
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1, 036. }3

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From Dodsonville north along highway to point 2.5 miles north of Zynchburg.
Dodsonville, 0.5 mile north of, at T road north, on highway bridge over creek, on guard rail; painted square
Lynchburg, 1.7 miles south of, at road corner, on stone coping of Stroup School (district 4), 3 feet north of southwest corner of building; chiseled square ..... \(1,013,86\)
Lynchburg, 1.5 miles south of, at T road east, in corner fence post; iron spike ..... 1, 002.93
Lynchburg, on south edge of town, on south corner of northeast abut- ment of bridge over creek; chiseled square ..... 987.61
Lynchburg, in north corner of railroad fork, 29 feet south of store, 74 feet northwest of railroad station; iron post stamped " Prim. Trav. Sta. No. 941909 Ohio 1009 " ..... 1, 009.194
From point near Marathon east along highway to point 1.5 miles southwest ofDanville.
Marathon, 2.4 miles southeast of, at crossroads, in northeast corner fence post ; iron spike
926.97
Marathon, 3.5 miles southeast of, at Hawthorns Corner crossroads, on cement walk by gate in front of residence of Jacob Hawthorn; chiseled square ..... 940.14
Fivemile, 1 mile north and 0.5 mile west of, at three roads, north of road corner, 2 feet south of fence; iron post stamped "Ohio 951 "- ..... 950.783
Fivemile, 1 mile north and 0.5 mile west of, at three roads, north ofroad corner, 2 feet south of fence; iron post stamped " Ohio 951 "--
Fivemile, 1 mile north by 0.6 mile east of, at \(T\) road south, in cornerfence post; spike950.783960.42
Fivemile, 1 mile north by 1 mile east of, at crossroads, at southeastcorner of Gum Corner School (district 6), on concrete walk; chis-eled square969. 72
Fivemile, 1 mile north by 1.5 miles east of, at T road south, in cor- ner fence post; iron spike ..... 977.37
Fivemile, 1 mile north by 1.9 miles east of, at crossroads, in corner fence post; bent iron spike ..... 980.55
Fivemile, 1 mile north by 2.2 miles east of, at three roads, on top of box culvert; painted square ..... 975.22
Northtown, 3 miles east of, at southeast corner of Harwood and Five-mile road, at road south, 20 feet east and 10 feet south of cornerstone at forks; iron post stamped " Prim. Trav. Sta. No. 891909Ohio 986 "985.695
Pulse, 1.4 miles west of, at three roads, north of road intersection, in root of large maple tree ; copper bench-mark nail ..... 990.98
Pulse, 0.9 mile west of, at crossroads, on stone in culvert; painted square ..... 984.70
Pulse, 0.2 mile west of, at iron bridge over creek, on northeast abutment, on top stone; chiseled square ..... 969.00
Pulse, at crossroads, 50 feet east of post office, in root of large maple tree; copper bench-mark nail ..... 987.71
Feet.
Pulse, 0.2 mile east of, at T road south, in corner fence post; spike_- ..... 981.30
Pulse, 0.8 mile east of, at Chaney School (district 2), in southwest corner of school yard; iron bench-mark post stamped "Ohio 994 "- ..... 994.080
Pulse, 1.4 miles east of, at T road north, on stone culvert; painted square ..... 1, 020.64
Pricetown, 0.3 mile west of, at T road south, on top of culvert; painted square ..... 1, 014.94
Pricetown, at crossroads, in northwest corner of foundation stone of brick store of C. E. Barr ; chiseled square ..... 1, 003. 35
Pricetown, 0.7 mile east of, at T road south, on northeast abutment of culvert, on top stone; chiseled square ..... 1, 009. 21
Hollowtown, 1.1 miles north of, at crossroads, in base of oak gate- post north of road west; copper bench-mark nail ..... 1, 018. 46
Hollowtown, 0.4 mile north of, at road corner, on fence; painted point ..... 1, 014.85
Hollowtown, opposite T road southeast, at southwest corner of Ger- man Baptist Church yard; iron post stamped "Ohio 1030 " ..... 1,030. 181
Hollowtown, 0.7 mile northeast of, at T road east, in corner fence post ; spike ..... \(1,040.23\)
Hollowtown, 0.8 mile northeast of, at T road west, in root of large oak tree ; copper bench-mark nail ..... 1, 042.71
Hollowtown, 0.9 mile northeast of, at road north, on culvert; painted square ..... 1, 048.38
Danville, about 1.5 miles southwest of, at road forks with road bearing due east, 40 feet southwest of northeast corner, in center of road, on top of bowlder ; chiseled square ..... 1, 051.27
From Pulse north along highway to Damascus School.
Pulse, 1.1 miles north of, at crossroads, in northeast corner fence post; iron spike ..... 995.75
Pulse, 1.8 miles north of, at three roads, in corner fence post north- west of road corner ; iron spike ..... 986. 22
Pulse, 2.5 miles north of, at T road west, on top of east end of drain pipe ; painted square ..... 994.14
Dodsonville, 2.5 miles southwest of, at crossroads, in southwest stone abutment of bridge over creek, on top stone ; chiseled square_ ..... 996.96
Dodsonville, 1.6 miles west by 1.9 miles south of, at T road north, in corner post; iron spike ..... 1, 010.86
Dodsonville, 1.6 miles west by 0.8 mile south of, at T road west, in corner fence post; spike ..... 1, 017.57
From point 2 miles east of Blowville southeast along highway to Buford,thence northeast to Hollowtown.
Crosstown, 0.2 mile east of, at crossroads, on stone in culvert; painted square ..... 917. 31
Crosstown, 0.8 mile east of, at three roads, north of road corner, by fence corner ; iron bench-mark post stamped "Ohio 922 " ..... 922. 280
Crosstown, 1.6 miles east of, at crossroads, on south end of stone culvert, on top stone; chiseled square ..... 913. 68
Crosstown, 2.2 miles east of, at T road north, at brick school, on east end of wooden culvert; painted square ..... 939. 68
Centerville, at crossroads, 60 feet east of store, on east end of 12 -inch vitrified-pipe road culvert ; chiseled square ..... 947. 63
Centerville, 1.2 miles east of, at T road south, on stone at corner;

Feet. 948.28
Greenbush, at crossroads, in yard of Malott residence, in root of poplar tree; copper bench-mark nail ..... 947. 62
Greenbush, 0.2 mile east of, at \(\mathbf{T}\) road south, in corner fence post; spike ..... 947.96
Greenbush, 0.8 mile east of, at T road north, at northeast fence cor- ner ; iron bench-mark post stamped "Ohio 952 " ..... 951. 747
Greenbush, 1.2 miles east of, at T road south, in yard of John Miller, on concrete well curb; chiseled square ..... 950.52
Buford, 3 miles west of, at T road north, in corner fence post; spike_ ..... 949.30
Buford, 2.7 miles west of, at \(T\) road south, in yard of Columbia College District 4 school, in root of giant oak; copper nail ..... 951.08
Buford, 0.6 mile southwest of, at \(\mathbf{Y}\) roads, in southeast fence-corner posit ; iron spike ..... 955.56
Buford, 0.4 mile southwest of, at T road south, on stone culvert; painted square ..... 941.91
Buford, on northwest corner of steel bridge over creek, on plank; painted square ..... 943. 50
Buford, in yard of Buford Special School, 25 feet west of town pump; iron bench-mark post stamped "Ohio 955 " ..... 954.953
Buford, 0.6 mile northeast of, at T road north, on east end of stone culvert; painted square ..... 951.07
Buford, 1.5 miles northeast of, at T road north, in southwest cor- ner of yard of M. E. Purdy, in root of large maple tree; copper nail ..... 975.66
Buford, 2.1 miles northeast of, at \(T\) road south, in corner fence post ; spike ..... 984.43
Buford, 2.3 miles northeast of, at road east, in corner fence post; spike ..... 989.23
Hollowtown, 1 mile southwest of, near T road west, in root of giant oak, 130 feet northeast of road corner ; copper nail ..... 1, 002. 26
Hollowtown, 0.5 mile southwest of, at \(T\) road southeast, on culvert top; painted square ..... 1, 015.19
Hollowtown, 0.1 mile southwest of, at \(T\) road northwest, in corner fence post; spike ..... 1, 028.77
From point 1.2.miles east of Greenbush south along highways to Mount Orab.Mount Orab, 1.4 miles north of, at T road north, in corner telephonepole; spike943.27
Mount Orab, 1.3 miles north of, at crossroads, in base of telephone pole northeast of road intersection; iron spike ..... 939. 41
Mount Orab, 0.7 mile north of, at T road east, on plank culvert; painted square ..... 919.01
Mount Orab, 0.2 mile north of, on street east, on top of bowlder at corner ; painted square ..... 937. 89Mount Orab, at station, in northwest corner of road crossing, 15feet north of railroad and 5 feet west of sidewalk; iron bench-mark post stamped "Ohio 921 "920.792
Near Eastwood.
Eastwood, 100 feet southwest of Norfolk \& Western Ry. station, on west side of highway, in root of large oak tree ; copper nail ..... 929.21
Elastwood, 0.7 mile south of, at northwest corner of crossroads; iron post stamped " 922 " ..... 922.209
Sardina, 0.4 mile north of railroad station, 20 feet north of center of railroad crossing, on east end of stone culvert under railroad; chiseled square marked " 961.6 "
Feet.
961.61
From Taylorsville southwest along Norfolk \& Western Ry. to Sardinia.
Mowrystown, 1.33 miles north of, at Norfolk \& Western Ry. crossing, on east side of railroad, 1 foot west of railroad property line, on south side of public road, 35 feet southeast of center of railroad crossing; iron post stamped " 1000 "
999. 853
Mowrystown, on southeast corner of station platform, 18 feet southeast of southeast corner of Norfolk \& Western Ry. station; copper nail, painted " 987.9 "
987.93
Mowrystown, 1.43 miles south of, along Norfolk \& Western Ry., on west side of track, on property line, in base of fence post ; railroad spike, painted "974.3"
974.37
Mowrystown, 1.98 miles south of, at Norfolk \& Western Ry. crossing; top of west rail, painted " 962.6 " \(\qquad\)
Mowrystown, 2.1 miles south of, at Norfolk \& Western Ry. crossing, on west side of public road, 20 feet north of center of railroad crossing, on northeast corner of stone culvert under railroad; chiseled square marked " 953.2 "
962.6
953. 20
Sardinia, 0.84 mile north of, at Norfolk \& Western Ry. crossing; top of west rail, painted "939.5"
939.6

\section*{SCIO QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\). ]
Primary leveling by J. H. Wetzel in 1901 and B. J. Green in 1902.

\section*{At Jewett.}

Jewett, north entrance of schoolhouse, east end of stone step; bronze
tablet stamped "1009 Steubenville" (reported destroyed 1912)__- 1,008.165
From Cadiz northwest via Smithdale to station 15 post office, thence northeast to Bowerston, thence northwest to Sherrodsville.

Enfield, 0.7 mile east of, north side of road at fork to north, on stone rulvert; chiseled square
952.68

Enfield, 1.8 miles west of, on front doorstep of John N. Haverfield's brick house; aluminum tablet stamped " 938 Steubenville" \(\qquad\) 937.603

Laceyville, 1.5 miles east of, 600 feet west of blacksmith shop, on southeast abutment of bridge at crossroads; chiseled square \(\qquad\)
Smithdale, 0.7 mile west of, on southeast corner foundation stone of residence of J. W. McDivitt; aluminum tablet stamped " 909 Steubenville" \(\qquad\) 909. 488

Franklin (Tappan post office), 2 miles west of, on northeast abutment of bridge ; chiseled square
872.99

Bowerston, on northeast coping stone of Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. bridge 84 ; aluminum tablet stamped " 943 Steubenville"
944.162


Sherrodsville, on coping stone of southeast corner of iron bridge leading from Sherrodsville to station; bronze tablet stamped " 913 Steubenville"
920.4
913. 321

Sherrodsville, in front of station; top of rail.

\section*{From point near Smithdale south via Deersville to Poulston residence (singlespur line).}

Deersville, 1.5 miles southwest of, in southeast corner of foundation of residence of J. N. and H. T. Poulston; aluminum tablet Feet. stamped " 1189 Steubenville"

From Conotton northeast along public roads to Perryville (double-spur line). Perryville (Lamartine post office), near northeast corner' of M. E. Church, on south foundation wall; aluminum tablet stamped " 1272 Steubenville"

1,272. 500
From Tippecanoe east to point near Hattonia, thence south to Minkville.
Clendening, on east foundation wall of E. D. Clendening's dwelling; bronze tablet stamped " 1091 Steubenville"

1,091. 242
Hattonia, 2 miles south of, north side of Brushy Fork, east end of top step of entrance to Barretts schoolhouse; bronze tablet stamped "915 Steubenville"
915.035

\section*{SCIOTOVILLE QUADRANGLE.}

> [Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
> Precise leveling by \(\mathbf{W}\). H. Monahan in 1906.

\section*{From Lucasville to Portsmouth along Norfolk \& Western Ry.}

Lucasville, in front of station; top of rail
554.9

Lucasville, 2.82 miles south of, railroad bridge over road, southeast corner of south abutment; aluminum tablet stamped " 559 "
558. 757

Davis, in front of station; top of rail
566.9

Davis, 1.08 miles south of, bridge over road, south abutment, southwest corner; aluminum tablet stamped " 558 "
557.869

Davis, 1.96 miles south of, stone culvert, east side of railroad; chiseled square
550.68

Davis, 4.0 miles south of, stone-arch bridge over creek, top of southwest corner; aluminum tablet stamped " 534 ".
Vera station, in front of ; top of rail
533. 724

Portsmouth, on southwest corner of stone step, south side of Norfolk \& Western Ry. station; chiseled square
Portsmouth, southeast corner of post office, in first course of foundation, 1 foot above ground; chiseled square (U. S. Engineer Corps bench mark)
535.129

Primary leveling by E. L. McNair in 1898-99.
From Hales Creek southwest via South Webster and Wait to Sciotoville.
Scioto Furnace, 1,900 feet southwest of station, on side hill in partly wooded lot of Scioto Furnace Co., 125 feet south of and 30 feet higher than road, in sandstone bowlder; copper bolt stamped " 647 I"
649.635

Sciotoville, at front doorway of two-story brick schoolhouse, in face of stone doorsill; bronze tablet stamped " 546 I "
548. 694

From Sciotoville north via Scioto to Stockdale.
Harrison Township, 0.5 mile south of top of hill opposite John Niner's home, in sandstone ledge 8 feet east of center of road (in narrow ravine) ; copper bolt stamped " 788 I".-

> Scioto, in sandstone foundation under southwest corner of Knights of Pythias two-story building, west side of street; bronze tablet stamped " 654 I"
> Scioto, 4.6 miles north of, on main pipe, sec. 8, Madison Township, in sandstone foundation under southwest corner of Baptist Church; bronze tablet stamped " 665 I"

> From California (Stockdale) east to Grahamsville.
> California (Stockdale), in front of residence of E. V. Samson, north side of street, in stone lamp and hitching post; bronze tablet stamped " 732 I"
> California (Stockdale), 5.25 miles east of, on road to Grahamsville, 375 feet west of road crossing and small bridge over stream, Scioto Township, 7 feet north of center of road, in sloping face of sandstone ledge; bronze tablet stamped " 642 I"
734. 020

Feet.
656.793
667. 195
643.991
533. 728
547. 899
545. 394
550.04
554. 291
670.806
602.98
605.51
607.562

From Davis northeast along public roads via Scioto (Harrisonville) to Massie.
Davis, 1.1 miles north of, about 5 miles north of Portsmouth, west side of track in south abutment of iron bridge over Portsmouth and Chillicothe pike; aluminum tablet stamped " 559 "
557. 869

Portsmouth, about 5 miles north by 0.6 mile east of, west side of Fort Hill, on stone, north side of road; chisel mark painted " 798.1 "--
Crone, 1.2 miles southwest of post office, on Portsmouth-Harrisonville pike, at T road northwest, 0.25 mile east of Long Run Methodist Episcopal Church and 850 feet south of Long Run United Brethren Church, northwest corner of road forks; iron post stamped " 747 "
797.94
747. 108

Crone, 0.6 mile northeast of, T road northwest, 50 feet north of road forks, north abutment, west side of small wooden bridge over creek; chiseled square painted " 684.4 "
684.31

\title{
Scioto (Harrisonville), 3.1 miles southwest of, on Portsmouth-Harrisonville pike, northeast corner of road forks, at A. Oertal's farm; iron post stamped " 685 " \\ Feet. \\ Scioto (Harrisonville), in sandstone foundation under southwest corner of Knights of Pythias two-story building, west side of street; bronze tablet stamped " 654 I" \\ \(\qquad\) \\ Sicjoto, 3.8 miles northeast of, on Jackson pike, at southeast corner of \(T\) road southeast, about 0.2 mile west of White schoolhouse (district 10), Madison Township; iron post stamped " 728 " \\ \(\qquad\) \\ 727.613 \\ Scioto, 4.8 miles northeast of, T road southwest, in southwest corner of top of stone; chiseled cross \\ 589.90 \\ Massie, near, 7.4 miles northeast of Scioto, 120 feet northwest of schoolhouse (district 12), east side of road, 75 feet higher than main road, in sandstone ledge of hillside; bronze tablet stamped "678 I" \\ 679.856 \\ Near Lucasville.
}

Davis, 0.09 mile south of station, on southeast corner of south abutment of railroad bridge over highway, in stone; chiseled circular mark
564.7

Lucasville, about 600 feet north of Norfolk \& Western Ry. station, at corner of flour mill; iron post stamped "Prim. Trav. Sta. No. 28, 1904, 559 "
558.629

\section*{Near Clifford.}

Clifford, 3.22 miles south of, northwest corner of railroad bridge over highway, top of abutment; aluminum tablet stamped " 554 "
554.068

SEAMAN QUADRANGLE.
[Latitude \(38^{\circ} 45^{\prime}-39^{\circ}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\) ]
Primary leveling by Howard Clark and C. E. Mills in 1910.
From Mayhill via Tranquility and Unity to West Union and Beasleys Fork.
Mayhill, 1.7 miles southwest of, about 15 feet north of mail box at T road, in front of W. S. Moore's residence, on stone in pike; chiseled circle

1, 027. 24
Iranquility, 2.4 miles north of, south end of stone culvert at road
crossing; chisel mark
Tranquility, about 50 feet north of store, west end of culvert; iron post stamped " 770 "
770.218

Tranquility, 1.8 miles south of, in middle of highway at T road, on limestone; chisel mark (circle)
817.34

Lawshe, 3.1 miles west of, road crossing under Norfolk \& Western Ry., 50 feet south of railroad and 10 feet west of road; iron post stamped " 672 "
671. 689

Lawshe, 2.9 miles west of, bridge 2038, at milepost P 42-C 65, south end of west abutment, \(2 \frac{1}{2}\) feet below track; chiseled square (Norfolk \& Western Ry. bench mark)
671. 65

Unity, northeast corner of crossroads, 30 feet northeast of center of crossroads; iron post stamped " 958 ".
958. 684

West Union, 3 miles northwest of, on Unity pike, 30 feet northeast of center of road forks; iron post stamped " 836 "
836.171

West Union, southeast corner of Main Street (Wamsley pike) and East Street (Wrightsville pike) ; iron post stamped " 956 "
956. 505
West Union, 2.4 miles south of, on Wrightsville pike, 30 feet south of small iron bridge over Beasleys Fork, southeast corner of road forks, 1 foot from retaining wall, at T road east; iron post stamped "Prim. Trav. Sta. No. 14, 1910648 "

Feet. 648.878

From Emerald south to Decatur and Maddox, thence northeast to West Union.
Emerald, 2.5 miles southwest of, in middle of highway at road crossing, about 0.25 mile south of Wilson school building, on limestone rock; chisel mark (circle)
\(1,023.11\)
Emerald, 4.2 miles southwest of, at T road, north of highway in front of Louis Julia's residence ; spike in root of wild cherry tree__ 1, 021.55
Emerald, 5.7 miles southwest of, 20 feet north of Norfolk \& Western Ry. track and 15 feet west of highway at railroad crossing; iron post stamped " 1054 "
Emerald, 7.3 miles southwest of, at T road, in front of J. L. Watson's residence, about 3 miles northeast of Carlisle, on limestone rock near mail box; chiseled circular mark
975. 70

Emerald, 7.8 miles southwest of, at \(T\) road, at base of small white oak tree standing in middle of road forks near old cemetery, on rock; chiseled circle
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1, 017. 84

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Emerald, 12.5 miles south of, on north side of pike at \(Y\) road, about 0.25 mile north of Baird school, on limestone rock; chiseled circular mark
912.87

Emerald, 13 miles south of, at Baird school on Russellville pike, about 2.5 miles east of Russellville, in corner of schoolhouse lot; iron post stamped "Prim. Trav. Sta. No. 22, 947 "
Decatur, 4.2 miles northwest of, 2 miles east of Russellville, in coping at northeast corner of covered bridge over Eagle Creek; bolthead_.
Decatur, at street crossing, in middle of village; iron post stamped " 924 "
814. 22

Decatur, \(\mathbf{1 . 7}\) miles south of, on Decatur and Aberdeen pike, in coping at northwest corner of covered bridge over Eagle Creek at road forks west of old mill; bolthead
653.38

Clayton, 1.4 miles nortb of, east end of stone culvert near road forks at Suck Run school building; chiseled circular mark
731.79

Clayton, about 60 feet east of store on south side of pike; iron post stamped "963"
963.110

Primary leveling by E. C. Bibbee in 1915.
From point west of Winchester east along Norfolk \& Western Ry. to Seaman, thence along highways southwest to Eckmansville, thence southeast to point near Bentonville.

Emerald, 5.67 miles southwest of, at Norfolk \& Western Ry. crossing, 20 feet north of railroad, 15 feet west of highway; iron post stamped " 1054 Ohio" (Bull. 476, p. 34) \(\qquad\) \(1,054.032\)
Winchester, 2.06 miles west of, on Norfolk \& Western Ry., 100 feet east of milepost marked "P 52 C 55," 20 feet north of railroad, 25 feet west of highway, at railroad crossing, in base of telegraph pole; 60 -penny spike 3 inches above ground, " 1020 " painted on telegraph pole \(1,019.94\)
Adams and Brown county line, on Norfolk \& Western Ry.; top of rail, painted " 1005 "

1,005. 0
Trestle 2041 ; top of rail, " 1000 " painted on trestle
1, 000.3

Winchester, 1.04 miles west of, on Norfolk \& Western Ry., 200 feet east of milepost marked "P 51 C 56," 20 feet north of railroad, 30 feet west of public road, at railroad crossing, in base of tele-
graph pole; rail spike 2 inches above ground, " 1003 " painted on telegraph pole \(\qquad\)
Feet. 1,003. 09
975.904
977.03
932.137
907.96
922. 361
937.7
937. 18
939. 45
899.072

Seaman, 1 mile south of, 120 feet south of Scott-Wayne township line, on east side of road, in cultivated field, 1 foot east of fence line, in root of hickory tree 18 inches in diameter; copper nail and washer, " 896 " painted on tree \(\qquad\)
Seaman, 1.46 miles south of, at Youngsville, 40 feet north of Youngsville Church, in forks of Y roads, in root of maple tree; copper nail and washer, " 885 " painted on tree \(\qquad\)
Seaman, 2.06 miles south of, on south side of Unity pike, 2.5 feet north of fence line opposite \(\mathbf{T}\) road north, 8 feet west of blacksmith shop; iron post stamped " 830 Ohio"
Grace Run, covered bridge; floor, marked " 807 "
Surface of water under above bridge May 13, 1915 \(\qquad\)
Seaman, 3.05 miles south of, 70 feet south of southeast corner of Sunnyside schoolhouse yard, on east side of road, on large flat limestone rock; chiseled square, " 895 " painted on fence near.---
Seaman, 4.08 miles south of, on pike, on large wheel rock at northwest corner of walk leading to Frank Baird's residence; chiseled square, " 940 " painted on fence 30 feet north \(\qquad\)
North Liberty (Cherry Fork post office), in south part of town, 100 feet south of bridge over Cherry Fork, in forks of road, 2 feet south of telephone pole; iron post stamped " 861 Ohio"
830.266
806.6

791
895.05
940.47
860.528

North Liberty, 1.27 miles southwest of, on Eckmansville-North Liberty pike, 250 feet east of Mrs. David Swaringen's residence, at northeast corner of small wooden bridge, on abutment; chiseled square, " 910 " painted on bridge

Feet.
909.72

Eckmansville, in west part of town, near northwest corner of \(\mathbf{T}\) road west, just south of gate to W. C. Morrison's yard, 35 feet north by 25 feet west of center of T road; iron post stamped "Prim. Trav. Sta. No. 21 Ohio 19001004 "
\(1,003.684\)
Wayne-Liberty township-line crossing; road elevation, painted " 972 "

Eckmansville, 0.88 mile south of, 300 feet south of James Shell's residence, on east side of road, on fence line, in root of whiteoak tree 27 inches in diameter; copper nail and washer, "972" painted on post 12 feet north
971.7
971.57

Eckmansville, 1.63 miles south of, on west side of road, on fence line, 150 feet north of W. P. Ebright's residence, in root of walnut tree 30 inches in diameter; copper nail and washer, " 952 " painted on fence 4 feet west
952.24

Eckmansville, 2.7 miles south of, 10 feet south of southwest corner at \(T\) road west, 1 foot east of fence in public road, 150 feet south of E. R. Jordan's mail box; iron post stamped " 922 Ohio "
922.485

Eckmansville, 3.55 miles south of, in locust stump 4 feet high, at east end of footbridge over Gordon's Run; copper nail and washer, " 824 " painted on post 3 feet south \(\qquad\) 823.81

Eekmansville, 4.35 miles south of, on Cincinnati pike, at northwest corner of \(T\) road north, in base of corner fence post 6 inches above ground; rail spike, " 915 " painted on post
914.64

Eckmansville, 5 miles southeast of, on Cincinnati pike, at southwest corner of crossroads, 500 feet north of J. C. McGovney's residence ; iron post stamped " 954 Ohio "
953.959

North Liberty, 6 miles south of, 20 feet north of northeast corner of Adams County and Cincinnati pike crossing, at southwest corner of concrete walk leading to East Liberty M. E. Church; chiseled square, " 912 " painted on fence opposite
911.95

North Liberty, 7 miles south of, at northwest corner of crossroads, on Adams County pike, 1,200 feet southeast to J. B. McClanahan's residence on hill, 1,260 feet north of bridge over Eagle Creek; iron post stamped " 805 Ohio," painted on fence
805.447

Eagle Creek; surface of water, May 18, 1915
796.8

784
Bentonville, 2 miles northeast of, 20 feet southwest of southwest corner of Adams County pike and Maysville road crossing, in root of elm tree 2 feet in diameter in open pasture field; copper nail and washer, " 862 " painted on tree
861.82

Bentonville, 1.3 miles northeast of, 200 feet east of Riffle's residence, at North Liberty pike, at base of telephone pole, on limestone rock; chiseled circular mark, " 882 " painted on telephone pole
882.13

\section*{SHAUCK QUADRANGLE.}
[Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\) : longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).]
From point 4.5 miles east by 1 mile south of Mount Gilead southwest to point 3 miles north of Penlan.

Mount Gilead, 4.5 miles east by 1 mile south of, at southwest corner of crossroads ; spike in telephone pole, marked " 1278.6 "
Mount Gilead, 4 miles east by 2 miles south of, at northwest corner Feet. of crossroads; iron post stamped " 1211 "-................................ 1, 211. 130
Mount Gilead, 4 miles east by 3 miles south of, at northwest corner
of crossroads; spike in fence post, marked "1168.4"-............. 167. 10

Primary leveling by E. C. Bibbee, C. W. Howell, Philip Flitman, and F. Mobrey in 1911.
From point 2 miles east of Galion south along public road to point 3 miles southwest of Williamsport.
Galion, 2 miles east by 0.5 mile south of, at southwest corner of \(T\) road; iron post stamped " 1181 "

1,181. 021
Galion, 2 miles east by 1.5 miles south of, at northeast corner of crossroads; spike in telephone pole, marked " 1196.1 " \(1,194.90\)
Galion, 2 miles east by 3 miles south of, at northeast corner of crossroads; iron post stamped " 1255 "
\(1,254.915\)
Galion, 2 miles east by 4 miles south of, at southwest corner of \(T\)
road; spike in telephone pole, marked " 1280.8 "--.-----. 1, 279.59
St. James, 4.5 miles east by 0.5 mile south of, at northwest corner of crossroads; iron post stamped " 1323 "

1,322. 785
Whetstone, 2 miles east of, at center of crossroads ; point on bowlder,
marked " 1349.6 "...-. \(1,348.36\)
Whetstone, 2 miles east by 1 mile south of, at northwest corner of crossroads; iron post stamped " 1379 Prim. Trav. Sta. No. 54, 1910 Ohio"
\(1,378.417\)
Williamsport, 2 miles north by 1 mile west of, at northwest corner of crossroads ; iron post stamped " 1352 ."

1,351. 261
Williamsport, 1.5 miles north by 1 mile west of, at south end of \(T\)
road; spike in fence post, marked " 1315.9 "-....-. \(1,314.67\)
Williamsport, at northwest corner of crossroads; iron post stamped " 1374 "

1,372. 930
Williamsport, 1.5 miles south by 0.25 mile west of, at northeast cor-
ner of crossroads; spike in telephone pole, marked " 1348.5 "-..-- 1,347.21
Williamsport, 2.5 miles south by 0.5 mile west of, at northeast corner
of crossroads; spike in telephone pole, marked " 1314.8 "-...-- 1,313.49
From Mansfield southwest along highways to point 4 miles southeast of Galion.
Mansfield, 1 mile west of, 300 feet east of church, southwest corner
of crossroads; spike in base of telephone pole, painted " 1283.4 "-- 1,283.31
Mansfield, 1.7 miles west of, southeast corner of crossroads; spike in base of post, painted " 1361.0 "
\(1,360.96\)
Mansfield, 2.2 miles west of, northwest corner of crossroads; spike in
base of telephone pole, painted "1399.7 "--.-----1,399.69
Mansfield, 3 miles southwest of, southeast corner of crossroads; spike in base of fence post, painted " 1412.1 "
\(1,412.10\)
Alta station, 4.1 miles southwest of Mansfield, 300 feet east of crossroads, 50 feet east of Baltimore \& Ohio R. R.; iron post stamped " 1287 "

1, 286. 667
Mansfield, 4.3 miles southwest of, south side of road at fork of road; spike in base of telegraph pole, painted " 1377.0 "

1, 376.99
Mansfield, 5.1 miles southwest of, southeast corner of crossroads; spike in base of telephone pole, painted " 1478.8 "

1, 478.78
Mansfield, 5.8 miles southwest of, on stone in middle of road south at crossroads; chiseled square marked " 1477.9 "

1, 477. 90
Mansfield, 6.7 miles southwest of, northwest corner of crossroads; ..... Feet.spike in base of telephone pole, marked " 1417.8"\(1,417.84\)Mansfield, 7.2 miles southwest of, northeast corner of T road north,120 feet east of road north ; chiseled square on north side of bridge,marked " 1302.8"\(1,302.84\)
Mansfield, 7.8 miles southwest of, northwest corner of crossroads ; iron post stamped " 1229 " ..... 1,229. 188
Mansfield, 9.1 miles southwest of, west side of T road, on west wing on west side of abutment of bridge; chiseled square, painted " 1201.6 " ..... \(1,201.58\)
Mansfield, 9.4 miles southwest of, northwest corner of T road north; spike in base of telephone pole, marked " 1216.0 " ..... \(1,215.98\)
Mansfield, 9.8 miles southwest of, northwest corner of crossroads ; spike in base of telephone pole, marked " 1226.0 " ..... 1, 226.04
Mansfield, 11 miles southwest of, southwest of crossroads ; iron post stamped " 1250 " ..... \(1,250.075\)
Mansfield, \(\mathbf{1 1 . 4}\) miles southwest of, southwest corner of \(T\) road south; spike in base of telephone pole, painted " 1247.2 " ..... 1, 247.25
Mansfield, 12.6 miles southwest of, southeast corner of crossroads; spike in base of telephone pole, marked " 1303.4 " ..... 1, 303. 47
From Bellville north along Baltimore \& Ohio R. R. to Alta.Bellville, 1.6 miles northwest of, southeast corner of railroad cross-ing; spike in base of telephone pole\(1,151.26\)
Bellville, 1.8 miles northwest of, northeast corner of railroad cross- ing; spike in telephone pole, marked " 1146.5 " ..... \(1,146.23\)
Bellville, 2.25 miles northwest of, southeast corner of railroad cross-ing; spike in base of telephone pole, painted " 1149.2 "\(1,148.99\)
Bellville, 3.7 miles northwest of, southeast corner of railroad cross- ing; iron post stamped " 1154 " ..... \(1,153.724\)
Lexington, northwest corner of railroad crossing, opposite cornerfrom station; iron post stamped " 1180 "\(1,179.914\)
Lexington, 1.2 miles northwest of, northeast corner of railroad cross- ing; spike in base of telephone pole, painted " 1197.5 " ..... 1, 197. 24
Lexington, 1.9 miles northwest of, southeast corner of railroad cross- ing; spike in base of telephone pole, marked " 1236.2 " ..... 1, 235.97
Lexington, 1.4 miles northwest of, southeast corner of railroad cross- ing; spike in base of telephone pole, painted " 1208.9 " ..... 1, 208. 60
Lexington, 2.1 miles northwest of, at northeast corner of railroadcrossing; spike in base of fence post, painted " 1240.8 "1, 240.60
Lexington, 2.6 miles northwest of, west side of road, east side of rail- road; spike in base of telephone pole, marked " 1280.3 " ..... 1, 280.03
From point near Ankenytown to point near Fredericktown.

Ankenytown, 1.2 miles south of, at first railroad crossing, on west side of track, 25 feet south of center of public road; iron post stamped " 1157 Ohio".


Bellville, 100 feet west of front entrance to public-school building; iron post stamped " 1144 Ohio"
\(1,144.493\)
Bellville, 25 feet northwest of north end of station platform, on east abutment on south side of bridge over Clear Fork; chiseled square, marked " 1126.3 "

Bellville, 0.8 mile west of, at \(Y\) road; spike in base of sign post, Feet.
painted "T. B. M. 1129.07"
Bellville, 1.25 miles west of, at northwest corner of crossroads; spike in base of telephone pole painted "T. B. M. 1133.57" \(1,133.33\)
Bellville, 2.3 miles west of, on southeast corner of east abutment of bridge over Clear Fork; chiseled square, painted "T. B. M. \(1^{\text {¹ }} 140.7\) "- 1, 140. 50
Bellville, 3.7 miles west of, at southwest corner of \(T\) road south; spike in base of telephone pole, painted "T. B. M. 1174.07"
\(1,173.85\)
Bellville, 4.5 miles west of, at northwest corner of crossroads; iron post stamped " 1177 Ohio"
\(1,176.687\)
Bellville, 5.9 miles west of, at southeast corner of crossroads; spike in base of elm tree, painted "T. B. M. 1202.6 "
\(1,202.40\)
Bellville, 6.6 miles west of, at crossroads, on northwest corner of north abutment of bridge over Clear Fork ; chiseled square, painted "T. B. M. 1209.16 "
 \(1,208.96\)
Johnsville, 1.1 miles northeast of, at northeast corner of crossroads, near entrance to cemetery, 200 feet east of church; iron post stamped "Prim. Trav. Sta. No. 65, 1910, 1256 "

1,255. 904
Johnsville, at northeast corner of square; iron post stamped " 1354 Ohio "

1,353. 716
Johnsville, 1.1 miles west of, at southwest corner of \(\mathbf{T}\) road south; spike in base of telephone pole, painted " T. B. M. 1367.7"
\(1,367.54\)
Johnsville, 1.5 miles west of, at southwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1395.9 "
\(1,395.77\)
Johnsville, 2.4 miles west of, at southwest corner of crossroads; spike in base of corner post, painted "T. B. M. 1405.2"
\(1,404.99\)
Johnsville, 3.4 miles west of, at southeast corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1382.9 "\(1,382.72\)

From Johnsville south along highway to Miller schoolhouse, thence east along highway to point 1.7 miles north of Ankenytown.

Johnsville, 1.1 miles south of, northwest corner of west abutment of bridge over branch of Clear Fork; chiseled square, painted "T. B. M. 1313.0 "

1, 312.91
Johnsville, 1.4 miles south of, at southwest corner of crossroads ; spike in base of telephone pole, painted "T. B. M. 1341.84 "
North Woodbury, at head of \(\mathbf{T}\) road west ; spike in base of telephone pole, painted "T. B. M. 1375.9 "

1, 375.75
North Woodbury, 0.6 mile south of, at head of \(T\) road west; spike in base of telephone pole, painted "T. B. M. 1413.2 "
\(1,413.08\)
North Woodbury, 1.5 miles south of, at southeast corner of crossroads, 150 feet west of Miller schoolhouse; iron post stamped " 1342 Ohio"

1, 341.443
North Woodbury, 1.5 miles south by 1 mile east of, at northeast corner of crossroads; spike in base of fence post, painted "T. B. M. 1354.2 "

North Woodbury, 1.5 miles south by 1.8 miles east of, at northeast corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1305.4 " \(1,305.25\)
Darlington, 1.8 miles south of, at northwest corner of \(T\) road west; spike in base of telephone pole, painted " 1234.0 "

1, 233.89
Darlington, 2 miles south of, 2 miles west by 0.5 mile south of Bangorville, in Richland County, Perry Township, at southeast corner of crossroads ; iron post stamped " 1214 Ohio "
Feet.
Bangorville, 1 mile west by 0.5 mile south of, at northwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1304.6 "
Bangorville, 0.5 mile south of, at northwest corner of T road west, in end of culvert ; copper nail painted "T. B. M. 1295.3 "
1, 295. 21
Bangorville, at northeast corner of \(T\) road east; spike in base of telephone pole, painted "T. B. M. 1372.12"
Bangorville, 1 mile east of, at southeast corner of crossroads; spike in base of fence post, painted "T. B. M. 1307.4" \(1,307.25\)
Bangorville, 1.7 miles east of, 1.5 miles north of Palmyra, at south-
east corner of crossroads; iron post stamped " 1239 Ohio"
Ankenytown, 1.8 miles north of, at southwest corner of T road west; spike in base of telephone pole, painted "T. B. M. 1217.07"
Ankenytown, 1.2 miles north of, at Richland-Knox county line road, at southwest corner of crossroads; spike in base of telephone pole, painted " 1187.5 " \(1,187.36\)
From point 1.5 miles south of North Woodbury south to point 3.9 miles west of Batemantown.
North Woodbury, 4 miles south of, at northwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1382.8" 1,382. 74

From Ankenytown west along highways to point 8 miles west of Batemantown.
Ankenytown, at west end of station platform, on concrete retaining curb wall; chiseled square \(1,127.25\)
Ankenytown, 1.1 miles west of, at southwest corner of crossroads; spike in base of corner post, painted " 1165.9 "

1, 165. 64
Ankenytown, 2.2 miles west of, at southeast corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1187.5" \(1,187.29\)
Ankenytown, 2.8 miles west of, at northwest corner of crossroads; iron post stamped "1217 Ohio"
\(1,216.573\)
Batemantown, at southeast corner of crossroads; spike in base of telephone pole, painted " 1153.8 "
\(1,153.65\)
Batemantown, 1 mile west of, at northeast corner of T road north; iron post stamped " 1189 Ohio"

1, 189.097
Batemantown, 1.8 miles west of, at southwest corner of T road south; spike in base of telephone pole, painted " 1247.2 "
\(1,247.00\)
Batemantown, 2.5 miles west of, 100 feet east of T road south; spike in base of telephone pole, painted " 1272.6 "
\(1,272.42\)
Batemantown, 3.9 miles west of, at northwest corner of crossroads ; iron post stamped " 1250 "

1,250. 177
Batemantown, 4.9 miles west of, at southwest corner of crossroads; spike in base of telephone pole, painted "1273.8"-
\(1,273.67\)
Batemantown, 6.2 miles west of, 2.09 miles south of Pulaskiville, at northwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 1299.6"

1, 299.54

\section*{Near Fredericktown.}

Fredericktown, 1.7 miles north of, 12 feet east of railroad, on west side of stone pier for overhead bridge 576 ; chiseled square
\(1,112.78\)

\section*{SIAM QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\). ]
Precise leveling by the Baltimore \& Ohio R. R. and the Coast and Geodetic Survey.
From Chicago Junction west along Baltimore \& Ohio R. R. to point 1 nile west of Scipio siding.

Chicago Junction, about 2.5 miles west of, on Baltimore \& Ohio R. R. right of way, at secoud telegraph pole west of milepost 269 (c),
on a knoll 39 feet south of the track; red-metal cap on iron post (C. \& G. S. b. m. \(\left.I_{5}\right)^{1}\) \(\qquad\)
Chicago Junction, about 3 miles west of, on Baltimore \& Ohio R. R. right of way, between third and fourth telegraph poles east of milepost 268,16 feet north of track, in top surface of coping of a culvert; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. J5) ---
Chicago Junction, about 5 miles west of, on Baltimore \& Ohio R. R. right of way, 8 telegraph poles east of milepost 266 , in center of top surface of the gray sandstone coping of a culvert; copper bolt (C. \& G. S. b. m. K

Siam, Seneca County, on Baltimore \& Ohio R. R. right of way, 246 feet west of Pennsylvania R. R. crossing, about 6 feet south of track, in center of a concrete block about 3 by 4 feet on the top surface, set level with the grade; red-metal disk (C. \& G. S. b. \(\left.\mathrm{m} . \mathrm{L}_{5}\right)^{1}\)

Feet.
912.595
910.939
922.188
953.179

Siam, on Baltimore \& Ohio R. R. right of way, 1,230 feet west of Pennsylvania R. R. crossing, about 48 feet north of track, in corner of fence at a road crossing; reci-metal cap on iron post (C. \& G. S. b. m. \(\mathrm{M}_{5}\) )

Siam, about 3 miles west of, on Baltimore \& Ohio R. R. right of way, in the north end of west abutment of an undergrade crossing hridge ; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. Ns) --
Scipio siding, about 1 mile west of, on Baltimore \& Ohio R. R. right of way, 3 telegraph poles east of signboard " 1 mile to Scipio," in center of the top surface of the north end of a concrete culvert; copper bolt (C. \& G. S. b. m. O \({ }_{5}\) )

Primary leveling by Philip Flitman and C. E. Mills in 1911.
From point near Carrothers northwest along Pennsylvania R. R. to point near Bloomville.

Carrothers, 1.1 miles northwest of, northeast corner of road crossing; spike in base of telephone pole, marked " 961.8 "
961.18

St. Stephens, 0.5 mile southeast of, southwest corner of private-road crossing; spike in base of telephone pole, marked " 957.4 " \(\qquad\) 956.8

St. Stephens, 425 feet northwest of station, northeast corner of crossing; iron post stamped " 948 "
947. 143

St. Stephens, 1.25 miles northwest of, northwest corner of road crossing; spike in base of telephone pole, marked " 948.5 "
947. 79

Bloomville, 1.3 miles southeast of, southeast corner of road crossing; spike in base of telephone pole, marked " 942.3 "
941. 63

Bloomville, 0.5 mile east of, center of town, northeast corner of road crossing; spike in base of telephone pole, marked " 930.285 "
929.57

Bloomville, 2 feet north of southwest corner of town hall, in water table; aluminum tablet stamped " 932 "

\section*{From point near Carrothers northeast along highway to Siam.}

Carrothers, 0.7 mile north of, southeast corner of crossroads ; chiseled square on south end of stone drain, marked " 964.1 " \(\qquad\)
Carrothers, 1.8 miles north of, southwest corner of T road west, on stone drain in front of Fred Richard's residence ; chiseled square, marked " 950.7 " \(\qquad\)
Feet.
963.52
950.17

Caroline, 1.1 miles south of, southwest corner of crossroads ; spike in base of telephone pole, marked " 940.9 "
940.37

Caroline, northwest corner of crossroads; iron post stamped " 929 "--
Attica, crossroads in center of town, northwest corner of, on stone curbing of well at iron pump; chiseled square, marked " 952.5 "---
Attica, 1.2 miles north of, northwest corner of crossroads; spike in base of telephone pole, marked " 966.8 "
951.99

Siam, 1,230 feet west of crossing, 48 feet north of track, in corner of fence at private road crossing; iron post stamped (C. \& G. S. b. m.)
955.386

From point 2 miles north of Auburn north along highway to point 2 miles southeast of Flat Rock.

New Pittsburg, 3 miles west by 1.5 miles north of, on north end of north abutment east wing wall of steel bridge over creek; chiseled square, marked "927.1"
926. 51

Attica, 3.5 miles southeast by 1 mile south of, on Seneca-Huron county-line road, 25 feet northwest of steel bridge over Honey Creek; iron post stamped " 921 "
920.261

Attica, 3.5 miles southeast of, southeast corner of T road south; sprie in base of telephone pole, marked " 948.2 "
947. 62

Attica, 4 miles southeast of, 425 feet east of church at T road north, stone drain across road; chiseled square on top of south end, marked " 951.6 "
951. 05

Chicago, 5 miles west of, northwest corner of T road east; chiseled square on southwest corner of stone drain, marked " 954.6 " \(\qquad\) 954.05

Chicago, 0.5 mile north by 5 miles west of, southwest corner of \(\mathbf{T}\) road south; chiseled square on east end of stone drain, marked "932.1"-
Chicago, 5 miles northwest of, about 400 feet east of milepost C-266, southeast corner of road crossing; iron post stamped " 924 " \(\qquad\) 923. 427

Centerton, about 3 miles west of, 400 feet south of crossroads, at schoolhouse; chiseled square on northwest corner of concrete bridge, marked " 900.7 "
900.10

Centerton, about 3 miles west by 0.6 mile north of, southeast corner of steel bridge over Mud Creek; chiseled square on north abutment, marked " 885.2 " \(\qquad\) 884.61

Omar, 1 mile south by 3 miles east of station, south side of road at T road north; spike in base of telephone pole, marked " 890.0 "
889. 46

Omar, 3 miles east of, northeast corner of crossroads at schoolhouse (Norwich Township district No. 2) ; iron post stamped " 870 "
869.214

Omar, 3 miles east by 1 mile north of, 600 feet south of road forks, on north abutment west wing wall of small iron bridge across road; chiseled square, marked " 846.1 "
845.45

Havana, 3 miles west of, north wall of stone drain at T road north; chiseled square on northwest corner, marked " 843.4 "
842.82

Weavers Corners, 2.7 miles south of, 450 feet south of crossroads; on north abutment west side of iron bridge over creek, northwest corner of top course; chiseled square, marked " 817.6 "

From Siam north to point southwest of Flat Rock.
Siam, 0.8 mile north of, northwest corner of crossroads; iron post stamped " 938 "
937.834

Omar, 0.8 mile south of, southwest corner support of water tank; chiseled square on stone base of support, marked " 902.5 "
901.95

Omar, on concrete step at southeast corner of store and ticket office; chiseled square, marked " 904.4 "
903.88

Omar, 0.5 mile west of, northwest corner of T road north; spike in base of fence post, marked " 903.2 "
902.67

Omar, 0.5 mile west by 1 mile north of station, southeast corner of crossroads; iron post stamped " 892 "
891.076

Omar, 0.5 mile west by 2 miles north of, southeast corner of crossroads, on north end of first concrete step to main entrance of Catholic Church; chiseled square, marked " 878.1 " \(\qquad\)
Frank, 0.5 mile west by 2 miles south of station, northwest corner of crossroads; spike in base of telephone pole, marked " 868.7 "
877.58

Frank, 0.5 mile west by 1 mile south of station, northwest corner of crossroads; spike in base of fence post, marked " 852.0 "
868.10
851.43

Frank, 0.5 mile west of station, southeast corner of crossroads; iron post stamped " 829 " \(\qquad\)
Flat Rock, 1.8 miles south by 1 mile west of, at southwest corner of crossroads; spike in base of fence post, marked " 804.516 "

\section*{From point near Flat Rock east to Hunts Corners.}

Flat Rock, 0.8 mile south of, 0.5 mile east of, 60 feet west of Sam Leininger's house ; top of bowlder
808.51
806. 77
795. 58
791. 28
769.133

From point near Flat Rock west along highway to point 5 miles north of Republic.

Flat Rock, 0.25 mile north of, at southwest corner of crossroads; spike in telephone pole
793.05

Flat Rock, 0.8 mile south by 0.5 mile west of, at southeast corner of road crossing; iron post stamped " 800 Ohio"

Feet.
799.691

Flat Rock, 0.8 mile south by 1 mile west of, at southeast corner of crossroads; spike in telephone pole
800.98

Flat Rock, 1.8 miles south by 1 mile west of, at southwest corner of crossroads; spike in fence post
Flat Rock, 1.8 miles south by 2 miles west of, at northwest corner of crossroads, at northeast pier of bridge ; top of iron plate in bridge seat \(\qquad\)
Flat Rock, 3 miles west by 1.8 miles south of, at southeast corner of crossreads; iron post stamped " 826 Ohio"
802.38
826.526

Flat Rock, 3.5 miles west by 1.8 miles south of, at southeast corner of crossroads; spike in telephone pole, marked " 810.606 "
810.79

Flat Rock, 2.25 miles south by 4.5 miles west of, on Kilbourne road; spike in telephone pole \(\qquad\)
West Lodi, 2 miles north by 1 mile west of ; iron post stamped " 820 Ohio "
828.35
819. 754

West Lodi, 2.5 miles north by 1.5 miles west of, in southeast pier of bridge over Noel Ditch; top of bolt
809.39

West Lodi, 2 miles west by 2.5 miles north of, 200 feet west of northwest corner of crossroads; spike in telephone pole
Lowell, 0.5 mile south by 2 miles east of, at northwest corner of small bridge; top of bolt in bridge seat \(\qquad\)
Republic, 5 miles north by 1 mile west of, at northeast corner of crossroads, south side of brick house of A. J. Rule, in foundation; bronze tablet stamped " 792 "
792.847

Primary leveling by S. R. Archer and E. C. Bibbee in 1912.
From St. Stephens north along highway to Scipio siding, thence east to Coast and Geodetic Survey bench mark 2 miles east of Scipio siding.
St. Stephens, 425 feet northwest of station, at northeast corner of road crossing; iron post stamped " 947 "
947. 143

St. Stephens, 1.1 miles north of, at fence center, northeast corner of yard of house, 130 feet north of center of crossroads, on west side of road; copper nail in top of small stump, marked " 940.3 "--
St. Stephens, 2.1 miles north of, northeast corner of crossroads; copper nail in root of 8 -inch elm tree, marked " 932.8 "
940.32
932.72

St. Stephens, 2.6 miles north of, northwest corner of north-south road crossing Tiffin-Carolina road, in root on east side of 3-foot ash tree; copper nail, marked " 929.0 "
928.90

St. Stephens, 3.1 miles north of, 2.25 miles south of Scipio siding, northeast corner of crossroads ; iron post stamped " 915 "
915.161

Scipio siding, 1.25 miles south of, in northeast corner of schoolhouse, in southwest corner of crossroads near fence corner; chiseled square cut in top of stone, marked " 928.4 "
928. 35

Scipio siding, 0.25 mile south of, in center of crossroads; chiseled square cut in top of corner stone, marked " 942.2 "
942. 06

Scipio siding, 1 mile east of, southeast corner of crossroads; painted square on top of south end of tile drain under road to east, marked " 957.9 "
957.74

Scipio siding, 2 miles east of, 3 miles west of Siam, on Baltimore \& Ohio R. R., in top of stone at north end of west abutment of undergrade crossing bridge; chiseled square marked "U. S. B. M." (C. \& G. S. b. m. N \({ }_{5}\) )

From Scipio siding north along highway to point 2 miles north by 1 mile west of West Lodi.

Scipio siding, northeast corner of crossing, in fence corner at foot of high telephone pole, on Baltimore \& Ohio R. R. ; iron post stamped " 940 "
Selpio siding, 0.7 mile north of, southeast corner of crossroads; copper nail in base of corner fence post

Feet.
940.052
928.25
888.68
886.09
881.876
856.06

West Lodi, 1 mile west of, 50 feet southeast of center of crossroads; copper nail in root on west side of 13 -foot hickory tree on inside of fence, marked " 866.6 "
866.47

West Lodi, 0.5 mile north by 1 mile west of, northeast corner of crossroads; copper nail in top of east end of plank drain, marked " 853.1 " \(\qquad\)
West Lodi, 1 mile north by 1 mile west of, 175 feet south of crossroads, on small highway bridge, on north abutment east wing wall; chiseled square in top of stone marked " 843.6 " \(\qquad\)
West Lodi, 1.5 miles north by 1 mile west of, 0.5 mile east of Kilbourn road, southeast corner of \(T\) road south; chiseled square in stone at foot of corner fence post, marked " 832.7 " \(\qquad\)
West Lodi, 2 miles north by 1 mile west of, on Kilbourn road, on west side of diagonal road at half section line; iron post stamped " 820 "
853. 02
843. 50
832.61
819. 754

From Havana to Centerton.
Havana, 0.9 mile south of, 700 feet south of private crossing; chiseled square on west end of stone culvert
844.59

Havana, 1.8 miles south of, 60 feet west of railroad crossing; spike in base of telephone pole
Centerton, 1.6 miles north of, on south side of road, 40 feet west of railroad at crossing; iron post " 868 ".
867.271

Centerton, 300 feet north of station, 50 feet west of railroad; highest , point on cast iron culvert under wagon road

\section*{SIDNEY QUADRANGLE.}
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Botkins south along Cincinnati, Hamilton \& Dayton Ry, to Sidney.
Botkins, Shelby County, north side of main cross street one-fourth mile east of the Cincinnati, Hamilton \& Dayton Ry., in top corner of stone foundation of public school building, in south face, 2.5 feet east of west corner, 2.3 feet above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. B \({ }_{2}\) )

1,004. 985

Anna, First Methodist Church building, corner of Pike and Second streets, on the east side of small buttress north of east door, 2.4 feet above ground and 0.49 foot south of north edge of buttress; brass bolt marked with horizontal line (C. \& G. S. b. m. C C ) Swanders, 0.5 mile north of, northeast quarter of stone culvert dated 1892 under Cincinnati, Hamilton \& Dayton Ry. track, top of third step below coping, 5 inches from its south face and 5 inches from east face of next step above ; chiseled square (C. \& G. S. b. m. D D
Franklin township, on Cincinnati, Hamilton \& Dayton Ry., halfway between mileposts 101 and 102 from Cincinnati, lowest point of grade, southeast quarter of culvert, on second step, about 4.3 feet below coping; chiseled square (C. \& G. S. b. m. E E )
\(1,006.033\)
Sidney, on Cincinnati, Hamilton \& Dayton Ry., at southwest quarter of bridge 40 over Cleveland, Cincinnati, Chicago \& St. Louis Ry., on northwest corner of bridge-seat course, 6 inches from north and west faces ; chiseled square (C. \& G. S. b. m. F \(\mathrm{F}_{2}\) )

Feet. \(1,030.388\)

Sidney, northwest corner of courthouse square, \(48 \frac{1}{3}\) feet above city zero point. The mark was made by burying a sandstone 20 inches square and 2 feet high with another stone 2 feet high and 14 inches square at the bottom and 3 inches square at the top, set on top of the sandstone. Both stones were firmly embedded in the ground up to the top of the second stone, above which is 4 inches of cement in which a cross is cut (C. \& G. S. b. m. Sidney City)
Sidney, county courthouse, on west face of foundation of north vestibule 2 feet 1 inch south of north projecting edge of foundation and 3 feet 5 inches above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. G 2 )
962.675

Clinton township, 1.2 miles south of Sidney, on line of canal and Cincinnati, Hamilton \& Dayton Ry., southwest quarter of bridge over canal, on northwest corner of large bridge seat stone 6 inches from each face; chiseled square (C. \& G. S. b. m. H2 )
961.836

Primary leveling by C. W. Marvin in 1903 and E. C. Bibbee in 1911.
From Botkins east along public road to point near Jackson Center, thence north to point near Geyer.

Botkins, on north side of Main cross street, 0.25 mile east of Cincinnati, Hamilton \& Dayton Ry., in top of cornerstone of foundation of public schoolhouse, in south face 31 inches east of west corner, 28 inches above ground; brass bolt marked with a horizontal line (Coast and Geodetic Survey bench mark)
\(1,004.985\)
Botikins, at road crossing; top of rail \(1,001.8\)
Botkins, 1 mile south of, in T. 7 S., R. 6 E., south end, east side of Western Ohio (electric) R. R. abutment; highest point on coping stone
985.21

Botkins, 2.2 miles southwest of, at Densmore Township (subdistrict 10) schoolhouse; highest point on northwest corner of top step__ 1,010.29

Botkins, 3.5 miles southeast of, 30 feet south by 15 feet west of northeast corner of N. W. \(\frac{1}{4}\), sec. 11, T. 7 S., R. 6 E.; iron post stamped "1026 Ohio"
\(1,026.214\)
Botkins, 4.2 miles southeast of, in north end of culvert at \(T\) road south, 0.7 mile east of northwest corner of sec. 12, T. \(7 \mathrm{~S} ., \mathrm{R} .6 \mathrm{E}\).; copper nail

From point near Jackson Center east to county line,
T. \(7 \mathrm{~S} ., \mathrm{R} .7\) E., 0.25 mile west of southeast corner of sec. 2, at T road
north; iron post stamped " 1024 Ohio"----------1, 024.080

From county line near Maplewood west along highway to Anna.
T. 7 S., R. 7 E., in sec. 35,30 feet north by 25 feet east of crossroads; iron post stamped "1032 Ohio"

1,031. 648
T. 7 S., R. 7 E., 0.25 mile west of southeast corner of sec. 28 ; iron post stamped "1033 Ohio"

1, 032.920
T. 7 S., R. 7 E., 100 feet southwest of schoolhouse, 35 feet north by 20 feet east of center of crossroads; highest point on north end of cast iron culvert
\(1,054.41\)
T. 7 S., R. 6 E., 0.25 mile east of northwest corner of sec. 36,40 feet south by 20 feet east of center of crossroads; iron post stamped " 1035 Ohio"
Anna, on First M. E. Church building, on corner of Pike and Second streets, on east side of small buttress north of east door, 30 inches above ground, 6 inches south of north edge of buttress; brass bolt marked with a horizontal line (C. \& G. S. b. m. C-2)

\section*{From Sidney northeast along highway and north to Maplewood.}

Sidney, on courthouse, on west face of foundation on north vestibule, 2 feet sourth of north projecting edge of foundation, 3 feet 8 inches above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. G-2)

Sidney, 2.1 miles northeast of, near center of sec. 19, T. 1, R. 7 E., at southeast corner of crossroads; iron post stamped " 952 Ohio".
Port Jefferson, in northeast corner of schoolhouse yard; iron post stamped " 976 Ohio"
Port Jefferson, 1.2 miles northeast of, near center of sec. 19, T. 1, R. 14 E ., on large granite rock on east side of road ; chiseled square_ 1, 050.96

Maplewood, 3.3 miles south of, at northwest corner of crossroads, 0.1 mile north of southeast corner of sec. 12 , T. 1, R. 7 E. ; iron post stamped " 975 Ohio"
T. 1, R. 7 E., near quarter corner on east side of sec. 1, at northwest corner of crossroads; highest point in coping stone of small culvert- 1, 041.99
T. 2, R. 7 E., 0.25 mile north of southeast corner of sec. 36 ; iron post stamped " 1032 Ohio".

1,032. 003
Maplewood, about 0.25 mile west of ; highest point on coping stone north side of east abutment of bridge, first rock at north end of second tier, painted and chiseled

\section*{From point 3 miles east of Anna south to point near Port Jefferson.}
Anna, 3.9 miles southeast of, at northeast corner of crossroads, 0.25 mile east of southwest corner of sec. 36, T. \(7 \mathrm{~S} ., \mathrm{R} .6 \mathrm{E}\). ; chiseled square on large granite rock
Feet. 1, 026.40
Anna, 5.3 miles southeast of, 0.3 mile west of southeast corner of sec. 32, T. 2, R. 7 E.; in top of corner fence post ; copper nail 1, 082.30
T. 1, R. 7 E., 0.25 mile west of northeast corner of sec. 8, at south- east corner of T road; iron post stamped " 1046 Ohio"

\(\qquad\)
 1, 045.666
T. 1, R. 7 E., 0.2 mile west of northeast corner of sec. 17 ; highest point on northeast corner of schoolhouse step
1, 046. 27
T. 1, R. 7 E., near southeast corner of sec. \(17,1.4\) miles southwest of Port Jefferson, in top of large fence post at \(\mathbf{T}\) road north; copper nail
1,033. 65

From Sidney southeast 5 miles.
Sidney, 0.8 mile south of, on concrete abutment, east end, north side
of bridge over Miami River; chiseled square
Sidney, 1.5 miles south of, 1,000 feet south of west drive to Children's Home, at east end of small concrete culvert ; chiseled square_
965.63

From point 2.6 miles east of Port Jefferson south along highway to Plattsville.
Pemberton, 2.5 miles northwest of, 25 feet south by 20 feet west of center, sec. 18, T: 2, R. 13 ; iron post stamped " 1059 Ohio"
Pemberton, 3.0 miles southwest of, 20 feet west by 15 feet south from center of sec. 16, T. 2, R. 13 , at crossroads; chiseled square on granite rock
T. 2, R. \(13,0.25\) mile north of center of sec. 15 , on west side of road, at residence of J. C. Ward; iron post stamped " 1067 Ohio"
\(1,067.275\)
T. 2, R. 13, 20 feet west by 15 feet south of center of sec. 14 ; highest
point on west end of cast-iron culvert under wagon road_-...- 1, 056. 71

From Lockington north along highway to Newburn.
Newburn, at northeast corner of \(T\) road east; iron post stamped " 960 "
960.337

Primary leveling by H. B. Hoel in 1909.
From point 4 miles east of New Knoxville south along highway to Hardin, thence to Sidney.

Kettlersville, 1 mile east of, southwest corner of T road south; iron post stamped " 979 "
978.843

McCartysville, 1 mile east of, northwest corner of crossroads; iron
post stamped " 980 "
\begin{tabular}{lll} 
Hardin, 4 miles north of village, northwest corner of crossroads; iron \\
post stamped " 990 " & & \\
\hline
\end{tabular}
Hardin, 1 mile north of village, northwest corner of crossroads; iron
post stamped " 960 "
Hardin, 2 miles east of station, southwest corner of T road east, 60
feet north of railroad crossing; iron post stamped " 1015 "_-...- 1, 015. 219

From Swanders southwest 5 miles.
Swanders, in front of station; top of rail
\(1,018.3\)
Swanders, 1 mile south by 2 miles west of, at southwest corner of crossroads; iron post stamped " 1028 "

1,028. 009

\section*{SOUTH CHARLESTON QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Primary leveling by A. J. Ogle in 1905 and F. W. Hughes in 1904.
From Pitchin northeast along highway via Plattsburg to point near Summer-
ford; thence west to Villa. (Elevations redetermined by S. R. Archer in
1916.)
Pitchin, 3.8 miles northeast of, at Pleasant Ridge schoolhouse, in northwest corner of foundation, 1.5 feet south of corner; aluminum Feet. tablet not stamped \(1,083.354\)
Harmony, 2.3 miles south of, at Fletcher M. E. Church, in top stone of foundation, 1 foot south of northwest corner ; aluminum tablet stamped " 1149 "
Plattsburg, 3.8 miles west of, at Newlove crossroads, in stone under door of schoolhouse; aluminum tablet stamped " 1109 "
Plattsburg, in foundation on north side 2 feet west of entrance of high school; aluminum tablet stamped " 1155 "
\(1,154.587\)
Plattsburg, 2.8 miles east of, in stone under door of Wilson schoolhouse; aluminum tablet stamped " 1179 "
\(1,178.164\)
Summerford, 1.2 miles west of, 0.2 mile north of National pike and Columbus, London and Springfield Electric R. R., 0.4 mile north of Dove Creek school, at southeast corner of parapet of bridge over Deer Creek; aluminum tablet stamped " 1185 " \(1,184,447\)
Brighton, 4 miles north of, 0.5 mile north of Brighton-Tradersville pike, in Lundys lane, 600 feet south of \(T\) road, in third stone from top of northeast abutment of bridge; aluminum tablet stamped " 1161 "
Vienna Crossroads, 2 miles north of, at Pleasant township school (subdistrict 3), in northwest corner of foundation of W. Shorey's house; aluminum tablet stamped " 1236 " 1, 234. 992
Vienna Crossroads, 2 miles north by 2 miles west of, in top stone of foundation of Asbury Church, 2 feet west of southeast corner; aluminum tablet stamped " 1182 "
New Moorefield, 0.7 foot east of southwest corner of public school building, in top of stone foundation; aluminum tablet stamped "1054"

1, 053.914
From Selma northeast along highway near Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. to London.

Selma, in southwest corner of south face of stone foundation of general store at railway station; bronze tablet stamped " 1086 Columbus" \(\qquad\)
South Charleston, at southwest side of public school building, in top of stone foundation; aluminum tablet
\(1,086.077\)

South Charleston, 4 miles northeast of, at crossing of Madison-Clark county line and London pike, in south side of county-line stone; aluminum tablet stamped " 1139 " \(1,138.402\)
London, 4.6 miles southwest of, 400 feet southwest of house, in top of township-line stone; aluminum tablet stamped " 1122 "
\(1,121.430\)
From Selma southeast 1 mile to county line.
Selma, 1 mile southeast of, 150 feet east of fork to northeast, at south margin of road, on top of stone monument; chisel mark "G L"-- 1, 096.69

\title{
SPENCERVILLE QUADRANGLE. \\ \\ [Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).] \\ \\ [Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(84^{\circ} 15^{\prime}-84^{\circ} 30^{\prime}\).] Primary leveling by H. B. Hoel in 1909.
} Primary leveling by H. B. Hoel in 1909.
} From Spencerville east along Erie R. R. to Kempton.

From Spencerville south via Kossuth to St. Marys, thence east to point 2 miles beyond Moulton.

Kossuth, 1.1 miles northwest of, west side of north-south road, at T road east ; iron post stamped " 842 ".
St. Marys, 6 miles north of, east side of north-south road, at T road west ; iron post stamped " 828 " \(\qquad\)
St. Marys, 3 miles north of, at southwest corner of crossroads; iron post stamped " 859 " \(\qquad\)
Moulton, 1.1 miles west of, 15 feet south of railroad at crossing, 40 feet west of road, on right of way ; iron post stamped " 906 ".
Moulton, 2 miles east of, 30 feet north of railroad at crossing, 30 feet east of highway, on right of way ; iron post stamped " 882 "

From point 4 miles southeast of Moulton via Moulton to Conant.
Moulton, in front of station; top of rail
Moulton, 2.25 miles north of, northwest corner of crossroads; iron post stamped " 873 "
Moulton, 5.25 miles north of, southeast corner of T road south; iron post stamped " 848 "
905.447
882.108
896.7
873. 430
841.576
827. 676
858.975
848.107

\title{
Conant, 3.5 miles south of, southeast corner of \(\mathbf{T}\) road east; iron post stamped " 834 "
}

Feet.
833.887

\section*{SPRINGDALE QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]

> Primary leveling by C. E. Mills and Howard Clark in 1910. From Aberdeen via Manchester to Wrightsville.

Aberdeen, 4.4 miles east of, 160 feet east of small iron bridge over Little Threemile Creek, in northwest corner of crossroads, on top of stone ; chiseled cross marked " 511.55 "
512.56

Aberdeen, 5.8 miles east of, on Manchester pike, 35 feet southeast of center of forks, southeast corner of \(T\) road south to Ohio River; iron post stamped " 554 "
555.044

Manchester, 4.2 miles west of, 10 feet south of forks, on south side of road at \(\mathbf{T}\) road north up hollow; iron post stamped " Prim. Trav. Sta. No. 19, 1910513 "
Manchester, southwest corner of Manchester and Bentonville pike and Second Street, in northeast corner of fence around pump, opposite Presbyterian cemetery; iron post stamped " 510 "
Manchester, 0.7 mile east of, on Manchester and Rome pike, 150 feet west of bend to northeast in road, 2 feet east of telephone pole south of road; iron post stamped " 519 " \(\qquad\)
Wrightsville, southeast corner of crossing of Manchester and Rome and Wrightsville and West Union pikes; iron post stamped "Prim. Trav. Sta. No. 17, 1910533 "
514.127
511. 226
519. 499
533.370

From Beasleys Fork to Wrightsville,
Beasleys Fork post office, at road forks, 200 feet east of large iron bridge over Beasleys Fork, 50 feet west of store and 35 feet southwest of center of road forks; iron post stamped " 584 " \(\qquad\)
Wrightsville, 0.60 mile west of, on Kentucky bank of Ohio River, 60 feet west of Gilpins Run, 25 feet south of Ohio River, in base of 6 -inch willow tree; \(\log\) screw

Near Bentonville.
Bentonville, about 60 feet east of road crossing, in center of town, west of pike, back of telephone pole; iron post stamped " 914 " \(\qquad\)
Bentonville, 1.3 miles northeast of, 200 feet east of Rifle's residence at North Liberty pike, at base of telephone pole, on limestone rock; chiseled circular mark
584.471
473.91
914.544
882.13

\section*{SPRINGFIELD QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by H. G. Lowe, C. J. Hooker, W. C. Tupper, and B. J. Green in 1903.

From Enon northeast along Big Four Route to Springfield.
Enon, Mad River township, in face of brick wall on north side at northwest corner of Erie R. R. station; bronze tablet stamped " 874 Columbus"
Springfield, at north end of west side of fountain opposite east entrance to city hall, in top of stone of base step; copper bolt (city bench mark)
Springfield, in face of second arched pillar from north end of city

Feet. 978.967

\section*{From Springfield south along pike via Pitchin to Selma.}
Springfield, east side of Clifton Street at Summit Avenue, southeast city limits, on north end of stone culvert; chiseled cross ..... 1, 025.79
Pitchin, Grcene Township, northwest corner of crossroads, 10 feet south of north end of general store of E. L. Nave, in face of foundation wall at northeast corner; aluminum tablet stamped "1087 Columbus"
Pitchin, 2.75 miles south of, Greene Township, on top of top stone of southeast abutment wall of high iron-truss bridge over Little Miami River ; chiseled cross ..... 1, 030.67
From Springfield southwest along railroad to Goes, thence southeast along highway to Cedarville.
Emery Chapel, 3.9 miles southwest of Springfield, 450 feet south ofstation, at northeast corner of bridge over Mill Creek, on north abut-ment ; chiseled square997. 36
Hustead, 330 feet south of station, on northwest corner of stone cul- vert; aluminum tablet (not stamped) ..... \(1,020.430\)
Yellow Springs, 0.6 mile north of, 1.2 miles south of Hennessey sta- tion, on southwest corner of stone culvert 158 ; chiseled square_ ..... 979.63
Yellow Springs, 200 feet west of station, on east end of stone step at front entrance to Ridgeway's drug store; chiseled square ..... 978. 67
Goes, at front entrance to brick schoolhouse (district), in face at north end of doorsill ; aluminum tablet stamped " 875 Columbus"- ..... 874.419
Cedarville, 3.5 miles northwest of, at forks of road, on top of stone culvert; chiseled cross ..... 1,003. 92
From Springfield northwest along Tremont pike to Eagle City, thence east to Villa.

Eagle City, at S. R. Hockman estate, in southeast corner of foundation of white house; aluminum tablet stamped " 927 Columbus "--
Villa, 400 feet west of north-south road, in southwest corner of foundation of C. R. Marshall's house; aluminum tablet stamped " 1079 Columbus"

1,077. 125

\section*{From North Eampton east along highway to Eagle City.}

North Hampton, just west of center of town, in north end of west abutment of iron bridge; aluminum tablet stamped " 1080 Columbus"

Primary leveling by E. C. Bibbee in 1912.
From point 4 miles northeast of Alpha northeast along highway to Goes.
Alpha, 5 miles northeast of, 2.5 miles south of Byron, west side of \(\mathbf{T}\) road east, near quarter section corner secs. 10 and 16, T. 3, R. 7; iron post stamped "Prim. Trav. Sta. No. 441907 Ohio 917 "

Alpha, 5.7 miles northeast of, 100 feet southwest of schoolhouse, 5
 feet south of public road; copper nail in root of black-oak tree

862.59

Goes, 1 mile south of, 100 feet southwest of T road north, on west abutment south side of bridge over Conner's branch; chiseled square

From point near Villa along highways southwest to Springfield, thence south to Pitchin. (Line of 1916 by S. R. Archer over lines of 1903 by W. C. Tupper and H. G. Lowe.)
Villa, 0.47 mile north of, 0.10 mile north of road forks, southwest corner of yard to Union schoolhouse, 20 feet north of well, 40 feet north of road, in root on south side of 2 -foot hickory tree; copper nail

Feet. 1, 078. 69
Villa, 0.90 mile south of, 0.20 mile south of \(T\) road northwest, \(\frac{1}{8}\) mile north of township line (Springfield-New Moorefield) and \(T\) road west, on top of west end of culvert; chiseled square

1,045. 28
Springfield, steel highway bridge over Buck Creek on Lagonda Avenue, at Champion Works of International Harvester Co., north abutment, top of west end of parapet wall ; chiseled square
Springfield, southwest corner of intersection of Lagonda Avenue and Farlow Street, 100 feet west of Sandusky division of Cleveland, Cincinnati, Chicago \& St. Louis R. R. crossing, on south side of Lagonda Arenue, 5 feet west of storm-sewer opening, top of stone curbing; chiseled square
955.40

Springfield, southeast corner of intersection of Clifton and Tibbets streets, on east side of Tibbets Street, 6.5 feet south of storm-sewer opening, top of curbing; chiseled square
\(1,018.30\)
Springfield, at south city limits, on west side of Clifton Street at Sunset Avenue, on top of south stone at west end of stone culvert; chiseled square
Springfield, 2.5 miles southeast of, on Selma pike, at south quarter corner of SE. \(\frac{1}{4}\) sec. 27, T. 5 E., R. 9 N., northwest corner of crossroads at Crossroads Schoolhouse (subdistrict 5), top of north end of concrete culvert under west road; chiseled square
\(1,047.80\)
Springfield, 3.75 miles southeast of, on Selma pike, just east of north quarter corner of NW. \(\frac{1}{4}\), sec. 17, T. \(5 \mathrm{E} .\), R. 9 N ., T road east at southeast corner of road forks, in base of west side of cormer fence post ; copper nail
Springfield, 4.25 miles southeast of, on Selma pike, about 0.20 mile west of center of sec. 19, T. 5 E., R. 9 N., 100 feet east of crossroads, at fence line on north side of east road, in root on west side of 4-foot sycamore tree; copper nail
Pitchin, 1.20 miles northwest of, at road forks, about 0.1 mile east of center of sec. 24 , T. 5 E., R. 8 N., northwest corner of roads at foot of top of east side of concrete base to corner steel fence post; chiseled square

1,028. 72
Pitchin, 0.70 mile northwest of, steel highway bridge over north fork of Little Miami River, east stone abutment, top of north end of bridge seat; chiseled square \({ }^{1}\)

1, 027. 69
Pitchin, 0.40 mile north of, at Interurban station, \(T\) road east at, southeast corner of roads at south fence line, 10 feet east of fence corner, in root on southwest side of 10 -inch hickory tree; copper nail 1,090. 46
STEUBENVILLE QUADRANGLE,
[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).] Primary leveling by J. H. Wetzel in 1901 and J. A. Buford in 1902. From Steubenville northwest along road via Wintersville to Richmond. \({ }^{2}\)
Steubenville, in southeast corner of courthouse; aluminum tablet stamped " 715 Stbnvl"
714. 480

\footnotetext{
1 Old t. b. m. described in Bull. 411, p. 121, could not be found.
2 This line closes 1 foot low on accepted elevation at Richmond; therefore elevation given for Wintersville is possibly 1 foot low.
}
Wintersville, in southeast corner of foundation of Wintersville Feet. Church; aluminum tablet stamped "1256 Stbnvl" ..... 1, 255.774
From Steubenville northwest along road via Island Creek Church to Knoxville, thence southwest to Richmond, \({ }^{1}\)
Alikanna, in southwest pier of stone abutment of footbridge leading to water works; aluminum tablet stamped " 663 Stbnvl" ..... 662. 596
Island Creek, 0.75 mile southeast of, in southwest pier of bridge across Island Creek, 100 yards from road leading to Costonia; bronze tablet stamped " 788 Stbnvl" ..... 787. 583
Knoxville, at west end of, in southwest corner of stone foundation of church; aluminum tablet stamped " 1280 Stbnvl" ..... 1, 279.557
From Steubenville south to Brilliant, thence west via New Alexandria to
Brilliant, at northeast abutment of railroad bridge over highway, in southeast corner of bottom tier of stone; \(T\) cut in stone652.97
New Alexandria, in northeast corner of stone foundation of brick church; bronze tablet stamped " 1249 Stbnvl" ..... 1, 248. 789
From Steubenville west along Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. to Reeds Mills.
Mingo Junction, in front of station; top of rail ..... 674.5
Mingo Junction, on northwest coping stone of bridge 46 ; chiseled square ..... 670.21
Steubenville, 4.4 miles southwest of, on northeast corner of coping stone of bridge 48 ; chiseled square ..... 675.98
Gould, in front of station; top of rail ..... 692.5
New Alexandria, in front of station; top of south rail740.9
New Alexandria, 0.6 mile west of, on top stone in northwest abut- ment of small bridge; bronze tablet stamped " 752 Steubenville"-- ..... 751. 607
Fernwood, 660 feet east of station, on north end of arch culvert; railroad bench mark (railroad elevation 776.89) ..... 777.38Fernwood, 1.6 miles west of station, bridge 52 over Cross Creek, onnortheast corner of coping stone; railroad bench mark (railroadelevation 810.41)810.97Reeds Mills, 390 feet east of station, arch bridge 53 over Cross Creek,on northeast coping stone; railroad bench bark (railroad eleva-tion 828.22)828.66
SUMMERFIELD QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\). ]Primary leveling by E. C. Bibbee in 1911.
From Klondyke via Quaker City and Summerfield to Hamilton.
Lore City, 0.88 mile west of, on east abutment at north side of iron bridge; chiseled square painted " 815.52 " ..... 815. 42
Lore City, 0.55 mile east of, in north abutment of arched bridge; aluminum tablet stamped " 823 " ..... 822. 786

\footnotetext{
\({ }^{1}\) The extension of this line from Knoxville closes 1 foot low at Richmond.
\({ }^{2}\) This line closes 1 foot low on accepted elevation at Smithfield; therefore the elevations are possibly 1 foot low.
}
Lore City, 1.63 miles east of, 35 feet north of railroad, at crossing, on south abutment at west side of bridge; chiseled square marked

Feet." 824.05 " 823.95
Gibson, 1.12 miles east of station, about 500 feet northeast of Catholic Church, in east abutment at north side of railroad bridge ; aluminum tablet stamped " 838 "837.544
Salesville, 0.08 mile west of station, in north end of concrete culvert under railroad; aluminum tablet stamped " 852 " ..... 852. 207
Quaker City, 5 feet east of northeast corner of station, in top of property stone; aluminum tablet stamped " 874 " ..... 874.352
Quaker City, 0.82 mile south of, on rock on south side of road: chiseled square painted " 1064.89 " ..... 1, 064. 79
Batesville, 2.5 miles north of, on large rock on north side of road; chiseled square painted "1087.97" ..... 1, 087.87
Batesville, in southeast corner of foundation of high school building, 1 foot above ground; aluminum tablet stamped " 931 " ..... 930.821

Batesville, 2.58 miles southeast of, 3,000 feet east of Jacob Wisecarver's residence, on east abutment at south side of iron bridge over Beaver Creek; aluminum tablet stamped " 842 " \(\qquad\)
Summerfield, 6.36 miles north of, 700 feet northwest of John Bates's residence, in south abutment at east side of covered bridge painted white over North Fork Wills Creek; aluminum tablet stamped " 834 "
841.961

Summerfield, 2.91 miles north of, 260 feet north of T road, in northwest corner of foundation to residence of Mrs. L. Moore; aluminum tablet stamped " 886 "
885.682

Summerfield, in west abutment of wagon bridge over railroad, on Cross Street, at east side in ninth tier of stone from top; aluminum tablet stamped " 1187 " \(\qquad\) \(1,186.695\)
Summerfield, 1.05 miles east of, on rock south side of railroad; chiseled square marked " 1052.0 "

1, 051.91
Ethel, 100 feet east of station, on west abutment at south side of iron bridge at railroad crossing; chiseled square painted " 917.22 " \(\qquad\)
Ethel, 0.64 mile east of station, 700 feet east of residence of John Quinlin, 65 feet west of railroad, in brownstone ledge; aluminum tablet stamped " 892 "
890.897

Herlan, in front of station; top of \(T\) rail used as post marked " 872.48 " \(\qquad\)
Brister, 0.29 mile west of, 25 feet south of railroad at crossing, in east side of north abutment of covered bridge; aluminum tablet stamped "894"
872.39
893. 820

From Summerfield southwest via Sarahsville to Caldwell.
Whigville, 60 feet south of railroad, at northwest corner of foundation of M. E. Church, 18 inches above ground; aluminum tablet stamped " 1158 "
\(1,157.424\)
Fredericksdale schoolhouse, in southeast corner of foundation, 60 feet north of railroad, 700 feet east of station; aluminum tablet stamped " 895 "
894. 904

Fredericksdale, in front of station; top of rail
Sarahsville, 100 feet west of old station, 35 feet east of railroad, in north side of west abutment of iron bridge; aluminum tablet stamped " 856 "
856.231
Duvall, 530 feet west of station, in southeast corner of foundation of schoolhouse; aluminum tablet stamped " 820 "

Feet.
820.228

From Mount Ephraim north to Lore City.
Mount Ephraim, in southwest corner of foundation of M. E. Church,
18 inches above ground; aluminum tablet stamped " 1147 ".-..-1, 146. 472
Mount Ephraim, 2 miles north of, on east side of north abutment of
Mount Ephraim, 2 miles north of, on east side of north abutment of covered bridge at T road; chiseled square painted " 869.87 " \(\qquad\) 869. 74

Mount Ephraim, 2.66 miles north of, on east side of north abutment of small wooden bridge ; chiseled square painted " 854.77 " \(\qquad\)
Mount Ephraim, 3.78 miles north of, in north side of west abutment of covered bridge on T road (signpost reads "Mt. Ephraim 4 miles-Senecaville 3 miles") ; aluminum tablet stamped " 835 "---
Mount Ephraim, 4.8 miles north of, on west side of south abutment of bridge in front of schoolhouse at \(T\) road north; chiseled square painted " 845.8 "
845.68

Senecaville, in east side of north abutment of iron wagon bridge over Wills Creek; aluminum tablet stamped " 813 " \(\qquad\)
Senecaville, in front of station; top of rail
Lore City, 0.55 mile east of, in north abutment of concrete-arch bridge; aluminum tablet stamped " 823 "
854.63
834. 553
812. 487
813.3
822.786
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by W. H. Monahan in 1907.
From point 6 miles north of Grand Rapids northeast along Wabash R. R. and highway to bench mark 2 miles south of Monclova.
Whitehouse, in front of station ; top of rail
657.4

Whitehouse, 0.11 mile northeast of, on southwest foundation of Wabash R. R. pumping station ; aluminum tablet stamped " 658 "--

\section*{Primary leveling by F. Mobrey in 1911.}

From point 3 miles south of Delta east along highways to Whitehouse.
Delta, 3 miles south by 1 mile east of, southwest corner of crossroads, in Raker Union Church yard; brass tag on top of short post, marked " 693.0 "
Delta, 3 miles south by 1.2 miles east of, northeast corner of \(T\) road, opposite schoolhouse; spike in base of telephone pole, painted " 682.5 "
682.65

Delta, 3 miles south of, 1.5 miles east of, northwest corner of T road north; spike in base of telephone pole, painted "697.7"
697. 85

Delta, 3 miles south by 2 miles east of, southwest corner of crossroads; iron post stamped " 687 "
687. 386

Brailey, 1.8 miles south by 1 mile west of, 800 feet west of St. Johns Church, northeast corner of crossroads; spike in base of telephone pole, painted " 682.3 "
682.37

Brailey, 1.8 miles south of, at northwest corner of crossroads; brass tag in base of mail box, painted " 681.6 "
681.67

Brailey, 1.8 miles south by 1 mile east of, southwest corner of crossroads, in Elkin schoolhouse yard, 120 feet southwest of crossroads; iron post stamped " 677 "
677. 101

Brailey, 1.8 miles south by 1.5 miles east of, at T road north; spike in base of telephone pole, painted " 680.7 "

Brailey, 1.8 miles south by 2 miles east of, northwest corner of crossroads, on line between Fulton and Randolph counties; spike in base of telephone pole, painted " 680.5 "

Feet.
680. 43

Brailey, 1.8 miles south by 2.5 miles east of, 25 feet east of northwest corner of crossroads; tag on top of mail box, painted " 678.4 "
678.31

Brailey, 1.8 miles south by 3 miles east of, southwest corner of crossroads ; brass tag on top of fence post, painted " 680.8 "
680.70

Whitehouse, 1 mile northwest by 2.5 miles west of, northeast corner of crossroads, opposite Oak Grove schoolhouse; iron post stamped " 671 "
671. 169

Whitehouse, 2 miles northwest of, northwest corner of road forks; spike in base of mail box, painted " 674.1 "
674. 05

Whitehouse, 1.2 miles northwest of, northeast corner of crossroads ; spike in base of corner fence post, marked " 669.6 "
669.48

From point 1 mile north of Crissy south along highways to whitehouse.
Crissy, 0.1 mile north of, at crossroads, in platform of town pump; brass tag, painted " 649.400 "
649.58

Holland, 3.8 miles west of, southeast corner of crossroads ; spike in base of telephone pole, painted " 666.2 "
666. 46

Garden, station of Interurban Electric Ry., 4 miles west by 0.8 mile south of Holland, in north side of crossroads; iron post stamped "Prim. Trav. Sta. No. 28, 667 "
667.100

Holland, 3.8 miles west by 0.5 mile south of, at northeast corner of crossroads ; spike in base of telephone pole, marked " 660.0 "
660.18

Monclova, 2.25 miles west by 1.8 miles north of, at west side of \(Y\) road; spike in base of telephone pole, marked " 650.2 "
Monclova, 2.25 miles northwest of, 1.5 miles north of, at west side of Y road; spike in base of telephone pole, marked " 644.6 " \(\qquad\)
Monclova, 2.25 miles west by 1 mile north of, 300 feet east of Roberts Church, northwest corner of crossroads; spike in base of telephone pole, marked " 650.0 "
650.19

Monclova, 2.35 miles west of, 850 feet north of railroad, northwest corner of crossroads; iron post stamped " 649 "
649. 131

Monclova, 2.25 miles west by 0.8 mile south of, at northwest corner of stone culvert ; chiseled square, marked " 641.6 "
641.90

Whitehouse, 2.5 miles northeast of, at northwest corner of \(Y\) road; spike in base of fence post, marked " 643.6 "
643.91

Whitehouse, 1.9 miles northeast of, at \(Y\) road, on northeast end of bridge; bolt, marked " 640.7 "
641.03

Whitehouse, 1.8 miles northeast of, at southeast corner of Y road; spike in base of telephone pole, marked " 650.7 "
651.02

Whitehouse, 1.6 miles northeast of, northeast corner of \(T\) road south, at edge of cemetery; spike in base of telephone pole, marked "656.846"
657.13

Whitehouse, 1.4 miles northeast of, at south side of T road, 150 feet south of bridge; spike in base of telephone pole marked " 648.0 "--
Whitehouse, 1.2 miles northeast of, 200 feet north of Noble schoolhouse, on east side of \(T\) road; spike in base of telephone pole, marked " 657.4 "
657.937

From Garden west along highways to point 2 miles north of Delta.
Garden, interurban railway station, 20 feet north of, at east side of fork of road, on edge of track; spike in base of power-line pole, marked " 672.7 "
Midway, 0.3 mile north of, at southeast corner of crossroads; spike

Feet.

670.70
672.05
679.045
679.045
672.47
676.35
688.21
696. 880
708.74
720.91
731. 81
732. 50
738.446
739.45
744.55

\section*{From point 0.5 mile north of Crissy north along highways to point 3 miles west of Sylvania.}

Crissy, 0.5 mile north of, at southwest corner of T road; spike in base of telephone pole, painted " 650.3 "
650.52

Crissy, 1.2 miles north of, southeast corner of crossroads; spike in
base of oak tree, painted " 657.4 " 657.57
Crissy, 1.5 miles north of, at northeast corner of T road; spike in base of tree, painted " 678.7 "
678. 91

Crissy, 1.7 miles north of, northwest corner of crossroads; spike in base of corner fence post, painted " 678.8 "
679.04

Crissy, 2.4 miles north of, at five-point crossroads, northeast corner; iron post stamped " 678 "
677. 762

Crissy, 3.1 miles north of, at northwest corner of T road; spike in base of telephone pole, marked " 671.1 "
671.97

Raab, 3.0 miles east of, at northeast corner of crossroads; chiseled square on stone arch, marked " 673.1 "
673. 34

Raab, 2.5 miles east of, at northwest corner of T road; spike in root of tree, painted " 676.7 "
676.90

Raab, 2.5 miles east by 0.4 mile north of, west side of road forks; spike in base of post, painted " 676.0 "
676. 19

Raab, 1.9 miles east by 0.5 mile north of, northwest corner of road forks; spike in base of fence post, painted " 676.3 "

Glanntown, 2.2 miles west by 1 mile south of, 0.1 mile west of Keeler road; spike in base of telephone pole, painted " 671.0 "

Feet.
671.24

Glanntown, 2.2 miles west by 1 mile south of, at northeast corner of T road; spike in base of corner fence post, painted " 669.8 " \(\qquad\) 669.99

Glanntown, 2.2 miles west of, at southwest corner of crossroads; iron post stamped " 680 "
680.341

Glanntown, 1 mile west of, at south side of T road; spike in base of telephone pole, painted " 671.2 "
671.34

Glanntown, 1 mile west of, northwest corner of T road; spike in base of telephone pole, painted " 671.6 "
671. 75

Sylvania, 3 miles west by 1 mile south of, at southeast corner of crossroads ; spike in base of corner fence post, painted " 681.2 "
681.33

Sylvania, 3 miles west of, at northeast corner of crossroads, 50 feet north of railroad; spike in base of telephone pole, marked " 684.213 "-
684.29

From point 2.3 miles northeast of Raab west along highways to point 0.5 mile west of Siney.
Raab, 2.3 miles northeast of, at northeast corner of road forks; spike in base of corner fence post, painted " 673.1 "
673. 36

Raab, 0.5 mile east of, 0.1 mile north of, at west side of fork of road; spike in base of post, painted " 676.3 "
676. 55

Raab, 0.5 mile east of, at southeast corner of T road, east of bridge; iron post stamped " 673 "
673. 428

Raab, 1 mile west of, northeast corner of crossroads; spike in base of corner fence post, painted " 685.3 "
685. 55

Raab, 2 miles west of, southwest corner of crossroads; iron post stamped " 701 "
701. 602

Raab, 3.1 miles west of, at northeast corner of crossroads, at line between Fulton and Lucas counties; spike in base of telephone pole, painted " 709.0 "
709.38

Raab, 4.1 miles west of, at southeast corner of crossroads; spike in base of telephone pole, painted " 720.0 "
720.41

Caraghar, 1 mile south of, at southwest corner of T road; spike in base of fence post, painted " 724.2 "
724.60

Caraghar, 1 mile south by 0.3 mile west of, at southwest corner of T road; spike in base of corner fence post, painted " 728.5 "
728.90

Caraghar, 1 mile south by 1.3 miles west of, at southwest corner of crossroads; iron post stamped " 729 "
Caraghar, 1 mile south by 1.6 miles west of, at northwest corner of T road north; spike in base of corner fence post, painted " 737.4 "-
Caraghar, 1 mile south by 2.05 miles west of, northeast corner of T road north; spike in base of corner fence post, marked " 750.2 "-
Caraghar, 1 mile south by 2.3 miles west of, at north side of T road south; spike in base of telephone pole, marked " 747.6 " \(\qquad\)
Caraghar, 1 mile south by 3.3 miles west of, northwest corner of crossroads; spike in base of corner fence post, painted " 749.6 "-
Caraghar, 1 mile south by 3.7 miles west of, southeast corner of \(\mathbf{T}\) road south; spike in base of telephone pole, painted " 749.1 " \(\qquad\)
Caraghar, 1 mile south of, 4.3 miles west of, northeast corner of crossroads ; spike in base of corner fence post, marked " 751.3 "--
729. 709
737.87
750.66
748.07
750.15
749.61
751.83

From town line east along highways to point 3 miles west of Sylvania.
Metamora, 3.7 miles west of, southeast corner of \(T\) road; spike in base of corner fence post, marked " 737.7 "
Metamora, 2.7 miles west of, south side of T road north; spike in base of corner post, marked " 732.6 "
Metamora, 1.9 miles west of, southeast corner of T road south; spike in base of corner fence post, marked " 729.8 "
Metamora, 1.7 miles northwest of, at Champion interurban station, south side of T road north; iron post stamped " 727 " \(\qquad\)
Metamora, 0.7 mile west of, at edge of west corporation. line, at northwest corner of \(\mathbf{T}\) road north; spike in base of fence post, marked " 725.3 " \(\qquad\)
Metamora, 0.4 mile west of, southwest corner of T road south; spike in telephone pole, marked " 723.8 "
Metamora, 250 feet east of M. E. Church, northeast corner of T road north; spike in base of telephone pole, marked " 721.7 "
Metamora, 0.4 mile east of, at interurban stop 82, northeast corner of crossroads; spike in base of brace post, marked " 719.4 " \(\qquad\)
Metamora, 1.5 miles east of, at Treadway interurban station, on line between Lucas and Fulton counties; iron post stamped "Prim. Trav. Sta. No. 26, 713 "
Metamora, 2.7 miles east of, interurban stop 55 , northwest corner of crossroads; spike in base of corner post, marked " 710.2 "
Metamora, 3.7 miles east of, northeast corner of crossroads, at Burkey stop; iron post stamped " 704 "
Metamora, 4.7 miles east of, southwest corner of crossroads; spike in base of telenhone pole, marked " 697.1 "
Metamora, 5.7 miles east of, northwest corner of T road north; spike in base of telephone pole, marked " 692.4 "
Metamora, 5.98 miles east of, southwest corner of T road south; spike in base of fence post, marked " 690.9 "
Metamora, 6.6 miles east of, southeast corner of \(T\) road; spike in base of corner fence post, marked " 690.2 "
Metamora, 6.9 miles east of, northwest corner of T road north; spike in base of corner post, marked " 687.6 "
Sylvania, 3 miles west of, at northeast corner of crossroads, 50 feet north of railroad; spike in base of telephone pole

Feet. 732.87
730.15
725.67
724.19
722.06
713. 474
710.67
704.986
697.72
692.99
691.51
690.85
688.30
684.29

From point 1 mile south of Delta to point 3 miles southeast of Delta.
Delta, 0.5 mile east of station, at road crossing; top of south rail, marked " 704.46 " \(\qquad\)
Delta, 2 miles south by 0.5 mile east of, about 200 feet east of T road south, on south side of east-west road at \(T\) road north; iron post stamped " 691 "

From Delta north along highways to point 4 miles northeast of Lyons (portions of line).

Siney, 1 mile north of, northwest corner of crossroads; spike in base of telephone pole, marked " 749.329 "
Siney, 2 miles north of, northwest corner of crossroads; spike in base of telephone pole, marked " 751.7 "
751.95

Lyons, 4 miles east of, southeast corner of crossroads ; spike in base of telephone pole, marked " 744.4 "
744.65

Townline, station on Toledo \& Western R. R. (electric), at southeast corner of crossroads, in northwest corner of field; iron post stamped "Prim. Trav. Sta. No. 25, 1905, 733 "

\title{
SYCAMORE QUADRANGLE, \\ \\ [Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).] \\ \\ [Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).] \\ \\ Primary leveling by C. W. Marvin and R. G. DeFrees in 1903.
} \\ \\ Primary leveling by C. W. Marvin and R. G. DeFrees in 1903.
}

\section*{From Monnett north along highway via Broken Sword to Lykens,}

Monnett, 3.1 miles north of, 100 feet east of crossroads, iron bridge
over creek, at northeast corner of bridge seat on west abutment; chiseled square

Feet. 973.87
960.28
981.72
988. 522

Broken Sword, near northwest corner of sec. 3, T. 2 S., R. 16 E., 800 feet south of crossroads, on west side of road, 1 foot west of southeast corner of foundation of Seel's machine shed; bronze tablet stamped " 992 Col " \(\qquad\)
Lykens, near northeast corner of sec. 16, T. 1 S., R. 16 E., iron bridge over Sycamore River, at southwest corner of north abutment; aluminum tablet stamped " 951 Col "

From Nevada north along highway to Lemert.
Nevada, 0.25 mile east of, NW. \(\frac{1}{4}\) sec. 3 , T. 3 S., R. 15 E., on northeast corner of wall of bridge 47 ; chisel mark (Pennsylvania R. R. b. m.)

Lemert, SW. \(\frac{1}{2}\) sec. 1, T. 2 S., R. 15 E., in face of sandstone sill of front door of schoolhouse; aluminum tablet stamped "981 Col 1902"
928.571
981.929

From Nevada south along highway to Slingtown schoolhouse, thence north via Rock Run and Belle Vernon to McCutchenville.
Nevada, 1.25 miles east of, northeast corner of bridge 45 ; square cut (Pennsylvania R. R. b. m.)
940.210

Nevada, near center of NE. \(\frac{1}{4}\) sec. 4, T. 3 S., R. 15 E., in south front of foundation of school building; aluminum tablet stamped " 928 Columbus"
929.311

Nevada, 2.5 miles south of, on northwest end of stone abutment of iron bridge over Grass Run; chiseled square
Nevada, 3 miles south by 2 miles west of, at \(\mathbf{T}\) road south, in southeast corner of foundation of schoolhouse (district 4), Antrim Township; bronze tablet stamped " 890 Columbus 1903 " \(\qquad\)
Rock Run, SW. \(\frac{1}{4}\) sec. 35 , T. 2 S., R. 14 E., 5 miles west of Nevada, in foundation at east face of northeast corner of Bethel Church; bronze tablet stamped " 869 Columbus 1903 " \(\qquad\)
Oak Grove schoolhouse, 0.7 mile north of, NW. \(\frac{1}{4}\) sec. 14 , T. 2 S., R. 14 E., in southeast corner of foundation of Wm. Schoenberger's residence; aluminum tablet stamped " 836 Columbus 1903 " \(\qquad\)
Belle Vernon, near center of sec. 25, T. 1 S., R. 14 E., in north face of foundation at northwest corner of church; bronze tablet stamped " 837 Columbus 1903 "
913.81
891.043
870.001
836. 705
839.269
PRECISE AND PRIMARY LEVELING.375
THORNVILLE QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From New Salem east along Zanesville \& Western Ry, to point east of Chal- fants post office.
New Salem, in front of station; top of rail

Feet.
 987.9
Glass Rock, 1.2 miles east of, in southeast corner of abutmentof bridge; aluminum tablet stamped " 826 "825.901
Primary leveling by W. H. Monahan and C. H. Burrs in 1907.
From Glenford north along highway to point 3.7 miles south of Claylick,
Brownsville, 3.37 miles south of, in sandstone abutment at north- east corner of bridge; aluminum tablet stamped " 863 " ..... 862. 753
Brownsville, in sandstone foundation of hotel; aluminum tablet stamped " 951 " ..... 950.978
From Thornville north along Baltimore \& Ohio R. R. to point 2.8 miles south of Newark.
Thornville, in front of station at road crossing; top of rail897.1
Thornville, 3.4 miles north of, 150 feet west of railroad, in north- east corner of schoolhouse ; aluminum tablet stamped " 972 " ..... 971. 412
Thornville, 7.2 miles north of, 150 feet from track, in stone doorstep at north end of schoolhouse on east side of railroad; aluminum tablet stamped " 895 " ..... 895.241
From New Salem southeast along highway to Rushville, thence east to Somerset.
New Salem, 3.68 miles southeast of, 200 feet east of road fork to south, 30 feet north of road, in sandstone foundation of barn; aluminum tablet stamped " 1076 " ..... 1, 076.109
New Salem, 5.86 miles southeast of, 1,064 feet north of road forkon west, in sandstone coping of arch on east side of road;aluminum tablet stamped " 938 " (destroyed)937. 636

From Glass Rock south along Baltimore \& Ohio R. R. to Carthon.
Chalfants station, 33 feet northeast of center of road crossing, in southwest corner of field of N. S. Axline; iron post stamped "Prim. Trav. Sta. No. 52"
850.732

Chalfants, at road crossing; top of rail
Somerset, south side of Main Street, near front entrance to Reformed Church ; aluminum tablet stamped "1091"

1, 091. 197
Wellan, in front of station; top of rail
870.9

THURSTON QUADRANGLE.
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(82^{\circ} 30^{\prime}-82^{\circ} 45^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From Pickerington east along the Toledo \& Ohio Central and the Zanesville \& Western railways to New Salem,

Harley, 1.12 miles southeast of, in southwest corner of abutment at west end of railroad bridge over creek; aluminum tablet stamped " 865 "
Basil, in front of station; top of rail
865.036

Basil, in front of station in top of stone platform; aluminum tablet stamped " 867 "
866.9

Baltimore, in front of station; top of rail
867. 428

Thurston, in northwest corner of front steps of schoolhouse; alumi-

868.8 ner of highway bridge; aluminum tablet stamped " 935 "
886.379
935.167

Primary leveling by C. H. Burns and I. M. Flocker in 1907.
From Union station west along Baltimore \& Ohio R. R. to Pataskala, thence south along highway to Harley station.
Outville, 260 feet south of station, in coping stone of small bridge; aluminum tablet stamped " 1070 "

1, 069.850
Pataskala, 1.5 miles east of, northwest of road crossing; about 60 feet north of track, in southeast corner of field of Edward Condit; iron post stamped "Prim. Trav. Sta. No. 35 "

1,030. 228

Etna, at northeast corner of Methodist Church; aluminum tablet stamped " 1069 "

1, 069.378
Etna, 3 miles south of, in foundation of John Weaver's barn; aluminum tablet stamped " 1003 "
\(1,002.704\)
Ritter schoolhouse, 400 feet north of, in southwest corner of abutment of small iron bridge; aluminum tablet stamped " 880 "
879.550

\section*{From Union station south along highway to Thurston.}

Union station, 2 miles south of, 500 feet west of road, in foundation
of small house of S. Buckman; aluminum tablet stamped " 1006 "--
Luray, in doorstep of German Lutheran Church; aluminum tablet
stamped " 925 ".
Lueast of bridge, 47 feet due west of east rail, in south
Millersport, northeas
part of lot owned by Pence \& Swisher ; iron post stamped "Prim.
Trav. Sta. No. 46 "
From Thurston south along highway to point 3 miles south of Pleasantville, thence west to point near Carroll, thence north to Harley station.

Thurston, 3.2 miles south of, in sandstone abutment at southwest corner of bridge; aluminum tablet stamped " 885 "
885.277

Pleasantville, 3.14 miles south of, at east side of road at crossroads, in brick wall of schoolhouse; aluminum tablet stamped "1027"-

1, 027.237
Dumontville, in sandstone coping of stone culvert on east side of pike; aluminum tablet stamped " 1008 "
\(1,008.156\)
Dumontville, 1.74 miles west of, road on north, in sandstone abutment of highway bridge; aluminum tablet stamped " 886 "
886.302

Carroll, in sandstone wing wall at southeast corner of bridge over canal; aluminum tablet stamped " 836 "
836.169

Carroll, 2.56 miles north of, road fork on east, in sandstone abutment at northeast corner of bridge; aluminum tablet stamped " 811 "
810.600

TIFFIN QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Republic west along Baltimore \& Ohio R, R, to point 2.5 miles west of Tiffin,

Republic, Seneca County, about 0.25 mile east of, on Baltimore \& Ohio R. R. undergrade crossing bridge, over Marion State road, on the top surface of southernmost stone in the lower course; square cut in outline marked " 859 Republic"
860.353

Republic, in southwest corner of town hall, on west side, in vertical face of water table; aluminum tablet stamped " 883 Col."
884.146

Republic, near, 12 telegraph poles west of milepost 255 , on a knoll in Baltimore \& Ohio R. R. right of way, 39 feet south of track; chiseled square on top of post lettered "U. S. B. M." (C. \& G. S. b. m.)

Seneer 0.5 mile west of signboard, on Baltimore \& Ohio R. R. right of way, 547 feet south of track, at offset in right-of-way fence; red-metal cap on iron post (C. \& G. S. b. m. Q \(\mathrm{Q}_{5}\) )
822.517

Tiffin, about 3 miles east of, on Baltimore \& Ohio R. R. right of way, in center of south coping of stone-arch bridge 58; copper bolt (C. \& G. S. b. m. R \({ }_{5}\) )

Tiffin, about 1 mile east of, on Baltimore \& Ohio R. R. right of way, 0.25 mile west of milepost 248 and 984 feet east of junction of Baltimore \& Ohio and Pennsylvania railroads, in center of south girder (concrete) of bridge 61; red-metal disk (C. \& G. S. b. m. S5)
790.612
762. 468

Tiffin, at southwest corner of courthouse, west face, in window sill; tablet stamped " 757 Col."

Feet.
758.242
741. 801
775. 296
761. 193
773. 584
754. 453

Primary leveling by C. W. Marvin and R. G. DeFrees in 1903.
From Lykens north and west along highway via Republic and Beaver Creek to Old Fort.

Bloomville, 2 miles south of, south abutment of small iron bridge over Silver Creek, northeast corner of bridge seat, square mark
924.71

Bloomville, 2 feet north of southwest corner of town hall; aluminum tablet stamped " 932 Col " 983. 371

Bloomville, 1 mile north of, near northwest corner of sec. 10, T. 1 N., R. 16 E., northeast corner of south abutment of iron bridge over Honey Creek; square cut
894.57

Republic, southwest corner of town hall; aluminum tablet stamped " \(883 \mathrm{Col} "\)
Republic, about 3 miles north of, south of northeast corner of sec. 5 , T. 2 N., R. 16 E., at northwest corner of south abutment of small wooden bridge over creek; square cut

From Zieglers Corners along highway via Tiffin and Fort Seneca to 0ld Fort.
Keller's mill, on southwest stone abutment of bridge over Sandusky River ; chiseled square

Tiffin, 5.5 miles south of, 100 feet south of crossroads, at Bare schoolhouse, in west wall of stone culvert over drain; bronze tablet stamped " 803 Columbus 1903 "

Feet.
803.770

Tiffin, at southwest corner of west face of courthouse, in sill of window; aluminum tablet stamped " 757 Columbus 1903" (recovered by U. S. C. \& G. S.)
758.242

Fort Seneca, NW. \(\frac{1}{4}\) sec. 19, T. 3 N., R. 15 E., west of post office, in north face of foundation at northeast corner of schoolhouse; bronze tablet stamped " 700 Col "
701. 191

Old Fort, New York, Chicago \& St. Louis R. R. crossing; top of north rail

\section*{TOLEDO QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(83^{\circ} 30^{\prime}-83^{\circ} 45^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Alexis southwest along highways and Cincinnati, Hamilton \& Dayton Ry. to Roachton.

Alexis, Lucas County, west of Lake Shore \& Michigan Southern Ry. track, northeast of Ann Arbor R. R. track, at intersection on west abutment, south side, of long culvert of very large stone, first step below coping at northwest corner, 5 inches from either face; chiseled square, marked "B M" (C. \& G. S. b. m. U)
585.481

Toledo, northern part of city near Maumee River, west side of Summit Avenue and north corner of Columbus Avenue, on frame building ; copper nail on east side of sign (C. \& G. S. b. m. Toledo City No. 165)
Toledo, north bank of Maumee River, 348 feet above River Place, 4.38 feet south of south edge of flagging in River Park; stone triangulation monument set in ground. The point taken is the east point of the triangle cut in stone (C. \& G. S. b. m. Park \(\Delta\) ) \(\qquad\)
Toledo, north bank of Maumee River, north abutment of Pennsylvania R. R. bridge, east side, on retaining wall, 15 inches west of northwest corner of bridge-seat block and 3 feet above it; chiseled square, marked "B M" (C. \& G. S. b. m. V)
589.117

Toledo, northeast corner of Water and Madison streets, on southwest corner of traction company's power house, on top of sandstone water table just where brick begins, about 3 feet above sidewalk; marked by a chiseled square (C. \& G. S. b. m. power house) \(\qquad\)
601.119

Toledo, on United States custom office building, southeast corner of Madison and St. Clair streets, 15 feet south of south side of entrance on St. Clair Street, on south face of pilaster angle, 6 inches east of west face and 4.9 feet above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. W)
Toledo, northwest corner of customhouse building, cross cut on top of granite water table just where sandstone begins; outer quarter of cross (C. \& G. S. b. m. post office)
Toledo, southwest corner of Madison and Summit streets, on northeast corner of water table of Robert's drug store ; cross (C. \& G. S. b. m. Toledo City No. 44) \(\qquad\)
Toledo, on east abutment of Pennsylvania R. R. bridge over Maumee River, north of track, on coping stone, 9 inches north of north side of guard timber of track; highest point at northerly part of a cross (C. \& G. S. b. m. Toledo City No. 296)

Perrysburg, about 3 miles north of, on road to Toledo (on which electric railroad runs), 480 feet north of August Broke's house, in west face of culvert under road, 26 inches north of north spring of arch and 28 inches above top of arch (underside) ; brass bolt marked with a horizontal line (C. \& G. S. b. m. X)

Feet.
603.129

Perrysburg, 1.043 feet south of station, on west end of culvert, under Cincinnati, Hamilton \& Dayton Ry. track, 32 inches north of spring line and 18 inches above it; brass bolt, 26 inches above ground, marked with a horizontal line (C. \& G. S. b. m. Y)
615.696

Roachton, Wood County, just north of north line of Middleton Township, about 300 feet west of Cincinnati, Hamilton \& Dayton Ry. track, in foundation of residence of W. C. Parrin, center of east side, in east face of bay window, 2.2 feet south of north angle and 1.8 feet above ground, in second brick below wooden water table; horizontal line in brass bolt leaded horizontally (C. \& G. S. b. m. Z)

\section*{Primary leveling by Dean Halford in 1899.}

> Near Toledo.

Alexis, 0.6 mile north of, sec. 1, T. 9 S., R. 7 E., 0.1 mile south of Michigan-Ohio boundary, 1,200 feet north of Drouillard's Hotel, in face of culvert on west side of Toledo-Detroit pike; bronze tablet stamped " 586 Toledo"
586. 592

Sylvania, 0.25 mile east of, on Monroe Street, on stone at east of center of top pier of north abutment of culvert over North Branch (of Tenmile Creek) ; bronze tablet stamped "Toledo 639 " \(\qquad\) 640.016

Airline Junction, 2 miles southwest of, SW. \(\frac{1}{4} \mathrm{sec} .8\), T. 3 (Twelvemile Reservation), 0.5 mile south of Lake Shore \& Michigan Southern Ry., on stone pike, 0.3 mile east of crossroads, in top tier of center slot of culvert at south side of road; bronze tablet stamped "Toledo 624"
625. 164

Monclova, 2 miles south of, center of sec. 17, T. 1 (Twelvemile Reservation), on road 0.75 mile south of Wabash R. R., on top of pier at west end of north abutment of bridge over branch; bronze tablet stamped "Toledo \(642{ }^{11}\)
642.011

Holland, 0.2 mile south of station, sec. 15, T. 2 (Twelvemile Reservation), on top tier at west end of north pier abutment of bridge .over Wolf Creek; bronze tablet stamped "Toledo 617 " \(\qquad\)
Lime City, sec. 14, T. 4 (Twelvemile Reservation), opposite schoolhouse; in northwest corner of foundation of church; bronze tablet stamped "Toledo 647 "
617. 782

Perrysburg, 1 mile south of, sec. 7, T. 4 (Twelvemile Reservation), in top tier at east end of south pier abutment of bridge over Grassy Creek; bronze tablet stamped " 636 Toledo"
647.595
586.592
648.044

Walbridge, 1 mile southwest of, north end of west pier abutment of bridge over Cedar Creek; bronze tablet stamped "Toledo 619 "-
619. 496

\section*{Primary leveling by F. Mobrey in 1911.。}

From point 5 miles south of Holland to point 1.5 miles southwest of Holland.
Holland, 0.5 mile south of, southwest corner of crossroads; spike in base of telephone pole, painted " 636.6 "
Holland, 0.5 mile south by 0.5 mile west of, on south side of bridge; projection on east wing on abutment, painted " 623.4 "
623. 44

\footnotetext{
\({ }^{1}\) Recovered in 1907 and reset in 1908 by Joseph Hofman, surveyor of Lucas County.
}

Holland, 0.5 mile south by 1 mile west of, southwest corner of crossroads, 0.25 mile south of Albion stop on interurban line; spike in base of telephone pole, marked " 642.2 "

Feet. 642.34

\section*{From point 2 miles west of Sylvania to Sylvania.}

Sylvania, 2 miles west of, at Centennial schoolhouse northwest corner of crossroads; spike in base of corner post, painted " 678 "
678.11

Sylvania, 1.5 miles west of, at southeast corner of \(\mathbf{T}\); spike in base of telephone pole, marked " 667.5 "
667.53

TROY QUADRANGLE
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime} ;\) longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Sidney south along Cincinnati, Hamilton \& Dayton Ry. to Troy,
Kirkwood, Shelby County, on schoolhouse (Pontiac School), on east face, center of second pilaster from south enil, on water table, about 2 feet above ground; brass bolt, marked with horizontal line (C. \& G. S. b. m. 12)
986.092

Springcreek township, Miami County, on line of Cincinnati, Hamilton \& Dayton Ry., midway between Kirkwood and Piqua, on bridge over Bush Creek, east end of west abutment, bridge seat course, 6 inches from east and south faces; chiseled square (C. \& G. S. b. \(\mathrm{m} . \mathrm{J}_{2}\) )

Piqua, Cincinnati, Hamilton \& Dayton Ry., culvert 26, over Albino pike, northeast quarter, on center of east stone of bridge seat course; highest point circumscribed by a 1-inch square lettered "U. S. C. \& G. S." (C. \& G. S. b. m. K \({ }_{2}\) )
898. 948

Piqua, on Pennsylvania R. R., north end of east abutment of bridge over Miami River, top of bridge seat course, 14 inches north of truss and 8 inches back from face; highest point of 4 -inch square on side (C. \& G. S. b. m. Pennsylvania R. R.)
Piqua, southwest corner of crossing of Downing Street and Pittsburgh, Cincinnati, Chicago \& St. Louis Ry., northeast corner of malt house of J. G. Schmidlapp (1889), on water table, 3.9 feet above the sidewalk and 3.28 feet south of corner ; brass bolt marked with a horizontal line (C. \& G. S. b. m. L 2 )
Farrington, on Miami \& Erie Canal, 3 miles south of Piqua, lock built by Isaac Van Ness (1835), on west side of tumble on northwest corner of coping stone, 6 inches from either face; chiseled square (C. \& G. S. b. m. M \({ }_{2}\) )
934.258
865.427
876. 864

Concord Township, Miami \& Erie Canal lock, 2.5 miles north of Troy, east jaw of lock, east coping stone of wall, 6 inches from south face and 18 inches from east end of wall; chiseled square (C. \& G. S. b. m. \(\mathrm{N}_{2}\) ) \(\qquad\)
Troy, on Miami \& Erie Canal, Troy lock, east jaw, on coping stone, west of east end of wall and 6 inches north of south face; chiseled square (C. \& G. S. b. m. O \(\mathrm{O}_{2}\) )
Troy, southwest corner of courthouse, on south face, 2.46 feet from west corner and 3.9 feet above ground; brass bolt marked with a horizontal line (C. \& G. S. b. m. P \({ }_{2}\) )
844.520
835.440
841.048

Troy, south side of Miami Street, northeast corner of first house west of Lutheran Church; top of water table (C. \& G. S. b. m. Troy City)
837.685

Troy, southern limit of town, intersection of Miami \& Erie Canal and Cleveland, Cincinnati, Chicago \& St. Louis Ry., on east abutment of railroad bridge over canal, on west face of abutment, 4.3 feet above ground and 7.2 feet north of south end of abutment; brass bolt marked with a horizontal line (C. \& G. S. b. m. Q2)

Feet.
831.146
827. 278

Primary leveling by R. G. Defrees in 1903.
Bench mark set from levels on Dayton quadrangle.
Grayson, 0.5 mile north of station, 800 feet south of road fork west to Troy, at fork of road to east, in face of front doorsill of Walnut Grove schoolhouse; aluminum tablet stamped " 838 Columbus".-

Primary leveling by H. B. Hoel in 1909.
From Troy southwest 1.5 miles.
Troy, 1.8 miles southwest of, extreme southeast corner of sec. 30, Concord Township, Miami County, northwest corner of crossroads; iron post stamped " 888 "
888. 128

Primary leveling by E. C. Bibbee and J. J. McNulta in 1911.
From point 5 miles southeast of Sidney east along highway to county line.
Sidney, 4.6 miles southeast of, near southwest corner of sec. 26, T. 2, R. 13 ; highest point on north end of cast-iron culvert under wagon road
Sidney, 3.5 miles east by 2.5 miles south of, at northeast corner of \(T\) road north, 25 feet north by 20 feet east of junction, 0.25 mile west of northeast corner of sec. 25, T. 2, R. 13 ; iron post stamped " Prim. Trav, Sta. No. 36, 1909, Ohio 1078 " 1,077. 550
Sidney, 4.5 miles southeast of, at southwest corner of crossroads; chiseled square on large granite rock

1, 072.10
Sidney, 5.0 miles southeast of, 0.25 mile east of northwest corner of sec. 13, T. 2, R. 13 ; iron post stamped " 1085 Ohio"
\(1,085.337\)

Tawawa, 0.8 mile northeast of, on west side of road, opposite \(T\) road east, 0.1 mile north of southeast corner of sec. 2, T. 2, R. 13 ; chiseled equare on large granite rock
\(1,095.60\)
Tawawa, 1.2 miles northeast of, at southeast corner of crossroads, 0.5 mile east of southwest corner of sec. 32, T. 3, R. 13 ; iron post stamped " 1090 Ohio"

1, 090.060
From Kirkwood east along highway to corner of Champaign, Miami, and Shelby

Kirkwood, in east face of water table of schoolhouse; lead bolt marked " U. S. C. \& G. S." (C. \& G. S. b. m.)
Kirkwood, 2 miles east of, on Kirkwood pike, at center of crossroads; square cut on section stone, painted " 1035.6 "

Kirkwood, 3.5 miles east of, on Kirkwood-Bull pike, east quarter corner of sec. 5, T. 7, R. 12, at crossroads ; copper nail in telephone Feet. pole
Kirkwood, 5 miles east by 1.5 miles south of, southeast corner of crossroads, north quarter corner of sec. 27 , T. 2, R. 12 ; iron post stamped " 1076 Ohio"

1, 075.662
Ballou, 1 mile south of, intersection of crossroads, corner of secs. 15 , 16,9 , and 10, T. 2, R. 12 ; square cut on large stone
Ballou, 1 mile south by 1 mile east of, on county line road, northeast corner of crossroads, southwest corner of sec. 4, T. 2, R. 12 ; iron post stamped " 1119 Ohio"
\(1,119.19\)
T. 2, R. 13 E., southeast corner of sec. 4, southeast corner of intersection of Miami, Shelby, and Champaign county lines; square cut on large stone
\(1,150.97\)
From Piqua east along highway to St. Paris.
Piqua, in southwest corner, at Downing Street crossing of Pennsylvania R. R., on northeast corner of malt house of J. C. Schmidlapp, in water table; brass bolt, marked with horizontal line (C. \& G. S. b. m. \(\mathrm{L}_{2}\) )
876. 864

Piqua, 1.5 miles east of, at crossing of Pennsylvania R. R. and Cincinnati, Hamilton \& Dayton Ry., on latter railroad 50 feet north of crossing ; top of square nut in bond plate of west rail
903. 84
T. 1, R. 12 E., southwest corner of sec. 13, in northeast corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 37, 1909, 980 Ohio"
980.160

Piqua, 4 miles east of, on concrete road culvert, 100 feet east of crossroads, T. 1, R. 12 E.; square cut on north wing wall
992.48

Piqua, 4.5 miles east of, in northeast corner of crossroads; iron post
stamped " 1004 Ohio"
Fletcher, 1 mile west of, on stone steps of schoolhouse at crossroads ;
square cut_- 026.94
Fletcher, on concrete steps of post office ; square cut, painted " 1053 "- 1, 053. 42
Fletcher, 0.5 mile east of, in southeast corner of crossroads; iron post stamped " Prim. Trav. Sta. No. 41, 1064 Ohio"

1, 063.863
Fletcher, 1.5 miles east of, on southwest corner of water trough in school yard, southwest corner of crossroads; square cut

1, 093. 70
Lena, 0.5 mile west of, in schoolhouse yard, at northeast corner of crossroads, iron post stamped " 1129 Ohio"-
\(1,129.056\)
Lena, on large stone northwest corner of crossroads, 200 feet east of post office; square cut, painted " 1136 ",
\(1,136.28\)
Lena, 1 mile east of, in northwest corner of crossroads; copper nail in root on south side of large elm tree.
\(1,168.21\)

\section*{From Christiansburg west along highway to Troy.}

Christiansburg, in northwest corner of schoolhouse yard; iron post
stamped " 1116 Ohio"
Christiansburg, 3 miles west of, on Troy pike, in southeast corner of pike and T road south; iron post stamped " 1056 Ohio"
Christiansburg, 3.5 miles west of, on Troy pike, northwest corner of \(\mathbf{T}\) road north; square cut on large stone
Casstown, 1.5 miles east of, on Troy pike, southeast corner of crossroads; square cut on large stone, painted " 995 "
994.91
Casstown, in front of town hall, northwest corner of crossroads;

Feet.
 937.170 Casstown, 0.5 mile west of, on Troy pike, at northwest corner of \(T\) road running north; square cut on large stone
908.16
Casstown, 1.5 miles west of, on Troy and Casstown pike, northwest corner of pike and crossroads; square cut on large stone ..... 894. 68
Troy, 2.5 miles east of, on Troy pike, southeast corner of T road running south; iron post stamped " 834 Ohio" ..... 833.671
Troy, 2 miles east of, on Troy pike, in east side of telephone pole at center of cross and \(T\) roads; copper nail ..... 838.98
Troy, southwest corner of courthouse; brass bolt marked with hori- zontal line (C. \& G. S. b. m.) ..... 841.048
From point 0.5 mile west of Casstown north along highway to point nearFletcher.
Casstown, 0.5 mile west by 2 miles north of, southwest corner of crossroads, in front of residence of J. McDowell ; iron post stamped "952 Ohio" ..... 952.261
Fletcher, 1 mile west by 2 miles south of, southwest corner of Lost Creek pike; iron post stamped " 989 Ohio" ..... 988.897
Fletcher, 1 mile west by 1 mile south of, on east side of telephone pole, southwest corner of \(T\) road running east; copper nail ..... 1, 001. 61
From Conover south along highway to point west of Christiansburg.
Conover, Pennsylvania R. R. crossing; top of rail ..... \(1,134.46\)
Conover, 1.5 miles south of, on section stone at center of cross- roads, corner of secs. \(11,5,10\), and 4, T. 2, R. 11 ; square cut_-_- 1, 125. 09
Conover, 3 miles south by 1 mile west of, on Extension pike,southeast corner of T road north; iron post stamped "1088 Ohio"-_ 1, 088. 414
Christiansburg, 3.5 miles west of, on Troy pike, northwest cornerof pike and \(T\) road north; square cut on large stone\(1,044.077\)
Christiansburg, at northwest corner of schoolhouse yard; iron post stamped "1116 Ohio" ..... 1, 116. 078
Christiansburg, 2 miles south of, in northeast corner of crossroads; iron post stamped "1063 Ohio" ..... 1, 063.346
From Christiansburg to South McKendre Church.
Alcony, 2 miles east by 0.5 mile north of, northeast corner of cross- road and \(T\) road; square cut on large stone ..... \(1,057.06\)
Alcony, 1 mile east of, on northwest corner of pike and crossroad; square cut on large stone ..... 1, 008. 27
UHRICHSVILLE QUADRANGLE.[Latitude \(40^{\circ} 15^{\prime}-40^{\circ} 30^{\prime}\); longitude \(81^{\circ} 15^{\prime}-81^{\circ} 30^{\prime}\).]
Precise leveling by W. H. Monahan in 1906.
From Port Washington east along Pennsylvania R. R. to Uhrichsville.
Port Washington, 3.88 miles east of, 414 feet north of railroad, in topof southeast corner of stone abutment for locks of canal ; aluminumtablet stamped " 834 "834.859
Lock 17, in front of station ; top of railGnadenhutten, 35 feet north of railroad, in front of station; ironpost stamped " 834 "north of railroad, in front of station; inon
Gnadenhutten, in front of station; top of rail ..... 836.3
Tuscarawas, in front of station; top of rail ..... 844.3834.549
831.1
844.3

Tuscarawas, 0.24 mile east of, in top of northwest corner of abutment to bridge over highway; aluminum tablet stamped " 844 "---
Uhrichsville, 0.86 mile north of, in southwest corner of abutment at south end of overhead railroad bridge; small bolt (B. \& 0 . R. R. b. m. 48)

Feet.
844.738
862.029

From Uhrichsville east along Pennsylvania R. R. to Station 15 post office.
Uhrichsville, in front of Pennsylvania R. R. station; top of rail_---
Uhrichsville, 0.52 mile east of, 3 feet south of railroad track, 2 feet from ground, in stone foundation of overhead highway bridge; aluminum tablet stamped " 861 ". \(\qquad\)
Dennison, in front of station; top of rail
Dennison, 0.46 mile east of, stone abutment of bridge over creek; Pennsylvania R. R. bench mark (856.14?)
856.8
861.251
861.8
858.761

Dennison, 3.49 miles east of, in northeast coping of northwest wing wall of stone-arch bridge No. 86 ; aluminum tablet stamped " 868 Stbnvl" \(\qquad\)
Precise leveling by the Baltimore \& Ohio R. R.
From New Philadelphia southeast to point 1 mile north of Uhrichsville.
New Philadelphia, Tuscarawas County, 1 mile northwest of, at milepost 71 ; section of rail set vertically in ground (B. \& O. b. m. 39)_
New Philadelphia, at milepost 70 ; section of rail set vertically in ground (B. \& O. b. m. 40)
888.193
878. 525

New Philadelphia, about 0.5 mile southeast of, in northwest end of southwest coping of culvert; copper bolt (B. \& O. b. m. 41)
866. 580

New Philadelphia, about 2 miles southeast of, on northeast side of tracks at milepost 68 ; rail section (B. \& O. b. m. 42)
859.046

New Philadelphia, about 3 miles southeast of, in southwest end of southeast abutment of bridge at telegraph pole \(67 / 1\); copper bolt (B. \& O. b. m. 43)
855.963

Goshen, about 0.8 mile northwest of, in center of mud wall of southeast abutment of bridge at telegraph pole \(66 / 18\), northeast of present tracks ; copper bolt (B. \& O. b. m. 44)
855.682

Goshen, 0.5 mile southeast of, northeast side of tracks at telegraph pole \(65 / 15\); rail section (B. \& O. b. m. 45)
850.456

Midvale, quarter mile west of, in south end of east abutment of bridge at telegraph pole \(64 / 15\); copper bolt (B. \& O. b. m. 46) \(\qquad\)
Midvale, 0.5 mile southeast of, southwest of track in mud wall of southeast abutment of bridge at telegraph pole \(63 / 20\); copper bolt (B. \& O. b. m. 47)
853.141

Uhrichsville, about 1 mile north of, in west end of mud wall of south abutment of undergrade highway crossing bridge near milepost 62 ; copper bolt (B. \& O. b. m. 48)
862.029

Primary leveling by B. J. Green in 1902. At Station 15 post office.
Station 15 post office, Pittsburgh, Cincinnati, Chicago \& St. Louis Ry., stone bridge 86, on northeast coping of northeast wing wall; aluminum tablet stamped " 868 Steubenville"
868.622

From Tennett tunnel north to Tippecanoe.
Tippecanoe, southwest corner of Daviess and Spencer streets, on north foundation wall of dwelling; bronze tablet stamped " 882 Steubenville"
882.233
\[
45281^{\circ}-\text { Bull. } 651-17-25
\]

\section*{From Tippecanoe east along road via Minkville to Barretts Bridge.}

Tippecanoe, 0.8 mile east of, covered bridge over Brushy Fork, on south wing wall of east abutment; chiseled square

Feet. 870.12

Primary leveling by J. H. Wetzel in 1901 and B. J. Green and C. B. Minks in 1909. At Station 15 post office.

Station 15 post office, Pittsburgh, Cincinnati, Chicago \& St. Louis Ry. stone bridge 86 , on northeast coping of northeast wing wall; aluminum tablet stamped " 868 Steubenville"
868.62'

From Tennett tunnel north to Tippecanoe and east.
Tippecanoe, southwest corner of Daviess and Spencer streets, north foundation wall of dwelling; bronze tablet stamped " 882 Steubenville"
881. 736

Tippecanoe, 0.8 mile east of, covered bridge over Brushy Fork, on south-wing wall of east abutment; chiseled square

From Joyce north along Pennsylvania R. R. to near Canal Dover (part of adjusted line Newcomerstown to Canal Dover, the closure error of which was excessive).
Joyce, 1.1 miles north of, 25 feet west and 10 feet south of road crossing; iron post stamped " 873 "

\section*{UPPER SANDUSKY QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by H. W. Peabody in 1904.
From Forest east along Pittsburgh, Fort Wayne \& Chicago Ry, to Rock Run.
Forest, 2 miles east of, southwest corner of sec. 3, T. 3 S., R. 12 E., in next to top coping stone at southeast corner of culvert; aluminum tablet stamped " 907 Adj 1903 " \(\qquad\)
Forest, 2 milies east of, at northeast corner of east abutment of railroad bridge 88 ; chisel mark (railroad bench mark)
Kirby, east side of sec. 7, T. 3 S., R. 12 E., in east face at southeast corner of D. E. Maxwell's elevator; aluminum tablet stamped " 879 Adj 1903 " \(\qquad\)
Upper Sandusky, 6 miles west of, at northeast corner of coping of railroad culvert 81 ; chiseled square (railroad bench mark)
Upper Sandusky, 3.5 miles west of, south side of sec. 34, T. 2 S., R. 13 E ., at northeast corner of east abutment of railroad bridge 76, in stone 2 feet above bridge seat; aluminum tablet stamped " 836 Adj 1903 " \(\qquad\)
Upper Sandusky, 10 feet east of Hocking Valley Ry. and 50 feet south of Pennsylvania line, in stone post; bronze triangulation tablet stamped " 856 Adj 1903 " \(\qquad\)
Upper Sandusky, sec. 32, T. 2 S., R. 14 E., at right side of vestibule to main entrance at west side of Wyandot County courthouse; aluminum tablet stamped " 862 Adj 1903 "

From Upper Sandusky northwest along Hocking Valley Ry, to Carey, thence southwest along Big Four Route to Forest.

Upper Sandusky, 3.5 miles northwest of, 50 feet west of Hocking Valley Ry., at northeast corner of east abutment of railroad bridge; chisel mark
872.644
906. 750
908. 427
878.648
865.36
835.668
855.390
861. 698
869.62
817.02

Lovell, south side of sec. 2, T. 2 S., R. 13 E., in south face at southwest corner of M. E. Church; aluminum tablet stamped " 816 Adj 1903 "

\section*{Feet.}
815. 567

Crawford, southeast corner of sec. 27, T. 1 S., R. 13 E., 450 feet east of railroad crossing, at southeast corner of railroad bridge, in next to top coping stone; aluminum tablet stamped " 809 Adj 1903 "----
Carey, south side of sec. 16, T. 1 S., R. 13 E., in west face at northwest corner of M. E. Church, on Main Street; aluminum tablet stamped " 825 Adj 1903 "
807.993

Carey, 4 miles southwest of, center of sec. 1, T. 2 S., R. 12 E., 0.5 mile southwest of railroad crossing, in next to top stone at southeast corner of culvert; aluminum tablet stamped " 856 Adj 1903 "-
Wharton, north line of sec. 22, T. 2 S., R. 12 E., in west face at northwest corner of Howard's block, 160 feet back of Big Four Route station; aluminum tablet stamped " 883 Adj 1903 " \(\qquad\)

\section*{At McCutchenville.}

McCutchenville, in north face of water table of school building; bronze tablet stamped " 799 Columbus 1903 " \(\qquad\) Primary leveling by E. C. Bibbee in 1912.
From Forest southeast 3.7 miles along road on county line.
Forest, in north face at northeast corner of public-school building, sec. 8, T. 3 S., R. 12 E., aluminum tablet stamped " 934 Adj 1903 "-
Forest, 1.6 miles southeast of, southwest corner of \(T\) road east, in front of residence of William Lindsay, on line between Hardin and Wyandot counties, on large rock ; chiseled square \(\qquad\)
Forest, 2.5 miles south of, at T road east, on line between Hardin and Wyandot counties, at southwest corner of bridge, in abutment; bolt head_
Eorest, 3.7 miles south of, on Wyandot and Hardin county line, on east abutment north side of small iron bridge in crossroads; chiseled square
933.032
941. 50
910.96
909. 41

From point 4.9 miles south of Upper Sandusky to Upper Sandusky.
Tpper Sandusky, 4.9 miles south of, 0.3 mile south of large brick house (residence of Charles Muller), on northwest corner of north abutment of bridge; chiseled square
882.11

Upper Sandusky, 3.4 miles south of, 1,000 feet north of A. L. Johnson's residence, on south abutment west side of iron bridge; chiseled square
863. 56

Upper Sandusky, 2.25 miles south of, in base of telephone pole at Marseilles Pike and Hocking Valley R. R. crossing; spike
864.21

Upper Sandusky, 1.6 miles south of, 40 feet south of railroad crossing, in base of telegraph pole; spike
864.66

Upper Sandusky, 10 feet east of Hocking Valley R. R., 50 feet south of Pennsylvania R. R.; bronze tablet stamped " 856 Adj 1903" (Bull. 411)
855.390

\section*{VANCEBURG QUADRANGLE.}
[Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(83^{\circ} 15^{\prime}-83^{\circ} 30^{\prime}\).]
Primary leveling by C. E. Mills, Howard Clark, and C. B. Shaw in 1910. From Tulip to Rome (Stout post office).

Tulip, 0.5 mile south of, on west side of highway at \(T\) road, in front of Lasty Spire's residence, on limestone rock ; chiseled circle_
Tulip, 0.7 mile south of, at T road; iron post stamped " 808 "
Tulip, 1.8 miles south of, west of highway at road forks, foot of Rodgers Hill, on stone; chiseled circle
Rome, 3.1 miles north of, west of road, in front of school building, district 2, Green Township, Adams County, in root of large elm tree; spike \(\qquad\)
Rome, 0.8 mile north of, west end of stone culvert under pike at road forks in front of W. Tracy's residence ; chiseled circular mark \(\qquad\)

\section*{Near Buena Vista.}
Buena Vista, 0.5 mile east of, at northwest corner of crossroads, 30 feet west of center of crossroads; iron post stamped " Prim. Trav. Sta. No. 9, 1910 Ohio 515 "

\section*{From Wrightsville via Rome to Buena Vista.}
Wrightsville, 3.6 miles east of, 0.5 mile northwest of large steel bridge over Ohio Brush Creek, northeast corner of road forks; iron post stamped " 544 "
Rome, crossing of Main and Second streets, 50 feet southeast of center of crossroads; iron post stamped " Prim. Trav. Sta. No. 16, 1910, 524 " \(\qquad\)
Rome, 4.8 miles east of, near T road north and private road south, center of road fork made by road north; iron post stamped " 579 ".
Sandy Springs, opposite Vanceburg, Ky., in southeast corner of T road south to Ohio River; spike in root of hickory tree
Buena Vista, 1 mile west of, on north wing of east abutment at northeast corner of small iron bridge over Rock Run; chiseled cross \(\qquad\) From Tulip to Beasleys Fork.

Feet.
798.76

Tulip, 2.8 miles southwest of, at Wagners Ripples, south of highway at \(Y\) road in front of old mill; spike in root of large sycamore tree-
Beasleys Fork, 4.3 miles east of, southwest corner of stone abutment of iron bridge over Black Run, about 400 feet east of road forks; chiseled circle \(\qquad\)
Beasleys Fork, 3 miles east of, Cedar College, at road forks; iron post stamped " 550 "

From Sandy Springs to Vanceburg (checked spur line).
Vanceburg, Ky., on south side of soldiers' monument in courthouse yard ; chiseled square (U. S. Army engineer's elevation 528.242) --

\section*{VAN WERT QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\circ}\). ]
Primary leveling by A. D. Duck, H. Clark, and C. E. Mills in 1911.
From point 9 miles south of Van Wert north along highway to point 2.5 miles northwest of Hoaglin.

Van Wert, 9 miles south of, at Erie R. R. crossing, about 3 miles southeast of Ohio City, on north side of track; iron post stamped " 810 "
809. 639

Van Wert, 6.3 miles south of, at road crossing near Painter School; iron post stamped " 809 " \(\qquad\)
Van Wert, 4.7 miles south of, at road crossing, in front of J. W. Nicodemus's residence; spike in base of telephone pole
808.923

Van Wert, 3.5 miles south of, in front of Ed. Knodel's residence at \(T\) road; spike in base of fence post
801.58
802.61
Yan Wert, 2.2 miles southeast of, at trolley-road crossing; iron post Feet.stamped " 788 "787. 669
Van Wert, 10 feet north of northeast corner of courthouse ; iron post stamped " 786 " ..... 785.759
Van Wert, 1.9 miles north of, at lane leading to Chas. Kesler's resi- dence; copper nail in southeast corner of floor of iron bridge

\(\qquad\) ..... 764. 41
Van Wert, 2.4 miles northeast of, at road crossing; spike in base of telephone pole ..... 764.96
Van Wert, 3.2 miles northeast of, at road crossing, on southwest cor- ner of stone abutment of iron bridge; chiseled circle ..... 759. 86
Van Wert, 4.1 miles northeast of, in corner of school lot (subdistrict 1, Hoaglin Township), at road crossing ; iron post stamped " 756 "-- ..... 755.953
Van Wert, 5.2 miles northeast of, on southwest corner of west abut-ment of iron bridge; chiseled circle
751.78750.03
747.37742. 552
742.57
737. 06
From Van Wert northwest along highways via Convoy to point 1.8 miles north-west of Convoy.
Van Wert, southeast corner of courthouse yard ; chisel mark on top of stone wall, marked " 785.926 " ..... 785.97
Van Wert, at crossing of Ohio Electric Ry. and Cincinnati Northern R. R. ; top of rail. ..... 783.7
Van Wert, 1.6 miles northwest of, northwest corner of crossroads ; spike in base of telephone pole, marked " 785.1 " ..... 785. 12
Van Wert, 2.7 miles northwest of, southeast corner of crossroads; spike in base of telephone pole, marked " 787.477 " ..... 787. 52
Van Wert, 3.8 miles northwest of, northeast corner of crossroads; iron post stamped " 776 " ..... 776.247
Van Wert, 5 miles northwest of, northwest corner of crossroads; spike in base of telephone pole, marked " 779.3 " ..... 779.38
Van Wert, 6.3 miles northwest of, northeast corner of \(T\) road north; spike in base of fence post, marked " 784.1 " ..... 784.13
Van Wert, 6.8 miles northwest of, southeast corner of T road south; spike in base of fence post, marked " 787.9 " ..... 787.87
Convoy, in center of town, northeast corner of crossroads; chiseled square on stone curbing, marked "784.1" ..... 784.18
Convoy, 0.2 mile north of center of town, west side of road, north end of gate to field; iron post stamped " 784 " (probably destroyed) --- ..... 783.906
Convoy, 1 mile north of, northwest corner of crossroads; spike in base of telephone pole, marked " 778.9 " ..... 778.96
Convoy, 1.8 miles north of, southwest corner of crossroads at Davis schoolhouse; spike in base of telephone pole, marked " 776.8 " ..... 776. 83

\section*{From Convoy south and west along highways to point 1 mile north of Schumm.}

Convoy, 1 mile south of, northwest corner of crossroads; spike in base of fence post, marked " 787.8 "

Feet. Convoy, 2 miles south of, southwest corner of crossroads at schoolhouse ; iron post stamped "Prim. Trav. Sta. No. 17, 1909 Ohio 792"-
Convoy, 3.25 miles south of, northwest corner of crossroads; spike in base of fence post, marked " 801.9 "
792.453

Convoy, 4.5 miles south of, northeast corner of crossroads; spike in base of post, marked " 806.2 "
802.05

Convoy, 5.5 miles south of, southwest corner of crossroads ; iron post stamped " 809 "
806. 37

Convoy, 6.5 miles south of, northeast corner of crossroads; spike in base of post, marked " 815.1 "
808.842

Convoy, 7.5 miles south of, northwest corner of T road west; spike in base of mail-box post, marked " 822.5 "
815.24

Glenmore, 1 mile north by 0.5 mile west of, northwest corner of T road north; spike in base of fence post, marked " 820.4 "
822. 70

Wren, 2.5 miles east of, southeast corner of crossroads; iron post stamped " 826 "
820.61

Glenmore, 1.5 miles west of, southeast corner of crossroads; spike in base of fence post, marked " 812.55 "
826. 171

Schumm, 1 mile north of, at southwest corner of crossroads; spike in base of fence post, marked " 824.6 "
812. 80

Schumm, 0.5 mile north of, northwest corner of T road west; spike in base of post, marked " 832.8 "
824.84

Schumm, at road crossing Toledo, St. Louis \& Western Ry.; top of rail, marked " 843.8 "
833.06
schumm, at Toledo, St. Louis \& Western Ry. crossing, 25 feet north by 25 feet east of center; iron post stamped "Prim. Trav. Sta. No. 16, 1909, Ohio, 841"
841.621

From point 4.5 miles north of Rockford north along highways to point 1 mile north by 2.5 miles west of Scott.
Rockford, 4.5 miles north of, 1 mile south of Ohio City, at northeast corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 15, Ohio 1909, 829"
828. 704

Ohio City, 0.25 mile west of, in northwest corner of road crossing, 60 feet north of track; spike in telephone pole, painted " 822.3 "
822.39

Ohio City, 0.5 mile west of, at northwest corner of crossroads; nail in corner fence post, painted " 822.5 "
822. 57

Ohio City, 0.5 mile west by 1 mile north of, at southwest corner of crossroads; spike in telephone guy pole, painted " 816.1 "
816. 19

Ohio City, 0.5 mile west by 2 miles north of, 100 feet west of North Liberty Creek, in northwest corner of crossroads; iron post stamped "811 Ohio"
811.327

Ohio City, 3.5 miles north of, at northeast corner of crossroads; spike in base of corner fence post, painted " 797.2 "-
797.33

Ohio City, 4 miles north of, at northeast corner of crossroads, 150 feet southeast of Pleasant Township school (subdistrict No. 4); spike in telephone pole, painted " 796.2 "
796. 33

Ohio City, 5 miles north of, 3 miles southwest of Van Wert, on section line, 400 feet north of J. R. Kreider's residence; iron post stamped " 792 Ohio "
791. 682

Van Wert, 2.25 miles west of, at northeast corner of crossroads; spike in fence post, painted " 788.9 "

Feet.
789.06

Van Wert, 2.25 miles west of, at northeast corner of crossroads; spike in base of corner fence post, painted " 779.4 "
779.55

Van Wert, 2.7 miles northwest of, southeast corner of crossroads; spike in base of telephone pole, painted " 787.5 "
787.52

Van Wert, 2.5 miles northwest of, at road crossing 200 feet south of district schoolhouse; top of south rail of eastbound track, painted " 777.3 "
Van Wert, 2.25 miles north by 2.25 miles west of, at T road east in southeast corner, in corner fence post opposite H. S. McClure's residence; spike, painted " 768.0 "
Van Wert, 3.25 miles north by 2.25 miles west of, at southwest corner of crossroads, 150 feet east of McClure's School, Union Township (subdistrict No. 8) ; iron post stamped " 765 Ohio " \(\qquad\)
Van Wert, 2.25 miles west by 4.25 miles north of, at northeast corner of \(T\) road east; spike in corner fence post, painted " 763.0 " \(\qquad\)
Cavett, 2.5 miles west of, 150 feet east of Centre School, 100 feet north of Union Centre Church, northeast corner of crossroads; spike in telephone guy pole, painted " 759.9 "
Cavett, 2.5 miles west by 1 mile north of, 150 feet east of C. L. Gordon's store, in northeast corner of crossroads; iron post stamped " 756 Ohio"
777.43
768.10
765. 562
763.12
760.05
755.818
751. 62
749.52
740.92
738.23

Tit ic:
: \(16 \mathrm{c}:\)
(2963 A.
766. 88
767.25

VERMILION QUADRANGLE.
[Latitude \(41^{\circ} 15^{\prime}-41^{\circ} 30^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by Dennis D. Doty in 1901.
From Berlin Heights via Ashmont and Vermilion to North Amherst (doublerodded line).
Berlin Heights, corner Main and Hotel streets, at southwest corner of stone window sill of Lippus \& Fowler's store; bronze tablet stamped " 777 Toledo"
Ashmont, 700 feet east of station, 300 feet south of railroad, in southeast corner of wagon bridge; aluminum tablet stamped " 614 Toledo"
776.588
614. 485

Vermilion, in window sill at southeast corner of Davis Bros.' store; aluminum tablet stamped " 595 Toledo"

Feet.
597. 480

\section*{Leveling in 1916 by S. R. Archer.}

From point 2 miles west of Berlin Heights north to Shiprock, thence northeast along New York, Chicago \& St. Louis R. R. to Vermilion, thence southeast along Lake Shore \& Michigan Southern R. R. to Brownhelm.
Berlin Heights station, south side of track, east side of north-south road, 6 feet east of west end of concrete retaining wall to cinder platform at New York, Chicago \& St. Louis R. R. depot, 1 foot south of south rail ; top of chiseled square
Berlin Heights station, 1.5 miles northeast of, New York, Chicago \& St. Louis R. R. crossing switch of Lake Shore R. R. at southeast corner of crossing, top concrete base for angle of interlocking leading to south signal block; chiseled square
Ashmont, 1.20 miles southwest of, north-south road crossing on New York, Chicago \& St. Louis R. R. at, 50 feet south of track, on east side of road at fence line, in root on southwest side of 6 -inch oak tree (north tree of two trees) ; copper nail
Ashmont, 700 feet east of station, 300 feet south of railroad, in southeast corner of wagon bridge; aluminum tablet stamped " 614 Toledo " \(\qquad\)
Ashmont, 0.5 mile northeast of, New York, Chicago \& St. Louis R. R., over Chappell Creek, 100 feet west of railroad bridge over northsouth road, west concrete abutment, top of north end of parapet wall ; chiseled square \(\qquad\)
Vermilion, 2.85 miles southwest of, 0.25 mile southwest and 150 feet west of New York, Chicago \& St. Louis R. R. crossing on northsouth road, 75 feet south of north right of way line, on north side of east-west private road, in root on east side of 15 -inch oak tree; copper nail.
Vermilion, 1.58 miles southwest of, 100 feet west of north-south road crossing, north side of New York, Chicago \& St. Louis R. R., in base on north side of second telegraph pole west of road crossing; railroad spike driven in \(\qquad\)
Vermilion, 0.44 mile southwest of New York, Chicago \& St. Louis R. R. depot, south side of tracks, top of east end of coping of concrete culvert 727 ; chiseled square

Vermilion, "stone monument," about 250 feet east of east pier, 300 feet a little north of east from angle in west pier, 88 feet westerly from a 2.5 -foot basswood tree, 61 feet northerly from largest of three willows clustered near clump of willows ; iron bolt in top of stone monument (Lake Survey elevation, 578.50)

Feet. 578.50

Vermilion "Lime Kiln," on north face of stone foundation of lime kiln, near northeast corner, about 125 feet west of west pier on lake shore, ledge and upright and letters chiseled in face of third stone from ground, marked " U. S. B. M." (Lake Survey elevation, 581.80)

Vermilion, Lake Shore \& Michigan Southern R. R. bridge 135, over Vermilion River, west abutment, top of south end of parapet wall, at junction of parapet wall and east end of retaining wall; chiseled square \(\qquad\)
Yermilion, 0.90 mile east of, Lake Shore \& Michigan Southern R. R. concrete bridge over New York, Chicago \& St. Louis R. R., top of east end of south guard wall ; chiseled square
614.65

Vermilion, 2 miles east of, overhead highway crossing, at north side of tracks, top of south corner of east end of stone-retaining wall, 1 foot lower than track; chiseled square
631.90

Brownhelm, 120 feet east of Lake Shore \& Michigan Southern R. R. depot, north side of tracks, top of southwest corner of concrete base to electric signal box; chiseled square
650.79

Brownhelm, Lake Shore \& Michigan Southern R. R. bridge 141, over highway, on west side of and 5 feet above driveway, in third layer of stone from ground, at south end of old stone abutment, 6 inches north of junction of concrete and stone masonry; bronze peg (stem of old tablet, top of which has been destroyed) set in face of, marked "U. S. B. M. 642 "
642.112

\section*{WARREN QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(80^{\circ} 45^{\prime}-81^{\circ}\).] Precise leveling by the Coast and Geodetic Survey.
From Berlin Center northeast along Pennsylvania R. R. to point near Niles,
Berlin Center, Mahoning County, 70 meters north of Pennsylvania R. R. station, 15 meters east of tracks, base of the southwest support of railroad water tank; chiseled square (C. \& G. S. b. m. We )
Ellsworth, about 90 meters south of Pennsylvania R. R. station, in northwest corner of large stone step of public-school building; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. We) _
\(1,120.666\)
Rosemont, southeast corner of Pennsylvania R. R. station, on curbing of platform, 5 centimeters from building; chiseled square (C. \& G. S. b. m. X \({ }_{6}\) )
\(1,071,456\)
Rosemont, 100 meters west of Pennsylvania R. R. station, on public highway, in middle of the north coping of the stone culvert; chiseled square marked "U.S.B.M." (C. \& G. S. b. m. Y \({ }_{6}\) )
Rnsemont, about 0.3 mile west of station, at public-road crossing, in northwest corner of public-school grounds; red-metal cap on iron post (C. \& G. S. b. m. Z \(\mathrm{Z}_{6}\) )

1, 065.557
North Jackson, about 0.25 mile east of Pennsylvania R. R. station, in southwest corner of east abutment of highway bridge; red-metal disk (C. \& G. S. b. m. A \({ }_{7}\) )
\(1,014.652\)
North Jackson, 45 meters southeast of station at corner of fence, 40 meters east of railroad crossing; red-metal cap on iron post (C. \& G. S. b. m. B \({ }_{7}\) )

1, 024. 622

North Jackson, 1.4 miles north of, on Pennsylvania R. R. right of way, one telegraph pole from milepost 7 , in middle of east coping
of concrete-arch bridge 10 ; chiseled square marked "U.S." (C. \& G. S. b. m. \(\mathrm{C}_{7}\) )

Feet.
1, 001. 462
Lordstown, Trumbull County, northwest corner of road crossing, four telegraph poles north of milepost 5 , in corner of fence, on land belonging to Ada Horn; red-metal cap on iron post (C. \& G. S. b. m. \(\mathrm{D}_{7}\) )
949. 010

Lordstown, about 0.8 mile north of, on Pennsylvania R. R. right of way, at milepost 4 , on west end of north abutment to bridge 6 ; chiseled square (C. \& G. S. b. m. E \(\mathrm{E}_{7}\) )
919.845

Niles, 2 miles southwest of, near Boenna Crossing, on Baltimore \& Ohio R. R. right of way, 328 feet east of Pennsylvania R. R. track, on lower step of the undergrade crossing bridge 423 ; red-metal disk (C. \& G. S. b. m. F \(\mathrm{F}_{7}\) )
899.342

Primary leveling by H. W. Peabody in 1905.
From Newton Falls north to Braceville, thence west to Windham.
Newton Falls, southeast corner of high-school building, in water table over basement window facing east; aluminum tablet stamped " 927 Adj 1903 "
Braceville, crossing at station; top of rail_
From Newton Falls south along highway to Berlin Center, thence east to Canfield, thence north to West Austintown, thence west to Jackson Center, thence north to Lordstown, thence east to Niles.
Pricetown, 200 feet east of crossroads, in south face of southeast corner of Methodist Church; aluminum tablet stamped " 942 Adj 1903"
Berlin Center, 4 miles north of, 3 miles west of Rosemont, 400 feet west of northwest corner of crossroads, in south face of southeast corner of barn of Charles Smith; aluminum tablet stamped " 1023 Adj \(1903 "\) \(\qquad\)
Berlin Center, 450 feet east of crossroads, on south side of road, in stone doorsill to main entrance to M. E. Church; aluminum tablet stamped " 1075 Adj 1903 "
\(1,075.166\)
Berlin Center, 2.5 miles east of, 2.5 miles west of Ellsworth, inside of fence at northeast corner of crossroads; iron post stamped " 1159 Adj 1903 " (Prim. Trav. Sta. No. 39)

1, 159. 304
Ellsworth (center), at southeast corner of Presbyterian Church, in top of stone platform to entrance; aluminum tablet stamped "1068 Adj 1903"

1,068. 057
Canfield, in south face of southeast corner of Presbyterian Church; aluminum tablet stamped " 1162 Adj 1903 "

1, 162.238
Canfield, in park in center of town, 2 feet west of band stand; iron post stamped "Prim. Trav. Sta. No. 143 "
West Austintown, at southwest corner of crossroads, in north face of northwest corner of United Evangelical Church; aluminum tablet stamped " 1012 Adj 1903 "

1,012. 182
Jackson Center, 0.2 mile east of main crossroads, south of road, in north face of northeast corner of townhouse; aluminum tablet stamped " 1035 Adj 1903 " (probably removed 1914)
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1,034.634

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Lordstown, west side of road, 0.2 mile north of principal crossroads, in east face of northeast corner of Disciples Church, northeast corner sec. 6, T. 3 N., R. 4 W.; aluminum tablet stamped " 954 Adj 1903 "

Niles, sec. 5, T. 3 N., R. 3 W., at southwest corner of Main and West Church streets, in north face of northeast corner of First Presbyterian Church; aluminum tablet stamped " 890 Adj 1903 " \(\qquad\)
Feet.
889.871
880.105

Leavittsburg, northwest corner sec. 24, T. 4 N., R. 4 W., 400 feet west of station, northwest corner of Erie R. R. bridge over Duck Creek, in coping stone next to top; aluminum tablet stamped " 895 Adj 1903 "

\section*{WAUSEON QUADRANGLE.}
[Latitude \(41^{\circ} 30^{\prime}-41^{\circ} 45^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Primary leveling by C. E. Mills and C. W. Howell in 1911.

\section*{From point 3 miles east of Archbold to point 3 miles south of Delta.}

Archbold, 3 miles east of, southwest corner of sec. 36 , German township, at road crossing; spike in base of telephone pole \(\qquad\)
Archbold, 4 miles east of, at northwest corner of crossroads; iron post stamped " 749 Ohio"
742.99
748. 725

Archbold, 5 miles east of, southeast corner of sec. 31, Clinton Township, at road crossing; spike in base of telephone pole
760.18

Wauseon, 2.5 miles west by 2 miles south of, at road crossing; spike in base of fence post
762.79

Wauseon, 2 miles south by 1.5 miles west of, at southwest corner of crossroads; iron post stamped " 756 Ohio"
Wauseon, 2 miles south by 0.5 mile west of, at southeast corner of bridge at crossroads ; chiseled circle, painted "T. B. M. 739.3 "
Wauseon, 2 miles south by 0.5 mile east of, at southeast corner of crossroads; spike in post, painted "T. B. M. 739.6 "
739. 74

Wauseon, 2 miles south by 1.5 miles east of, at northwest corner of crossroads; iron post stamped " 736 Ohio"
736. 533

Wauseon, 3 miles south by 1.5 miles east of, at southwest corner of crossroads; spike in telephone pole, painted "T. B. M. 717.6" (on unchecked spur line)

Wauseon, 2 miles south by 2.5 miles east of, at southwest corner of crossroads; spike in base of telephone pole, painted "T. B. M. 718.9 " \(\qquad\) 719.07

Wauseon, 2 miles south by 3.5 miles east of, at northwest corner of crossroads; spike in telephone pole, painted "T. B. M. 708.8"
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Wauseon, 2 miles south by 4.3 miles east of, at southwest corner of crossroads; iron post stamped " 701 Ohio"
708.92
701. 584

Wauseon, 2 miles south by 5.5 miles east of, at northwest corner of crossroads; spike in telephone pole, painted "T. B. M. 694.3"
694. 44

Wauseon, 2 miles south by 6.5 miles east of, at southeast corner of T road south; spike in corner post, painted "T. B. M. 687.6"
687. 74

Wauseon, 2 miles south by 7 miles east of, at southeast corner of \(\boldsymbol{T}\) road south; spike in post, painted "T. B. M. 685.7 "
685. 88

Wauseon, 2 miles south by 7.3 miles east of, at northwest corner of T road north to Delta; iron post stamped " 690 Ohio "
690.216

Liberty Center, 4 miles north of, at southeast corner of crossroads; spike in corner post, marked "T. B. M. 687.3"
Delta, 3 miles south of, at crossroads; spike in base of telephone pole, painted " 687.953 "
Feet.
688.07

\section*{From Eckley east and south along highways to Wauseon.}
Eckley, 0.8 mile north of, at southwest corner of crossroads; painted square on concrete base of iron post 7.2 feet high, marked " 744.09 "-
Eckley, 0.8 mile north by 1 mile east of, northwest corner of crossroads; spike in base of telephone pole, marked " 745.8 " \(\qquad\)
Eckley, 0.8 mile north by 2 miles east of, in southeast corner of T road south, northwest corner of schoolhouse yard; iron post stamped " 751 "
Eckley, 0.8 mile north by 3 miles east of, northwest corner of crossroads; spike in base of fence post, marked " 760.9 " \(\qquad\)
Wauseon, 1.8 miles north by 1.25 miles west of, southeast corner of crossroads; spike in base of fence post, marked " 781.4 "
Wauseon, 1.8 miles north of, northeast corner of crossroads; iron post stamped " 789 " \(\qquad\)
Wauseon, southeast corner of Ottokee and West Linfoot streets, at east end of water trough; chiseled square on stone, marked " 773.1 "
Wauseon, 20 feet east of station, at road crossing; top of north rail, marked " 763.2 "

Wauseon, southwest corner of Depot and North Fulton streets, 1 foot from water plug; chiseled square on stone curbing, marked " 770.3 " \(\qquad\)
Wauseon, 0.25 mile east by 1.25 miles south of, northeast corner of crossroads; spike in base of telephone pole, marked " 745.7 " \(\qquad\)
Wauseon, 0.25 mile east by 2.25 miles south of, southeast corner of crossroads; spike in base of fence post, marked " 739.649 " \(\qquad\)
From point 1.8 miles north of Wauseon east along highway to point 1 mile southeast of Delta,

Wauseon, 1.8 miles north by 0.8 mile east of, northeast corner of crossroads; spike in base of telephone pole, marked " 769.1 "
Wauseon, 1.8 miles north by 1.8 miles east of, southeast corner of crossroads; spike in base of fence post, marked " 766.5 "
Wauseon, 1.8 miles north by 1.8 miles east of, southeast corner of crossroads; spike in base of telephone pole, marked " 762.6 "
Delta, 4 miles west of, southeast corner of crossroads; iron post stamped " 753 " \(\qquad\)
Delta, 3 miles west of, northwest corner of crossroads, northeast corner of platform, in wooden pump; spike head painted white, marked " 754.9 "
Delta, 2 miles west of, northwest corner of crossroads; spike in base of telephone pole, marked " 744.4 "
Delta, 1 mile west of, at southeast corner of \(T\) road south, at corporation line; spike in base of telephone pole, marked " 733.9 " \(\qquad\)
Delta, west side of city hall, in lawn between sidewalk and street, 50 feet north of Main Street; iron post stamped " 723 Ohio" \(\qquad\)
Delta, 300 feet east of station, at railroad crossing; top of south rail, marked " 721.8 "
Delta, 1 mile southeast of, at southeast corner of T road; nail in base of fence post, marked " 709.3 "
769.44
766. 78
744.27
745.99
751.317
761.14
781.68
789. 484
773.36
763. 50
770.61
746. 00
739. 74
762.91
753. 229
755.14
744. 60
734. 12
723.226
722.0
709. 45

\section*{From point 1.8 miles north of Wauseon north and east along public road to point 5 miles north of Delta.}
Wauseon, 2.8 miles north of, at northwest corner of crossroads;

Feet.

785.68

786. 185
\(\begin{array}{lll}\text { Ottokee, } 1 \text { mile west by } 1 \text { mile north of, at northwest corner of } & \\ \text { crossroads; spike in fence post, marked " } 791.2 \text { " } & \end{array}\) Ottokee, 1 mile west by 1.5 miles north of, on south end of east wing of concrete culvert; top of masonry, marked "783.1"
783. 41

Ottokee, 1 mile west by 2 miles north of, at northeast corner of
crossroads; spike in fence post, marked " 794.6 "----------- 794.97
Oak Shade, 2 miles south of, at southeast corner of crossroads; iron post stamped "798 Ohio"
798.613

Oak Shade, 2 miles south by 0.5 mile east of, at northwest corner of crossroads; spike in fence post, marked " 787.36 "
787. 20

Oak Shade, 2 miles south by 1 mile east of, at northeast corner of crossroads; spike in fence post, marked " 779.5 "
779.81

Oak Shade, 2 miles south by 2 miles east of, at northwest corner of crossroads; white cross on concrete trough, marked " 780.4 "
780.67

Winimeg, 1 mile north by 1 mile west of, at southeast corner of
crossroads; iron post stamped " 768 Ohio"---------- 768.108
Winimeg, 0.5 mile west by 1 mile north of, at T road south; spike in fence post, marked " 774.3 "
774. 48

Winimeg, 1 mile north of, at southeast corner of crossroads; spike in fence, marked "767.1" \(\qquad\)
Winimeg, 1 mile north by 0.5 mile east of, at southeast corner of crossroads; spike in fence, marked " 756.9 "
767. 31
757. 12

Delta, 4.8 miles north by 1.8 miles west of, at northeast corner of
crossroads ; iron post stamped " 755 Ohio"------------------- 755.035
Delta, 4.8 miles north by 0.8 mile west of, at southeast corner of crossroads; spike in fence post, marked "755.4"
755. 55

Delta, 4.8 miles north of, at southwest corner of crossroads; spike in fence post, marked " 765.0 "
765. 09

From point 6.25 miles north of Wauseon west along highway to point 1 mile west of Thelma.

Oak Shade, 2 miles south by 1 mile west of, at southwest corner of crossroads; spike in fence post, marked " 809.8 "
810.15

Oak Shade, 2 miles south by 2 miles west of, at T road east; spike in fence post, marked " 766.2 " \(\qquad\)
Spring Hill, 3 miles north of, at southwest corner of crassroads; iron post stanoped " 732 "
766. 6
732.405

Thelma, north end of lower concrete step, at T road east; west end of stone, marked " 739.2 " \(\qquad\)
Thelma, 1 mile west of, at T road east; spike in fence post, marked " 723.7 "
739. 65
724.13

From point 2 miles south of Oak Shade north and east along highways to point 1 mile northeast of Seward.
Oak Shade, 1 mile south of, at southwest corner of crossroads; spike in fence, marked " 796.8 "
797.18

Oak Shade, northwest corner of T road north; iron post stamped "808 Ohio"
808.156

Oak Shade, 2 miles north by 1 mile west of, at southeast corner of crossroads ; iron post stamped "806 Ohio"
Oak Shade, 2 miles north by 2 miles west of, at northwest corner of crossroads; spike in fence, marked " 766.1 "
Oak Shade, 2 miles north by 3 miles west of, at southwest corner of crossroads; spike in fence post, marked " 748.1 "
Oak Shade, 2 miles north by 4 miles west of, at northeast corner of crossroads; iron post stamped " \(\tau 46\) Ohio"

Ritters, 1 mile east by 0.5 mile south of, at southeast corner of crossroads; iron post stamped "Prim. Trav. Sta. No. 24, 1905, 751"
From Delta north along highways to point 4 miles northeast of Lyons (portion of line).

Delta, 1 mile north of, southeast corner of crossroads; spike in base of fence post, marked " 741.8 "
Delta, 2 miles north of, northwest corner of crossroads ; spike in base of fence post, marked " 744.6 " \(\qquad\)
Delta, 3 miles north of, southwest corner of T road south; iron post stamped " 746 "
Delta, 4.25 miles north of, southwest corner of crossroads; spike in base of fence post, marked " 754.4 "
Delta, 5 miles north of, southwest corner of crossroads; spike in base of fence post, marked " 764.9 "
Siney, 0.5 mile west of, southwest corner of crossroads; iron post stamped " 754 "

Siney, 0.5 mile west by 1 mile north of, southeast corner of \(T\) road south; spike in base of fence post, marked " 750.2 ". \(\qquad\)
lyons, 3 miles east by 1 mile north of, 50 feet west of crossroads, on top of east wing wall of north abutment of small iron bridge over Bear Creek; chiseled square, marked " 738.674 "
806. 152
766. 45
748. 44
746.431
751.771
747. 260
754. 60

Feet.
811.89
799.11
799.15
780.606
772.96
766. 86
758.402
754. 78
750.60
738. 89
\[
0
\]
741.93
744. 74
765. 09
754. 696
750.39
738. 89

WAVERLY QUADRANGLE.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(82^{\circ} 45^{\prime}-83^{\circ}\).]
Precise leveling by N. A. Campbell and W. H. Monahan in 1906.
From Locks to Glen Jean along Norfolk \& Western Ry.
Locks, 1.92 miles south of, top of railroad culvert west of track; aluminum tablet stamped " 589 " \(\qquad\) Higby station, in front of ; top of rail

Feet.
589.213
593.8

Higby, 0.12 mile south of, railroad bridge, west side of track, north abutment, top of retaining wall; aluminum tablet stamped " 589 "-
Higby, 1.03 miles south of, top of railroad culvert, west of track; chiseled square
588.732
589.82

Higby, 2.05 miles south of, top of railroad culvert, west of track; chiseled square
605.89

Omega, in front of station; top of rail
596.8

Omega, 385 feet south of, railroad girder bridge, west side of track, north abutment, top of retaining wall; aluminum tablet stamped " 596 "
595. 636

Omega, 1.29 miles south of, north abutment railroad bridge, west of track; chiseled square
594. 69

Omega, 2.71 miles south of, north abutment of railroad bridge, east side of track; aluminum tablet stamped " 571 "
571. 034

Waverly, in front of station; top of rail
571.5

Waverly, 0.29 mile south of, north abutment of railroad bridge, on top of retaining wall, east side of track; aluminum tablet stamped " 570 "
569. 824

Glen Jean, in front of station; top of rail
573.4

Glen Jean, 0.49 mile south of, south abutment of railroad bridge over river, east side of track, top of retaining wall ; chiseled square_-
Glen Jean, 2.73 miles south of, highway bridge over creek, west side of north abutment; aluminum tablet stamped " 562 "
578. 716
561. 829

Primary leveling by R. C. Seitz in 1906.

\section*{From Waverly north along highway to Waller.}

Waverly, in courthouse yard, west corner ; iron post stamped " Prim. Trav. Sta. No. 16, 500 "
589. 382

Alma, bridge over Crooked Creek, in north wing of west abutment; aluminum tablet stamped " 620 "
619. 290

Waller, 2.90 miles south of, 235 feet north of T road west, at east end of culvert; aluminum tablet stamped " 813 "
812. 752

From Stockdale north to Beaver, thence west along Detroit, Toledo \& Ironton R. R, to point near Glen Jean Junction,

Robbins, 0.4 mile south of station, in northeast corner of churchyard at Beaver Chapel ; iron post stamped "Prim. Trav. Sta. No. 18, 656 "
656.123

Givens, 0.5 mile west of station, on top of stone culvert ; aluminum tablet stamped " 658 "
658.190

From Omega southeast to Cars Run school, thence south to Robbins.
Omega, 4.80 miles south of, on east side of road, at Cars Run Methodist Church (colored), on top of corner stone separating property of Andrew Harris and Colwine Cotton; aluminum tablet stamped " 601 "

Robbins, 4.20 miles north of, west side of road, on Cars Run, at south-
east corner of foundation of schoolhouse (district 17) ; aluminum tablet stamped " 692 "

Feet.
691.443
677.189

From point near Beaver east along highway to Glade, thence north along highway to Vigo.

Beaver, in front of station; top of rail
664.6

Reaver, at southwest corner of foundation of public-school building in large sandstone block; aluminum tablet stamped " 691 "
690.724

Glade, 435 feet south of station, at east side of road in wood lot; iron post stamped "Prim. Trav. Sta. No. 20, 687"
686.862

Glade, 3.80 miles north of, 200 feet west of Bethel Church, in sandstone outcrop halfway between fences; aluminum tablet stamped " 985 "
Limerick, in southwest corner of lot of T. J. Beatty, near iron bridge; iron post stamped "Prim. Trav. Sta. No. 19, 633"
985.103

Limerick, 3.6 miles north of, 300 feet south of house west side of road, at east end of culvert; aluminum tablet stamped " 612 " \(\qquad\)
Vigo, 2.7 miles south of, in north face of east pedestal of south arch of overhead Baltimore \& Ohio Southwestern R. R. bridge, 1,000 feet east of junction with Cincinnati, Hamilton \& Dayton Ry.; aluminum tablet stamped " 605 " \(\qquad\)
Vigo, at north side of road, 50 feet east of Baltimore \& Ohio Southwestern R. R., in base stone at southeast corner of A. C. Yoakum's brick house; aluminum tablet stamped " 617 " \(\qquad\)

\section*{Primary leveling by E. C. Bibbee in 1915. \\ Near Waller.}

Waller, 1.15 miles south by 0.92 mile west of, at the northeast corner of T lane north, in base of corner fence post; copper nail and washer, " 802.8 " painted on post (McNulta bench mark recovered) -
Waller, 1.15 miles south of, about 1,300 feet south of junction of Chillicothe-Waverly pike with Farmersville pike, in southwest corner of bridge, in forks of road; top of driftbolt, " 679 " marked on bridge
632.512
611.477
605. 262
616. 604
801.24
680.23

Waller, 2.04 miles south of, on Waverly-Chillicothe pike, 50 feet south of lane leading to W. E. Riley's residence, on center of west end of stone box culvert; chiseled square, " 745 " marked on culvert

WAYNESVILLE QUADRANGLE.
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(84^{\circ}-84^{\circ} 15^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey.
From Dayton south along Cincinnati, Hamilton \& Dayton Ry, to Alexandria.
Dayton, 2.5 miles south of, in Van Buren township, on Cleveland, Cincinnati, Chicago \& St. Louis Ry., viaduct bridge over highway, midway between Miami River bridge and canal bridge, on north abutment, southeast corner of bridge-seat course, 9 inches from either face and 15 feet east of truss; chiseled square (C. \& G. S. b. m. \(\mathrm{E}_{4}\) ) (destroyed)

\section*{Dayton, 4 miles south of, on Cincinnati, Hamilton \& Dayton Ry., southwest quarter of culvert 39 , west end of bridge-seat course, \(\mathcal{E}\) \\ Feet.}
inches east of west end ; chiseled square (C. \& G. S. b. m, C \(\mathrm{C}_{3}\) )
728. 374

Primary leveling by E. C. Bibbee in 1912 and F. L. Whaley in 1914.
From Dayton southeast along highway to Alpha, thence northeast 4 miles.
Dayton, Wayne Market building on corner of South Wayne and Burns avenues, on foundation south side at first entrance from west; chiseled square \(\qquad\)
Dayton, at junction of Wayne Street and Williamstown pike, on south side of street, at entrance to asylum, on curb; chiseled square
739.92
895.65

Bellmont, junction of Dayton, Springfield \& Xenia Southern with Spring Valley Electric R. R., 10 feet northwest of, on stone hitching post near northeast corner of crossroads ; highest point_-
Bellmont, 1 mile east of, on Dayton, Springfield \& Xenia Southern R. R., on south abutment east side of concrete bridge over creek at lane leading to Jacob Weng's dairy ; chiseled square \(\qquad\)
Shakertown, 500 feet east of crossroads, on Dayton, Springfield \& Xenia Southern R. R., on east abutment north side of steel bridge; chiseled square \(\qquad\)
Alpha, 3 miles northwest of, at power house for Dayton, Springfield \& Xenia Southern R. R., northwest of crossroads, in stump of telephone pole level with ground; spike
860.89

Alpha, 3 miles west of, at northwest corner of crossroads, near residence of Perry Hawker; iron post stamped " 913 Ohio "
913. 464

Alpha, 2 miles west of, 115 feet west of crossroads, on north end of concrete culvert under wagon road; chiseled square \(\qquad\)
Alpha, 1.1 miles west of, on south abutment east side of concrete culvert under wagon road No. 149 ; chiseled square \(\qquad\)
Alpha, 0.25 mile west of, at southwest corner of crossroads; iron post stamped " 801 Ohio" (this post was nearly washed out and reset, elevation by 1914 line)
801. 474

Alpha, 0.6 mile north of, 50 feet east of \(T\) road south, on west end south side of concrete wing wall of bridge; chiseled square (1913 and 1914)
825.58

Alpha, 1.4 miles north of, in guard post on northwest corner of small overhead bridge; first bolthead
866.15
\(\begin{array}{ll}\text { Alpha, } 2.2 \text { miles north of, } 50 \text { feet north of } T \text { road west, on north } \\ \text { abutment west side of small bridge; chiseled square_-....- } & 840.76\end{array}\)
Alpha, 2.8 miles northeast of, on east abutment south side of iron bridge over Beaver Creek; chiseled square
813. 47
825.95

Alpha, 1.5 miles east of, at \(\mathbf{T}\) road north, north end of concrete culvert ; chiseled square, painted " 825.6 T. B. M."
From point near Dayton southeast to Whites Corners, thence east to Bellbrook, thence northeast and north to Alpha.
Dayton, 3.6 miles southeast of, at southeast corner of intersection of Patterson road and Dayton-Wilmington pike; iron post stamped "952 Ohio"
952.237

Beavertown, 0.4 mile north of, on south end west side of abutment of iron bridge ; chiseled square
\[
45281^{\circ}-\text { Bull. } 651-17-26
\]
931. 39


Beavertown, 15 feet north of northwest corner of crossroads, on east end of concrete walk leading to W. Davis's residence; chiseled square \(\qquad\)
Beavertown, 1.1 miles southeast of, on Dayton, Springfield \& Xenia Southern traction line, on north end of flange on iron box, 50 feet north of railroad crossing; highest point
Beavertown, 2.1 miles southeast of, in forks of road in front of Sugar Creek United Presbyterian Church; iron post stamped "996 Ohio"

\section*{Feet.}
984. 58
960.00
996.176

Beavertown, 2.9 miles southeast of, 600 feet north of stop 219 , on north end west side of bridge on Spring Valley traction line; chiseled square
972.18

Beavertown, 3.9 miles southeast of, 300 feet south of stop 222 on Dayton, Springfield \& Xenia Southern traction line, at southeast corner of T road east; copper nail in root of maple tree
983.00

Bellbrook, 2.6 miles northwest of, on northeast corner of stone box culvert; chiseled square
948. 89

Bellbrook, 2.2 miles west of, at T road north called Whites Corner, on large granite rock on south side of road; chiseled square \(\qquad\)
Bellbrook, 1.2 miles west of, 1,000 feet northeast of T. L. Wilson's residence, on north end west side of retaining wall to stone box culvert; chiseled square \(\qquad\) 900.39

Bellbrook, at northeast corner of Methodist Church; iron post stamped " 796 Ohio"
796.250

Bellbrook, 0.3 mile east of, at northeast corner of T road north, on south abutment east side of small iron bridge ; chiseled square...-
Bellbrook, 1.5 miles northeast of, 30 feet north of Little Miami River, on south abutment east side of iron bridge over small creek; chiseled square
769. 22

Alpha, 5.4 miles south of, 200 feet northwest of J. Mullin's residence, on south abutment east side of bridge; chiseled square
774.98

Alpha, 4.4 miles south of, on east abutment north side of iron bridge 132 ; chiseled square
814. 64

Alpha, 3.4 miles south of, on Upper Bellbrook pike, 1,000 feet northeast of J. R. Smith's residence, at northeast corner of T road southeast; iron post stamped " 898 Ohio"
Alpha, 2.3 miles south of, on retaining wall north end east side of abutment of bridge opposite residence of George Sellars; chiseled square
846. 48

Alpha, 1.5 miles south of, 12 feet northeast of elm tree at lane leading to S. M. Spah's residence; on rock; chiseled square \(\qquad\) 877.64

Alpha, 0.7 mile southwest of, on south abutment east side of small iron bridge 165 ; chiseled square
789.19

From Dayton south along highway to point 3 miles west of Centerville, thence east to point near Bellbrook.

Dayton, at northwest corner of intersection of Washington and Cincinnati streets; on curb; chiseled square
739.33

Dayton, 1.9 miles south of, on Cincinnati Street, 170 feet south of L. Jenny's residence, on south end of sidewalk on west side of street; chiseled square
733.04

Dayton, 2.9 miles south of, in southwest angle of forks of \(Y\) road, 150 feet west of Charles Hollman's residence, on Springboro pike; Iron post stamped " 729 Ohio"

\section*{Dayton, 4 miles south of, on Springboro pike, on top step at entrance to brick schoolhouse ; chiseled square \\ Feet. \\ 745.85}

Dayton, 5.4 miles south of, 17 feet north of Ohio Electric R. R. crossing at stop 9 , on Springboro pike, in center of north abutment of concrete culvert; chiseled square
729.48

Dayton, 6.5 miles south of, at junction of Springboro and Alexander and Bellbrook pikes, at southeast corner of crossroads; iron post stamped " 730 Ohio" \(\qquad\)
Dayton, 7.5 miles south of, on Alexander-Bellbrook pike, on south abutment east side of large iron bridge; chiseled square \(\qquad\)
Dayton, 8.8 miles south of, at junction of Mad River pike and Alexander-Bellbrook pike, on large limestone rock on west end of culvert at northwest corner of crossroads ; chiseled square \(\qquad\)
Dayton, 9.7 miles south of, on Mad River road, on east abutment north side of iron bridge; chiseled square
806.07
901.32

Centerville, 3 miles west of, 300 feet north of junction of Mad River pike and Madisonville-Centerville pike, on north abutment west side of small bridge; chiseled square
730.220
759.51

Centerville, 3.5 miles west of, at intersection of Dayton-Springboro and Centerville-Madisonville pikes, southeast corner; iron post stamped "Prim. Trav. Sta. No. 47 Ohio 1909, 993 " \(\qquad\)
Centerville, 2 miles west of, on west abutment south side of iron bridge, at junction of Centerville-Madisonville pike with Yankee road; chiseled square
895.55

Centerville, 1.3 miles west of, on concrete abutment west side of small iron bridge; chiseled square
898.80

Centerville, on curb at southeast corner of crossroads; chiseled square
\(1,020.30\)
957.58

Bellbrook, 3.5 miles west of, 15 feet north of southwest corner of \(T\) road south, on west end of stone culvert ; chiseled square
Bellbrook, 3 miles west of, at northwest corner of \(T\) road north, iron post stamped "Prim. Trav. Sta. No. 46 Ohio 1909, 973"
973.219

From point near Centerville south along highway to Red Lion.
Centerville, 2.5 miles southwest of, on Yankee road, on south abutment west side of bridge 95,500 feet north of \(T\) road east; chiseled square
907. 03

Centerville, 4 miles southwest of, on Yankee road, at southwest corner of T road west; iron post stamped " 943 Ohio"
943.123

Centerville, 4.7 miles southwest of, on Yankee road, at southwest corner of lane west, on sandstone rock on property line; chiseled square
973.99

Springboro, 1.7 miles northeast of, at junction of Yankee road and Five Points road, on north abutment east side of iron bridge; chiseled square
875. 83

Springboro, 1 mile east of, on Five Points road, 25 feet north of northwest corner of crossroads; iron post stamped " 906 Ohio"----
905. 520

Springboro, 1 mile east of, at southeast corner of crossroads, on gate hinge in corner post, about 6 inches above ground; highest point_-
Springboro, 1.5 miles southeast of, on south abutment west side of large iron bridge over Clear Creek; chiseled square
Red Lion, 2.2 miles north of, on Red Lion and Springboro road,

Feet.
921.546
910.14
Red Lion, 1.2 miles north of, on east end of concrete culvert at T road west; chiseled square
From point near Springboro east along highway to Venable, thence north to
point near Centerville.
Springboro, 1.6 miles east of, on west end of second step at entrance to brick schoolhouse (district 5) ; chiseled square \(\qquad\)
Springboro, 2.4 miles east of, on southeast corner of large girder bridge, painted; highest point
809. 70
786. 63
Ridgeville, at northwest corner of crossroads; on west end of concrete culvert; chiseled square
867. 28
Ridgeville, 1 mile east of, at southwest corner of T road south; iron post stamped " 939 Ohio"
939. 220
Ridgeville, 1.5 miles east of, at Venable (flag stop), 100 feet west of railroad crossing, in root of 1 -foot elnt tree, 12 feet south of south property line; copper nail_
947. 23
Edgewood station, 600 feet northeast of, at northwest corner of railroad crossing, on west end of stone culvert under wagon road; chiseled square
998.83
Lytle, 0.25 mile east of post office, at northeast corner of crossroads, 12 feet south of southwest corner of M. E. Church; iron post stamped " 1013 Ohio" \(\qquad\) Lytle, 1.5 miles north of, in forks of road, in root of elm tree 5 feet in diameter; copper nail
1,012. 819
994. 38
Lytle, 2 miles north of, on Green-Montgomery county line, at northwest corner of crossroads on limestone county-line rock; chiseled square
983.27
Lytle, 2.9 miles north of, on Anthony Wayne pike, on east side of road at T road west; iron post stamped " 969 Ohio"
968. 908
Centerville, 2 miles southeast of, at northwest corner of Anthony Wayne pike and Spring Valley road, on large limestone rock on west end of culvert; chiseled square
931. 79

From point near Ridgeville east along highway to Waynesville, thence north to Bellbrook.

Ridgeville, 2.1 miles east of, at northwest corner of \(T\) road west; on large anchor rock; chiseled square
920.14

Waynesville, 2 miles southwest of, 1,000 feet northwest of Chas. Grey's residence ; on north abutment east end of concrete culvert; chiseled square
861. 22

Waynesville, 1.1 miles south of, at T road east; on south abutment of east side of iron bridge; chiseled square
724.67

Waynesville, 60 feet east of southeast corner of Corwin Avenue and North Street; iron post stamped " 754 Ohio"
753. 714

Corwin, 1.2 miles north of ; on northwest corner of north abutment of bridge 56 ; chiseled square
728. 44

Corwin, 1.8 miles north of, on northeast corner of north abutment of bridge 54 ; chiseled square
725. 40

Corwin, 3.1 miles north of, on northwest corner of north abutment of bridge 51 ; chiseled square
727.21

Corwin, 4.2 miles north of, on northwest corner of bridge 49 (stonearch culvert; chiseled square
Roxanna, 50 feet west of railroad, on railroad right of way, at cross- Feet. ing; iron post stamped " 755 Ohio" ..... 754.567
Spring Valley, 0.7 mile south of, on northeast corner of stone-arch culvert; chiseled square ..... 756. 56
Spring Valley, 6 feet east of railroad at crossing, on northwest cor- ner of concrete porch in front of Spring Valley Mercantile Store; chiseled square ..... 758.92
Spring Valley, 1.1 miles north of, on north abutment east side of wagon bridge over Gladys Run; chiseled square ..... 774.11
Bellbrook, 3.5 miles east of, north side of Lower Bellbrook pipe, at road northeast; iron post stamped " Prim. Trav. Sta. No. 45 Ohio 1909, 926 " ..... 925.572
Bellbrook, 2.5 miles east of, on concrete foundation at west side of east entrance to brick schoolhouse; chiseled square ..... 926. 70
Bellbrook, 1.2 miles east of, in girder at southeast corner of covered bridge over Little Miami River; copper bench-mark nail ..... 768.78
From point near Waynesville southeast to Harveysburg.
Corwin, 60 feet east of railroad crossing, in front of Robert Montjoy'sstore, on large granite rock; chiseled square735. 79
Corwin, 1 mile east of, on south end of culvert at lane leading to William Thompson's residence; chiseled square ..... 861.66
Corwin, 2 miles east of, 600 feet north of residence of P. D. Clagett, in forks of \(Y\) road; iron post stamped " 892 Ohio " ..... 891.982
Corwin, 3.2 miles east of, on northeast corner of retaining wall toeast abutment of small iron bridge; chiseled square849. 46
Harveysburg, 0.5 mile west of, 100 feet west of bridge over CaesarsCreek, on west abutment north side of concrete bridge over millrace; chiseled square793.88
Harveysburg, 0.5 mile east of, 150 feet west of crossroads, on eastabutment south side of iron bridge; chiseled square899.28
WELLINGTON QUADRANGLE.
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\).]
Precise leveling by the Baltimore \& Ohio R. R.
From point 2 miles southwest of Lodi west to point 1.5 miles west of Sullivan, 1
Lodi, Medina County, 2 miles southwest of, in northwest end of smallculvert at telegraph pole \(38 / 25 \frac{1}{2}\); copper bolt (B. \& O. b. m. 473) --914.365
Lodi, 3 miles southwest of, on bridge 118, at telegraph pole \(39 / 24 \frac{1}{2}\); copper bolt (B. \& O. b. m. 474) ..... 943. 523
Lodi, 4 miles west of, telegraph pole \(40 / 27\), in north corner of west abutment on bridge 120 ; copper bolt (B. \& O. b. m. 475) ..... 991. 217
Homer, 1.8 miles east of, in south end of small culvert at telegraph pole \(41 / 18\); copper bolt (B. \& O. b. m. 476) ..... 1, 011. 129
Homer, 0.25 mile east of, at milepost 33 ; section of rail set verticallyin ground (B. \& O. b. m. 477)\(1,074.159\)
Newtons, 500 feet west of, at telegraph pole \(44 / 10\); section of rail set vertically in ground (B. \& O. b. m. 478) ..... \(1,095.284\)
Newtons, 1 mile west of, in south end of small culvert at telegraphpole \(45 / 10\); copper bolt (B. \& O. b. m. 479)\(1,094.515\)
Newtons, 1.8 miles west of, set in north end of small culvert at milepost 30 ; copper bolt (B. \& O. b. m. 480) ..... \(1,101.007\)

\footnotetext{
\({ }^{1}\) Most of these bench marks have been destroyed by a change of roadbed.
}

\title{
Sullivan, Ashland County, 1.5 miles east of, at milepost 29 ; section Feet. of rail set vertically in ground (B. \& O. b. m. 481) _-__ 1, 119. 297 \\ Sullivan, at southwest corner of schoolhouse, in vertical surface of
water table; bronze tablet stamped " 1136 Canton Adj 1903"----1, 137. 443 \\ Sullivan, about 300 feet east of station, on culvert at telegraph pole \(48 / 14\), in the west end of north coping; copper bolt (B. \& O. b. m. 482) \\ 1, 122. 261 \\ Sullivan, about 1.5 miles west of, at milepost 26 ; section of rail set vertically in ground (B. \& O. b. m. 483) \\ 1, 126. 851 \\ Primary leveling by C. R. Henry in 1904 and G. M. Dimmick in 1905. \\ From Belden south along highway to Lodi.
}

Iitchfield, 300 feet south of square, in east wall of public schoolhouse; aluminum tablet stamped " 1010 Canton"
\(1,010.143\)
Chatham, in northeast corner of foundation of Academy Hall, public school; bronze tablet stamped "Prim. Trav. Sta. No. 23, A 1094 "--

1,094. 535
From Lodi west along Baltimore \& Ohio R. R. and highway to Sullivan.
Lodi, at northeast corner of Taylor Inn, in stone step; bronze tablet stamped "Prim. Trav. Sta. No. 4, 927 "
927. 406

Esselburn, 1 mile east of, in north side of northeast corner of stone culvert; bronze tablet stamped " 946 Canton"
946. 422

Homerville, 400 feet north of square, in foundation of private residence; bronze tablet stamped " 1083 Canton" 1,083. 776
Sullivan, in southwest corner of schoolhouse; bronze tablet stamped "Prim. Trav. Sta. 1136 Canton"

1, 137. 443
From Sullivan north along highway to Wellington.
Sullivan, 3 miles north of, 0.25 mile north of crossroad, east side of road, in top of stone culvert; bronze tablet stamped " 1054 Canton"
Wellington, 3.75 miles south of, west side of road, 200 feet south of \(\mathbf{T}\) road west, in top of stone culvert; bronze tablet stamped " 928 Canton "
929. 307

Wellington, in north side of Herrick Public Library ; in stone foundation; bronze tablet stamped " 859 Canton"
860.308

Leveling in 1916 by S. R. Archer.
From Sullivan east along old Baltimore \& Ohio R. R. to Homerville.
Sullivan, 1.10 miles east of, on south side of old Baltimore \& Ohio R. R. crossing, north-south road, east side of road, in foot of south post of gate ; copper nail
Sullivan, 2 miles east of, 80 feet west of north-south road, on south side of old Baltimore \& Ohio R. R. right of way, in field, in root on northeast side of 3 -foot maple tree; copper nail
Sullivan, 3 miles east of, on east side of north-south road, south side of old Baltimore \& Ohio R. R. right of way; top of east end of 2-foot steel drain pipe under road
Homerville, 1.25 miles west of, just west of old Baltimore \& Ohio R. R. crossing Homerville-Sullivan road, on south side of road, west side of driveway to residence standing on south side of road, in root on northeast side of east tree of two maple trees in front of residence; copper nail
Homerville, northwest corner of public square, at front entrance to E. J. Nausel's general store, top of concrete step at foot of column; chiseled square, marked "U. S."

\section*{From point near Homerville west along highway to Sullivan,}

Homerville, 2.1 miles west of, 675 feet west of crossroads, 220 feet east of dwelling standing on south side of road, on south side of road at fence line, in root on northwest side of 4 -foot oak tree; copper nail

Feet.
Sullivan, 1.85 miles east of, 0.23 mile west of crossroads, 100 feet west of house standing on south side of road, top of west end of south heading of concrete culvert under road; chiseled square

1, 117. 17
Sullivan, 0.9 mile east of, 0.2 mile west of crossroads, top of southwest corner of concrete highway bridge over creek; chiseled square.

1, 119. 80
From Grafton southwest along highway to Lagrange, thence east to Belden, thence northwest to Grafton.

Lagrange station, 0.6 mile northeast of Big Four Route milepost "Cleveland 29," north side of tracks, top of west concrete post of rail stand; top spike on track side
826.85

Lagrange, in brick wall of public hall, facing Soldiers' Monument; bronze tablet stamped " 825 Canton" (Bull. 411, p. \(41=825.167\) )
825.967

Lagrange, 1 mile east of, 60 feet east of \(T\) road north, top of south end of stone culvert under highway; chiseled square
830.24

Lagrange, 1.8 miles east of, northeast corner of crossroads, at fence corner, in root on southeast side of 2 -foot maple tree; copper nail_
Belden, 2 miles west of, 125 feet west of crossroads, on north side of road at fence line, in root on south side of 2 -foot elm tree; copper nail
828. 46

Belden, 1 mile west of, 75 feet east of crossroads, on south side of road, in root on northeast side of 3 -foot elm tree; copper nail
850.11

Belden, in southwest corner of Cleveland, Lorain \& Wheeling R. R. bridge over highway; bronze tablet stamped " 874 Canton" \(\qquad\)
Belden, 0.9 mile northwest of, on east side of Cleveland, Lorain \& Wheeling R. R., top of north post of rail stand at milepost L. 17, B. 144 ; copper nail
828.03

> WELLSVILLE QUADRANGLE.
> [Latitude \(40^{\circ} 30^{\prime}-40^{\circ} 45^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).]
> Primary leveling by A. T. Bagley and R. G. DeFrees in 1902 .
> From East Liverpool north via Calcutta and Sprucevale to Clarkson.

East Liverpool, rock 28 feet wide by 35 feet long, opposite Jackson street; cut on rock (U. S. Engineer Corps bench mark 43 A) _-- --
664. 58

East Liverpool, in foundation stone at northwest corner of city hall; aluminum tablet stamped " 731 Stbnvl"
731. 155

East Liverpool, River View Cemetery, Soldiers' Memorial Hall; bottom step at southeast corner

1, 239.64
Calcutta, southeast corner of Main Street, 15 feet from Trollen store, in large rock at base of telephone pole; aluminum tablet stamped " 1108 Stbnvl"

1, 108. 082
Clarkson, across street from Clarkson Hotel, at residence of Dr. Vale, in northwest corner of stone coping under wall; aluminum tablet stamped " 1193 Stbnvl"

1, 192. 531
From East Liverpool southwest to Wellsville, thence northwest via West Point to Elkton, thence east to Clarkson.
Wellsville, corner Fifth and Main streets, under second window from north on east side of city hall, in top of foundation; aluminum tablet stamped " 709 Stbnvl"

Wellsville, 3.5 miles north of, on Lisbon road, Highland town road to west; on northwest corner of front steps to Yellow Creek Presbyterian Church; chiseled square \(\qquad\) - -

Feet. 1, 203.13
West Point, in northwest abutment of iron bridge over Beaver Creek; aluminum tablet stamped " 907 Stbnvl"
906. 148

From Wellsville along Cleveland \& Pittsburgh division of the Pennsylvania R. R. and highway via Hammondsville to Knoxville.

Hammondsville, northeast abutment of iron bridge on Wellsville road; chiseled circle
690.19

New Somerset, store of N. C. Yeagley (and former post office), in northeast girder stone; bronze tablet stamped " 1220 Stbnvl" \(1,21^{n} .364\)

\section*{From Hammondsville west along railroad to Irondale.}

Irondale, 400 feet south of Cleveland \& Pittsburgh R. R. (Pennsylvania system) track, southeast abutment of wagon bridge over North Fork Yellow Creek; bronze tablet stamped " 717 Stbnvl"--
716.918

\section*{WEST CINCINNATI QUADRANGLE.}
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(84^{\circ} \quad 30^{\prime}-84^{\circ} \quad 45^{\prime}\). ]
Precise leveling by the Coast and Geodetic Survey.
From Ivorydale south to Cincinnati, thence west to North Bend.
Ivorydale, suburb of Cincinnati, on Cincinnati, Hamilton \& Dayton Ry., 100 feet south of station, on north abutment of bridge 4 over Mill Creek, west end of bridge-seat course, 6 inches north of obtuse angle of wing wall ; chiseled square (C. \& G. S. b. m. M M )
499. 485

Winton Place, on Cleveland, Cincinnati, Chicago \& St. Louis Ry., on north abutment of bridge over Mill Creek, west end, on coping stone. The original disk has been removed; the part taken as the bench mark is highest point of ring cut in stone (C. \& G. S. b. m. U. S. G. S. No. 498) \(\qquad\)
Cincinnati, north part of city, on Miami \& Erie Canal, 0.5 mile north of Clifton Springs, on Spring Grove, tumble of canal, on north wall, second step below bridge seat, 6.6 feet west of west side of wooden bridge, 5 inches from face of stone and 6 inches from end of stone; chiseled square (C. \& G. S. b. m. Q4)
Cincinnati, north part of city, on Baltimore \& Ohio R. R., on south abutment of bridge 3 over Spring Grove Avenue, east end, on first course below bridge-seat course, on top of first course of sandstone above limestone, on its northeast corner, 6 inches from either face; chiseled square (C. \& G. S. b. m. N )
--------------------------
Cincinnati, west part of city, Baltimore \& Ohio R. R. viaduct 90 over Gist Street, north abutment, west end, on second step and second course below bridge-seat course, 5 feet 6 inches below top of rail, 16 feet west of rail, 6 inches from face of and 8 inches from end of stone ; chiseled square (C. \& G. S. b. m. O4) \(\qquad\)
Cincinnati, northeast corner of Richmond and Freeman streets, on extreme southwest corner of water table of building; chiseled square (C. \& G. S. b. m. Cincinnati City)
 Cincinnati, east end of Richmond Street, east side of Central Avenue, 4.7 feet south of prolongation of north curb line of Richmond Street, on southwest corner of four-story brick building owned by Mrs. Sarah Neare, on south end of doorstone, 6 inches from either face corner ; square cut (C. \& G. S. b. m. Ps)
541. 285

Cincinnati, courthouse, 5.37 feet directly above No. 1 or \(T\); horizontal scratch on a silvered metal plate set flush with the masonry
and covered by an iron plate, locked in place (C. \& G. S. b. m. Reference mark to Cincinnati City No. 1) \(\qquad\)
Feet.
551.910
553. 078
490.818

Cincinnati, north entrance to waterworks building on Front Street, 0.28 mile above Louisville \& Nashville bridge, on west side of building, on iron doorsill, southwest end, 5 inches north of south jamb of door and 5 inches back from front edge of sill; center of cross cut diagonally across corrugations. This bench mark is said by city authorities and United States Gage Book to be at elevation corresponding to 60.389 on gage (C. \& G. S. b. m. Gage B M) --
Cincinnati, west part of city, on east abutment of lower road bridge at Eighth Street over Mill Creek, south side, 71 feet east of west end of this abutment and 15.5 feet west of east end, and 2.17 feet below coping; brass bolt marked with a horizontal line. An arrow cut on vertical face of coping points downward and toward the bench (C. \& G. S. b. m. U4)
Cincinnati, west part of city, on bank of Ohio River, between railroad tracks and Front Street, in vertical plane with west wall of first house (No. 2658) west of Lutheran Church " Deutsche Ves. Ev. Prot. Martini Kerche A. D. 1892," on doping of heavy retaining wall, called "Big Four wall", about 160 feet east of west end of wall ; chiseled square (C. \& G. S. b. m. V4) \(\qquad\)
Cincinnati, west end of Cleveland, Cincinnati, Chicago \& St. Louis Ry. retaining wall between Front Street and railroad tracks, 5.7 feet below top of coping and 6 inches north of south face of wall; senter of indented point surrounded by triangle (C. \& G. S. b. m. U. S. H.)

Sedamsville, intersection of Delhi Avenue and street car tracks, on cement walk near wall at northeast corner of Hartman's saloon, 8 inches west of corner of water table and 2 inches out from wall; chisel mark later enlarged to square (C. \& G. S. b. m. U. S. G. S.)

Cincinnati, southwest quarter of city, on Liston Avenue, opposite No. 3538, south side station of Cleveland, Cincinnati, Chicago \& St. Louis Ry., on northeast corner of building, north face, on first course of stone below water table, 3.9 feet above sidewalk, and 4 inches west of east corner ; brass bolt marked with a horizontal tne (C. \& G. S. b. m. Wi)
493.987
491.676

St. Joseph, 8.5 miles west of Cincinnati, on Cleveland, Cincinnati, Chicago \& St. Louis Ry., on north bank of Ohio River, 48 feet west of southwest corner of station and 56.25 feet south of south face of station, 4.8 feet south of south edge and 2.7 feet below top of retaining wall of Cleveland, Cincinnati, Chicago \& St. Louis Ry., on east end of stone box culvert under road crossing, culvert lying between Baltimore \& Ohio Southwestern and Cleveland, Cincinnati, Chicago \& St. Louis tracks and parallel with them; chiseled square on projecting part of south wall supporting covering stone (C. \& G. S. b, m. X4

Delhi, 81 feet west of west side of Baltimore \& Ohio Southwestern R. R. station, stone supposed to be bench mark No. LXV of transcontinental line of 1879 , nothing resembling bench identification mark was found, but a portion of the stone had been chipped off. The elevation of a low point in an irregular square was taken. Stone forms a foundation stone of Cleveland, Cincinnati, Chicago \& St. Louis station platform and is below plank (C. \& G. S. b. m. Canal stone)

Feet. 485.915
487. 719

Delhi, 2 miles west of, on coping stone of double-arch culvert, north side, over buttress between east arch over Muddy Creek and west arch over a railroad track, 85 feet east of west end of coping, 9 inches east of north face and 2.2 feet above top of rail ; chiseled square (C. \& G. S. b. m. B \({ }_{5}\) )
494.157

North Bend, Hamilton County, on line of Cleveland, Cincinnati, Chicago \& St. Louis Ry., on viaduct bridge opposite Baltimore \& Ohio Southwestern R. R. station, on east abutment, west face, 23.6 feet north of south end and 3.9 feet above ground; brass bolt marked with horizontal line (C. \& G. S. b. m. C )
Ohio-Indiana State line, on line of Baltimore \& Ohio R. R., 2 miles east of Lawrenceburg, Ind., on railroad bridge over Miami River, east abutment, north side, 5 inches south of north face and 18 inches east of west end ; chiseled square (C. \& G. S. b. m. D \({ }_{5}\) ) --
Lawrenceburg, Dearborn County, on west side of Short Street, between Baltimore \& Ohio Southwestern Ry. and High Street, on People's National Bank Building, north wall, 2.75 feet west of northeast corner and 3.9 feet above ground, in water table; brass bolt marked with a horizontal line (C. \& G. S. b. m. E E )

Note.-For record of permanent bench marks established by the Cincinnati topographic survey of 1912, apply to Department of Public Works, Cincinnati.

> Primary leveling by Ralph Stewart in 1898. From Winton Place to Barnesburg.

Winton Place, 400 feet southeast of Big Four Route station, west end of north abutment of plate girder of railroad bridge; highest point in circular depression where tablet had been \(\qquad\)
Cheviot, intersection of Walnut Street and Harrison pike; aluminum tablet stamped " Cin 915 "

Cleves, northwest corner of foundation of township hall; bronze tablet stamped "Cin 499 " \(\qquad\)
Miami, large steel bridge across Miami River, top of south end of east abutment; bronze tablet stamped "Cin 522 " \(\qquad\)
Barnesburg, 0.5 mile northwest of, on Bluerock pike, south corner of foundation of St. Paul German Evangelical Church; aluminum tablet stamped "Cin 863 "
497. 974
914.070
498. 232
521. 450
862.734

\section*{Primary leveling by E. C. Bibbee in 1915. From Miami southwest along highways to point near Hoovan.}

Miami, on large steel bridge across Miami River, on top of south end of east abutment; bronze tablet stamped " 522 Cin." (Bulletin 411, page 133\()^{1}\)

Feet. 521. 450

Miami, on large steel bridge across Miami River, at south end of east abutment, on top of second course of stone from top; chiseled square, " 520 " painted on rock \(\qquad\)
Miami, 1.04 miles southwest of, about 700 feet south of point where east line of sec. 1, T. 1 N., R. 1 E., crosses pike, on MiamiElizabethtown pike, 200 feet south of Mrs. A. Law's residence, on center of east concrete parapet to bridge ; chiseled square, " 516 " painted on parapet \(\qquad\)
Miami, 2.04 miles southwest of, on Miami-Elizabethtown pike, 100 feet west of Roy Reese's residence, in base of telephone guy pole; 60 -penny spike, " 534 " painted on guy pole \(\qquad\)
T. 1 N., R. 1 E., near point where road crosses southeast corner of sec. 3, 3.04 miles southwest of Miami, on Miami-Elizabethtown pike, 200 feet northeast of fishing camp, on north header at west end of tile culvert; chiseled square, " 520 " painted on telephone pole near_
Miami, 3.94 miles southwest of, on Miami-Elizabethtown pike, 1,020 feet north of Oliver Swisher's residence, on south abutment at west side of concrete bridge; chiseled square, " 493 " painted on bridge \(\qquad\)
Miami, 3.68 miles southwest of, on Miami-Elizabethtown pike, 160 feet south of T road north, 3 feet south of southeast corner of W. J. Baur's pump house, on west road line; iron post stamped " 493 Ohio"

\section*{WEST COLUMBUS QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(83^{\circ}-83^{\circ} 15^{\prime}\).]
Primary leveling by W. F. Hammond in 1899.
From Columbus west along National pike to Big Darby Creek, thence south to Georgesville, thence east via Grove to Spangler Hill.

Columbus, 3 miles west of, 1 mile northeast of Camp Chase, 400 feet north of Baltimore \& Ohio R. R., in top of west parapet wall of arch culvert, on Sullivan pike; aluminum tablet stamped " 788 Columbus 1899 " \(\qquad\)
West Jefferson, 1.75 miles east of, in first step of north wing of east abutment of bridge over Big Darby Creek; aluminum tablet stamped " 869 Columbus 1899 "
868.965

Grove City, 4.5 miles west of, on bridge seat at southeast corner of 10-foot bridge; chisel mark
887.58

Grove City, 4.5 miles east of, on southwest end of parapet wall at southwest corner of bridge over Scioto River; chisel mark
706.26

From Grove City northeast to Columbus.
Urbancrest, 900 feet southwest of station, 280 feet west of railroad, in limestone post ; bronze triangulation tablet stamped " 836 Columbus 1899 " (south base)
836.211

Briggsdale, 0.5 mile north of, on land of H. C. Detweiler, west of electric road and south of highway, in top of limestone post; bronze triangulation tablet stamped " 762 Columbus 1899 " (north base) _-

\footnotetext{
\({ }^{1}\) Found in 1915 badly mutilated, two-thirds cut away.
}
From Georgesville south to Derby, thence east to Commercial Point, thence north to Grove City.
Harrisburg, 3 miles north of, in west end of bridge seat on north abut- ment of bridge over Big Darby Creek; aluminum tablet stamped " 813 Columbus 1899 "

Feet.
812. 840
933. 165

903330
792066
\[
\text { [Latitude } 40^{\circ}-40^{\circ} 15^{\prime} ; \text { longitude } 82^{\circ} 45^{\prime}-83^{\circ} \text {.] }
\]

Primary leveling by C. F. Birdseye in 1901-2.
From East Columbus along pikes via Parks Mills to Now Albany.
Parks Mills, on southeast abutment of covered bridge over Alum
Creek, fourth step from top; bronze tablet stamped " 773 Colum-
bus" (destroyed)
New Albany, in northeast corner stone of foundation at north side of schoolhouse; aluminum tablet stamped " 1033 Cols"
\(1,03: 345\)
From New Albany east 1.7 miles, thence south along public roads via Oakland to Reynoldsburg.
Havens Corners, 1 mile east of, at crossroads, in east wall of founda-
tion of brick schoolhouse ; bronze tablet stamped " 1022 Col "---- 1, 022.453
From Parks Mills north along public roads via Westerville and Africa to Gregory.

Africa, 0.25 mile west of, east abutment of iron bridge over Alum Creek, in top stone of south wing wall; bronze tablet stamped " 831 Cols" (destroyed 1912)
\(833 \quad 042\)
From Gregory east along public roads via Rome and Sunbury to Van Valley, thence south to New Albany.
Sunbury, in foundation at northeast corner of city hall; aluminum
tablet stamped " 970 Cols "
Van Valley, 0.1 mile south of, in top stone of foundation of schoolhouse, at northwest corner; aluminum tablet stamped " 1061 Cols"- 1, 062045
Center Village, at northeast corner of foundation of schoolhouse (subdivision 6), in top of corner stone; bronze tablet stamped " 1068 Cols"

1, 068.721
Primary leveling by Philip Flitman in 1911.
Near Sunbury.
Sunbury, 1 mile east of, 12 feet west of milepost C-22; top of concrete rail post, marked " 1032.6 "
Sunbury, northeast corner of city hall, in foundation; aluminum tablet stamped " 970 "
970. 757

Sunbury, 1.5 miles north of, at southeast corner of T road; spike in fence post, marked " 982.2 "

\section*{WEST MANCHESTER QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(84^{\circ} 30^{\prime}-84^{\circ} 45^{\prime}\).]

\section*{Primary leveling by H. W. Peabody in 1905.}

\section*{From Pitsburg south to Verona.}

Gordon, NE. \(\frac{1}{4}\) sec. 35, T. 8 N., R. 3 E., in north face at northwest corner of elevator ; aluminum tablet stamped "1049 Adj 1905" 1, 049.265

From Pitsburg west along Big Four and Pennsylvania railroads to New Madison, thence south along highway to point 2 miles north of Gettysburg, thence east to Bachman.

Arcanum, 0.25 mile from north line of section 9, T. 8 N., R. 3 E., southwest of crossing of Big Four and Dayton \& Union railroads, in north face at northeast corner of foundation of G. R. Keller's grain elevator; aluminum tablet stamped "1053 Adj 1905"
Beech Greve crossroads, southeast corner sec. 2, T. 10 N., R. 2 E., 0.25 mile north of railroad track, in south face of corner stone at southwest corner of Timothy Reformed Church; aluminum tablet stamped "1096 Adj 1905"
Savona, about center of north side of sec. 9, T. 10 N., R. 2 E., on west side of Cincinnati Northern R. R. and about 900 feet north of Big Four Route at east side of Patty \& Coppock grain elevator, in base of brick chimney; aluminum tablet stamped "1106 Adj 1905"
\(1,106.073\)
New Madison, east of center of sec. 13, T. 10 N., R. 1 E., in west face at southwest corner of United Brethren Church; aluminum tablet stamped " 1113 Adj 1905 "

1, 113. 141
Yankeetown, near northeast corner sec. 35, T. 10 N., R. 1 E., 3 miles south of New Madison, 5.5 miles west of Castine, about 900 feet south of crossroads, in east face of southwest corner of schoolhouse; aluminum tablet stamped "1192 Adj 1905 " \(\qquad\) 1, 192. 219
Gettysburg, 2 miles north of, northeast corner sec. 23, T. 9 N., R. 1 E., 250 feet south of corner of \(T\) road south, in water table at east face of northeast corner of McFadden schoolhouse ; aluminum tablet stamped "1198 Adj 1905"
\(1,197.437\)
West Manchester, 3 miles southwest of, near northwest corner sec. 22, T. 9 N., R. 2 E., 600 feet north of Dunkard Church on northsouth road, in bridge seat at northeast corner of steel bridge over Price Creek; aluminum tablet stamped "1103 Adj 1905"1,102. 719
Euphemia, 2.25 miles west of, east of center of sec. 30, T. 7 N., R. 3 E., in center pier at south end of barn of Mrs. Caroline Weaver on north side of National road; aluminum tablet stamped "1076 Adj 1905"
Lewisburg, sec. 27, T. 7 N., R. 3 E., at southeast corner of old Lutheran Church at north edge of town, in northeast face of corner stone; aluminum tablet stamped "989 Adj 1903"
989.220

From New Lexington west to Eaton, thence northwest to Newhope, thence north to point 2 miles north of Gettysburg.

New Lexington, near southwest corner of sec. 27, T. 6 N., R. 3 E., in east face at southeast corner of New Lexington school building; aluminum tablet stamped " 899 Adj 1905"

Eaton, 3.9 miles east of, near northeast corner of sec. 31, T. 6 N., R. \(3 \mathrm{E} ., 1\) mile north of Eaton pike, in bridge seat at southeast corner of bridge over Bantas Fork; aluminum tablet stamped "932 Adj 1905"

Feet. 931.712

Newhope, south of center of sec. 13, T. 8 N., R. 1 E., at northeast corner of crossroads near center of village, near center of foundation at south side of United Brethren Church; aluminum tablet stamped "1153 Adj 1905"
Gettysburg, at north end of village, south line of SW. \(\frac{1}{4}\) SW. \(\frac{1}{4}\) sec. 25, T. 9 N., R. 1 E., in west face at southwest corner of vestibule to schoolhouse; aluminum tablet stamped "1177 Adj 1905" \(\qquad\) 1, 176. 583

\section*{From Newhope to point 2.7 miles southwest.}

Newhope, 1.5 miles west by 1.2 miles south of, in east abutment of small stone bridge; aluminum tablet stamped " 1204 " 1, 204.305

\section*{Near Gettysburg.}

Gettysburg, 0.96 mile west of, on National pike, 100 feet east of \(Y\) road, on south side of road, at entrance to E. V. Slamback's garage, on concrete header over tile culvert; chiseled square 1, 169.25

\section*{WEST SALEM QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(82^{\circ}-82^{\circ} 15^{\prime}\). ]
Primary leveling by R. C. Seitz in 1906.
From Sullivan south 4.3 miles, thence east along highway via West Salem and Aukerman to Canaan.
Sullivan, 4.55 miles south of, southeast corner foundation of schoolhouse; aluminum tablet stamped " 1147 "
West Salem, 3.98 miles west of, at crossroads, southwest corner of St. John's Reformed Chmrch; aluminum tablet stamped " 1173 "-1, 174. 522
West Salem, southwest corner of foundation of town hall; aluminum tablet stamped " 1119 " 1, 120.256
West Salem, 2.4 miles east of, north bridge seat on west abutment of small iron bridge; aluminum tablet stamped " 1027 " \(\qquad\) 1, 028.121
Aukerman, 0.53 mile north of highway crossing, 2 miles south of Burbank station, north side of highway and 23 feet west of Baltimore \& Ohio R. R. track, in old bridge abutment; aluminum tablet stamped " 899 "
899.783

From Aukerman south to point near Overton, thence southwest along highways to Jeromeville, thence north to point near Sullivan.
Armstrong station, east abutment of highway bridge on north bridge seat; aluminum tablet stamped " 887 " \(\qquad\) 887. 580

New Pittsburg, 2.25 miles east by 2.25 miles north of, 385 feet northwest of crossroads, foundation under bay window at east side of residence of Martha Pfeifer ; aluminum tablet stamped " 1227 ". 1,227. 302
New Pittsburg, 2.25 miles southeast of, east foundation wall of Excelsior Hall at T road south; aluminum tablet stamped " 1168 "-- 1, 168. 442
Reedsburg, 2 miles southeast of, at crossroads, in south face of foundation of residence of S . W. Oberholtzer, at southwest corner; aluminum tablet stamped " 1015 "
\(1,015.431\)
Jeromeville, 2.3 miles southeast of, 275 feet west of crossroads, north bridge seat on west abutment of small iron bridge; aluminum tablet stamped " 968 "

\title{
Jeromeville, west foundation wall of schoolhouse; aluminum tablet Feet. stamped " 1012 " 1, 012. 403 \\ Jeromeville, 3.65 miles north of, 1,200 feet south of crossroads, on west bridge seat of south abutment of small iron bridge; aluminum tablet stamped " 1041 " 1, 041.476 \\  \\ Polk, concrete step in front of east face of Christian Church; aluminum tablet stamped " 1276 " \\ 1, 276.505 \\ Primary leveling by E. C. Bibbee in 1912. \\ At Funk,
}

Funk, at northwest corner of crossroads; iron post stamped "982"--
981.859

\section*{WHEELING QUADRANGLE.}
[Latitude \(40^{\circ}-40^{\circ} 15^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).]
Primary leveling by J. H. Wetzel in 1901 and B. J. Green in 1902.
From Smithfield southeast along Warrenton pike.
Smithfield, 5 miles east of, SW. \(\frac{1}{4} \mathrm{sec} .27\), T. 4 N., R. 2 W., on southeast corner of foundation of Mr . M. B. Cole's barn; aluminum tablet stamped "1214 Steubenville"

1,213. 730
From Wheeling along Cleveland, Lorain \& Wheeling Ry, to Bridgeport.
Wheeling, pedestal of Wheeling \& Lake Erie R. R. bridge over Ohio River, on west side of Pittsburgh, Cincinnati, Chicago \& St. Louis Ry., between railway and pier ; center of pedestal U. S. Engineer b. m. 88 A

Martins Ferry, on east side of west pier of Martins Ferry-Wheeling street car bridge, 6 feet north of southeast corner of pier and 1.5 feet off ground; bench mark stamped "BU \(\square\) SM "
651.341

Bridgeport, on coping of south side approach to Wheeling and Bridgeport bridge; bronze tablet stamped " 662 Steubenville"
661. 576

From Benwood, w. Va., to Bellaire, Ohio.
Bellaire, corner of Belmont and Thirty-second streets, on top step under transom of city building (on Belmont Street) ; aluminum tablet stamped " 667 Steubenville"
667.751

WILKESVILLE QUADRANGLE.
[Latitude \(39^{\circ}-39^{\circ} 15^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\).]
Primary leveling by E. O. Garvin and R. S. Blinn in 1904.
From McArthur south along Hocking Valley Ry, to Dundas, thence northeast along Baltimore \& Ohio Southwestern R. R. to Zaleski.

McArthur, in north foundation wall of courthouse near east end; bronze tablet stamped " 767 Adj 1903 "
766. 733

Dundas, junction of Baltimore \& Ohio Southwestern R. R. and Hocking Valley Ry., 270 feet west of station, in east side top stone at south end of stone culvert on Baltimore \& Ohio R. R.; bronze tablet stamped " 740 Adj 1903 "
740. 266

Dundas, 3 miles northeast of, in top stone of east abutment, on north side at end of railroad bridge over Elk Fork and road; aluminum tablet stamped " 707 Adj 1903 "

\section*{From Vinton station east along old stage road to Albany.}

Prattsville, in front of E. Holden's residence, north side of road, in
large sandstone; aluminum tablet stamped " 757 Adj 1903 "-....
Albany, 6.8 miles west of, W. H. Martin's residence on south side of
road, near east corner of south foundation wall; aluminum tablet
Albany, 4.6 miles west of, at road north, in west front foundation
wall of Weaver Chapel, United Brethren Church; aluminum tablet
stamped " 776 Adj 1903 "
From Langsville southwest along highways to Vinton.
Danville, south side of foundation to schoolhouse; aluminum tablet stamped " 781 Adj 1903 "
781. 056

Rowlesville, 600 feet west of, 100 feet south of road, in natural ledge of rocks; aluminum tablet stamped " 683 Adj 1903 "
683. 229

From Vinton northwest along Hocking Valley Ry, to Dundas, thence southwest along Baltimore \& Ohio Southwestern R. R. to Hamden Junction.
Alice, near station, in south foundation of store building; aluminum tablet stamped " 708 Adj 1903 "
708. 170

Minerton, 300 feet north of station, in south side of brick foundation of pump house; aluminum tablet stamped " 628 Adj 1903 "
628. 230

Hawk, 1 mile south of station, in bridge seat on north abutment of railroad bridge over Raccoon Creek; aluminum tablet stamped " 638 Adj 1903 "
638.590

Hawk, 1 mile north of station, in face of south portal of tunnel; aluminum tablet stamped " 649 Adj 1903 "
649.303

Oreton, in south portal of tunnel; aluminum tablet stamped " 694 Adj 1903 "
694. 488

Oreton, 3 miles north of, in cut, quarry face by railroad track; aluminum tablet stamped " 775 Adj 1903 ".
775.049

\section*{WOODSFIELD QUADRANGLE.}
[Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(81^{\circ}-81^{\circ} 15^{\prime}\).]
Primary leveling by E. O. Garvin in 1903.
From Crabapple southwest along Ohio River \& Western Ry. to Lewisville.
Crabapple station, southwest abutment of Ohio River \& Western Ry. bridge, in top stone; chiseled square
933.24

Beallsville, in west foundation of public schoolhouse, 5.5 feet north of southwest corner; aluminum tablet stamped " 1262 Stbnvl" \(1,262.105\)
Coats post office, wagon bridge over Sunfish Creek, in top stone of southeast abutment; square cut
Woodsfield, in top foundation stone at southeast corner of courthouse, 30 feet south of east entrance; aluminum tablet stamped " 1211 Stbnvl"
Lewisville, opposite Distlin Hotel, in northwest corner of Oblinger's store, 3 feet above ground; aluminum tablet stamped " 1240 Stbnvl" \(1,240.313\)

From Lewisville west along Baltimore \& Ohio R. R. to Hamilton,
Hamilton, in front of station; top of rail
969.9

\section*{From Lewisville north along highways to Wiedmans, thence northeast to} Somerton, thence east to Alledonia.

Lewisville, 2.75 miles north of, at north edge of woods, at south door- Feet.
step of schoolhouse ; chiseled square
Monroefield, in east corner of stone step to white schoolhouse;
chiseled square
Miltonsburg, 1.5 miles northwest of, at Wiedmans triangulation station, 0.5 mile west of Catholic Church, old cemetery north of road, on stone monument 40 by 6 by 6 inches, set 36 inches in ground; bronze tablet stamped " 1394 Stbnvl"

1,393. 953
Malaga, at northwest corner of forks, in curb of sidewalk; chiseled square
\(1,315.34\)
From Neweastle north along highway to Bryan, thence west to Barnesville.
Hunter, southeast corner of Christian Church, in top stone of entrance; chiseled square
Hunter, 2 miles north of, on land owned by W. Patterson, on top of high, partly cleared hill in Goshen Township, in top of stone post 40 by 6 by 6 inches, set 33 inches in ground; bronze tablet (triangulation) stamped " 1364 Stbnvl"
\(1,364.085\)
Barnesville, city building, on west side of Arch Street, on south end of second step of entrance; aluminum tablet stamped " 1270 Steubenville"

1,269. 828
From Somerton west along highway to Temperanceville, thence north via Steele to Barnesville.
Temperanceville, in east foundation of schoolhouse No. 10, third tier of stone from ground, 1 foot from north corner; aluminum tablet stamped " 955 Stbnvl"
954. 998

Barnesville, 3 miles west of, at Steele triangulation station, a few feet east of Guernsey County line on a high, cleared hill in Warren County, on land owned by Isaac Steele, on top of a stone post 36 by 6 by 6 inches, set 30 inches in ground; bronze tablet stamped " 1374 Stbnvl"
From Milhorn's mill south to Newcastle triangulation station (double spur).
Newcastle (Pilcher post office), 0.3 mile south of Newcastle triangulation station, in top of stone post 30 by 6 by 6 inches, set 30 inches in ground; bronze tablet stamped " 1367 Stbnvl" 1,366. 613

\section*{WOOSTER QUADRANGLE.}
[Latitude \(40^{\circ} 45^{\prime}-41^{\circ}\); longitude \(81^{\circ} 45^{\prime}-82^{\circ}\).]
Precise leveling by the Baltimore \& Ohio R. R.

\section*{From point near Rittman northwest to point near Creston.}

Rittman, Wayne County, 0.5 mile east of, at milepost 53 ; section of

Rittman, 0.5 mile southwest of, at milepost 52 ; section of rail set vertically in ground (B. \& O. b. m. 458)
961.853

Rittman, 1.5 miles west of, 500 feet west of milepost 51 ; in northwest abutment in northeast side of bridge 94 ; copper bolt (B. \& O. b. m. 459)
\[
45281^{\circ}-\text { Bull. 651-17-27 }
\]

Rittman, 2.5 miles west of, at milepost 50 ; section of rail set vertically in ground (B. \& O. b. m. 460)

Feet.
969.904

Sterling, 1 mile east of, in bridge seat at south end of east abutment of Erie R. R. bridge; bronze tablet stamped " 964 Canton "; probably. moved in laying double track (B. \& O. b. m. 460A)
963.678

Sterling, 0.25 mile east of, north side of tracks opposite milepost 49 ; vertical rail section (B. \& O. b. m. 461)
970.465

Sterling, 0.8 mile northwest of, at milepost 48 ; section of rail set vertically in ground (B. \& O. b. m. 462)
975. 020

Sterling, 0.8 mile southeast of, at milepost 47 ; section of rail set vertically in ground (B. \& O. b. m. 463)
982. 544

Creston, 0.25 mile northwest of, at milepost 46 ; section of rail set vertically in ground (B. \& O. b. m. 464)
987. 325

Creston, 1.25 miles northwest of ; at milepost 45 ; section of rail set vertically in ground (B. \& O. b. m. 465)
974.241

Primary leveling by James B. Maguire in 1901. From Sterling west and south along highway via Canaan to Wooster.
Sterling, 0.75 mile east of Erie Railroad station; southwest corner of east abutment of Erie Railroad bridge over creek, in bridge seat; bronze tablet stamped " 964 Canton"
963.679

Canaan, 400 feet west of crossroads, on road from Canaan to Congress, in southeast corner of west abutment of highway bridge; bronze tablet stamped " 1054 Canton "-
\(1,053.526\)
Madisonburg, 0.5 mile west of, at crossroads intersection, set in east wall of culvert; bronze tablet stamped " 1109 Canton"
\(1,108.345\)
Wooster University, on south side of observatory, in water table; aluminum tablet stamped " 1084 Canton"

1,083. 611
Between Burton City and Wooster; spur lines from Pittsburgh, Fort Wayne \& Chicago Ry, bench mark.
Weilersville, 1 mile east of, on the Pittsburgh, Fort Wayne \& Chicago Ry., on northeast corner of box culvert ; railroad bench mark

1, 071. 326
Smithville, 1 mile southeast of, 0.8 mile north of Pittsburgh, Fort Wayne \& Chicago Ry., on southeast corner of north abutment of highway bridge over Sugar Creek; bronze tablet stamped " 1038 Canton" \(1,037.855\)
Orrville, 1.75 miles west of, on the Pittsburgh, Fort Wayne \& Chicago Ry. ; northwest corner of east abutment of culvert
\(1,038.287\)
East Union, 700 feet east of Cleveland, Akron \& Columbus Ry. crossing of state road, on southwest corner of east abutment of highway bridge over creek; bronze tablet stamped " 1074 Canton"

1, 075.129
Orrville, Pittsburgh, Fort Wayne \& Chicago Ry. station; gentlemen's waiting room, east end of north doorsill ; rảilroad bench mark_-_-_ 1, 059. 594
Orrville, at front entrance of town hall, in water table; aluminum tablet stamped " 1066 Canton"

1,064.963
Primary leveling by E. C. Bibbee in 1910.
From Kidron northwest along highway to point 1.9 miles north of Apple Creek.
Kidron, 2.2 miles west of, 25 feet south of railroad on west side of public road at crossing, on right of way ; iron post stamped " 1128 "- 1, 127.471
Apple Creek, 1.9 miles north of, on Cleveland, Akron \& Columbus Ry., 350 feet north of switch leading to Kidron, on southeast corner, east end of small concrete culvert under railroad at railroad crossing; chiseled cross_

1, 089.80

From Apple Creek north along Cleveland, Akron \& Columbus Ry, to Orrville.

Apple Creek, 300 feet south of station, at railroad crossing, in south- Feet. east corner of park ; iron post stamped "1029"
Apple Creek, 1.9 miles north of, southeast corner, east end of small concrete culvert under railroad at railroad crossing, 350 feet north of switch to Kidron; chiseled cross 1, 089.80
East Union, 1.2 miles south of, 895 feet south of milepost marked "C 102 H 92 "; chiseled square on southeast corner east side of small stone culvert under railroad
\(1,116.032\)
East Union, 700 feet east of crossing of State road, on southwest corner east abutment of highway bridge over creek; bronze tablet stamped "1074 Canton"
Orrville, in front entrance of town hall, in water table; aluminum tablet stamped "1066"

1,064. 963

\section*{XENIA QUADRANGLE.}
[Latitude \(39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}\); longitude \(83^{\circ} 45^{\prime}-84^{\circ}\).]
Primary leveling by F. W. Hughes in 1904, E. C. Bibbee in 1912, C. E. Mills and S. L. Parker in 1913, and F. L. Whaley in 1914.

From Cedarville southwest along highway to Xenia, thence west to Alpha.
Cedarville, southwest corner of United Presbyterian Church, in south face of stone foundation wall, 2 feet above ground; aluminum tablet stamped " 1055 Ohio" \(1,054.587\)
Cedarville, 1 mile southwest of, east end of stone culvert on Columbus pike; chiseled square painted " 1017 T. B. M." \(\qquad\) \(1,016.95\)
Cedarville, 1.5 miles southwest of, 400 feet south of T road west at Bakersville, east corner of stone abutment of steel bridge; chiseled square
Cedarville, 2.9 miles south of, 1,000 feet south of \(T\) road east, west side of stone culvert; chiseled square
980.99

Cedarville, 3.5 miles southwest of, 1 mile northeast of Wilberforce College, southwest corner of stone abutment of steel bridge 135 ; chiseled square
949. 22

Xenia, 3 miles northeast of, west corner of \(T\) road north through Wilberforce College grounds; iron post stamped "1011 Ohio"
Xenia, 2 miles northeast of, one mile southwest of Wilberforce College, 700 feet west of \(T\) road south, southeast corner of concrete capstone of steel bridge over Oldtown Creek; chiseled square \(\qquad\) 978. 88

Xenia, 1 mile northeast of, 200 feet south of 1-mile stone, southwest of concrete bridge; chiseled square
950.27

Xenia, in courthouse yard, 6 inches west of west side of south steps; iron post stamped " 938 "
938. 279.

Xenia, 1 mile west of, 500 feet west of city limits, south rail of Dayton, Springfield \& Xenia Southern R. R.; joint of rail painted " 922.9 "
923.3

Xenia, 2 miles west of, in front of Orphans' Home; south rail joint of Dayton, Springfield \& Xenia Southern R. R.; painted " 898.2 T. B. M."
804. 40

Xenia, 2.12 miles west of, 2 miles east of Trebein, northwest end of (stone) concrete culvert ; chiseled square painted " 885.6 ",
885. 94

Trebein, 0.9 mile east of, north end of stone culvert ; chiseled square painted " 804 T. B. M."

\section*{Trebein, 0.25 mile east of, northeast corner of crossroads; iron post Feet. stamped " 804 "}

From point west of Jamestown west along Cincinnati, Hamilton \& Dayton Ry. to Xenia.
Jamestown, 2.4 miles west of, on the Cincinnati, Hamilton \& Dayton Ry., northeast corner of road crossing, on east end of tile drain; painted square
\(1,051.15\)
Jamestown, 3.41 miles west of, on Cincinnati, Hamilton \& Dayton Ry., center track, 200 feet east of telegraph pole 29/15; copper nail in painted square " 1037.8 T. B. M."
\(1,037.80\)
Jamestown, 4.41 miles west of, northwest corner of road crossing at New Jasper; iron post stamped " 1024 "
\(1,024.364\)
Jamestown, 5.9 miles west of, east of Xenia, on Cincinnati, Hamilton
\& Dayton Ry., northeast corner of road crossing, on drain tile; painted square, marked "1025.4 T. B. M."
\(1,025.56\)
Xenia, 3.5 miles east of, northwest corner of road crossing, at Monroe siding; iron post stamped " 1041 "
\(1,041.440\)
Xenia, 3 miles east of, 0.57 mile west of Monroe siding, southeast pier of wagon bridge, 50 feet west of Cincinnati, Hamilton \& Dayton Ry. crossing; chiseled square painted "1030.8 T. B. M."--- 1, 031.04
Xenia, 2 miles east of, west side of Cincinnati, Hamilton \& Dayton Ry. crossing, in south end of railroad tie, in painted square; copper nail painted "1001.3 T. B. M."
 \(1,001.5\)
Xenia, 1 mile southeast of, 480 feet west of milepost (Dayton 20 miles) on Cincinnati, Hamilton \& Dayton Ry., in north end of tie; copper nail painted " 968.7 "
Xenia, southeast part of town, at crossing of Cincinnati, Hamilton \& Dayton Ry. and Monroe Street, on drain tile, northeast corner; painted square " 939.5 "
Xenia, 130 feet west of Cincinnati, Hamilton \& Dayton Ry. station, 50 feet north of railroad and Detroit Street crossing, west side of street, on top of large curbstone ; chiseled square painted " 924.7 ",
From point southwest of Jamestown west along highway via devious route to point 4 miles north of New Burlington, thence south 1.5 miles, thence west to Spring Valley.
Jamestown, 2.5 miles sauthwest of, northwest corner of crossroads, in base of telephone pole; spike painted " 1040.41 "
Jamestown, 3.59 miles southwest of, 4 miles northeast of Paintersville, southeast corner of T road south; iron post stamped " 1031 "-
Jamestown, 4.6 miles southwest of, 3 miles north of Paintersville, southwest corner of \(T\) road south, in telephone pole; copper nail painted " 1019 T. B. M." 1, 019.12
Jamestown, 5.6 miles southwest of, southwest corner T lane south, opposite brick schoolhouse, in telephone pole; copper nail painted "1022.7 T. B. M."

1,022. 69
Jamestown, 6.1 miles southwest of, 2 miles east of Silver Springs, east corner of road forks; iron post stamped " 1022 "
\(1,022.459\)
Jamestown, \(\mathbf{7 . 1}\) miles southwest of, west side of lane to Apple Grove farm, in root of catalpa tree 12 inches in diameter; copper nail painted " 1020 T. B. M."
\(1,020.23\)
Silver Springs, about 0.5 mile south of, 2,500 feet northwest of crossroads, in fence post west side of road; copper nail painted " 1006.4 T, B, M."

1, 006. 48

Silver Springs, 0.5 mile west of road forks at, in southwest corner of
Feet.
928.63

Silver Springs, 1.4 miles southwest of, 200 feet south of T road east, in northwest corner concrete abutment of steel bridge; chiseled square painted " 934.5 T. B. M."
934. 54

Silver Springs, 3.0 miles southwest of, southeast corner of crossroads, 400 feet east of Reformed Church, north of frame schoolhouse; primary traverse iron post No. 54 , stamped " 967 "
Xenia, 4 miles southeast by 2.8 miles east of, southeast concrete wing of covered bridge over Cæsars Creek; chiseled square painted " 910.7 T. B. M."
910.71

Xenia, 4 miles south by 1.8 miles east of, 500 feet north of \(T\) road west, on northwest corner of concrete floor of iron bridge over small stream ; chiseled square, painted "915.6 T. B. M." \(\qquad\)
Xenia, 4 miles south by 0.5 mile east of, in southeast pier of wooden bridge; chiseled square painted " 893.4 T. B. M." \(\qquad\)
Xenia, 4 miles south of, 4 miles north of New Burlington, at T road east, on large granite bowlder west side of pike opposite R. D. F. Beam's house ; painted circle on bowlder " 900 T. B. M."--

New Burlington, 3.1 miles north of, northwest corner of concrete floor of steel bridge; chiseled square painted " 882 T. B. M." \(\qquad\)
New Burlington, 2 miles north of, northwest corner of crossroads; iron post stamped " 924 " \(\qquad\)
Spring Valley, 3 miles east of, on limestone rock at road turn; circle painted " 902 T. B. M."
902.38

Spring Valley, 1.28 miles east of, at T road south, north side of road, in butt of telephone pole; copper nail painted " 907 T. B. M." \(\qquad\) 907.04

From point 2 miles north of New Burlington east along highway to a point 2 miles west of Bowersville.
New Burlington, 2 miles north of, northwest corner of crossroads; iron post stamped " 924 "
923.887

New Burlington, 2 miles north by 1 mile east of, at \(T\) road north, south side of road, in root of large locust tree ; copper nail painted " 972 T. B. M."
971.96

Paintersville, 5.6 miles west of, 225 feet east of T road south, at southeast end of concrete culvert, in guard wall; chiseled square painted " 936.4 T. B. M."
936. 41

Paintersville, 5.6 miles west of, southwest corner of iron bridge, 70 feet east of Zoors M. E. Church, in capstone; chiseled square painted "926.8 T. B. M."
926. 84

Paintersville, 3.9 miles west of, 4 miles north of Clare, southeast corner T road south; iron post stamped " 988 "
987.535

Paintersville, 3 miles west of south end of stone culvert at crossroads at Alazlers school and church; chiseled square painted " 1002 T. B. M."
\(1,002.32\)
Paintersville, 1.28 miles west of, at T road east, in center of pike, in butt of large oak tree; copper nail painted " 1000.3 T. B. M."
\(1,000.26\)
Paintersville, 1 mile west of, 100 feet west of \(T\) road south, in concrete step of Friends Church; chiseled square painted " 1000.6 ".
\(1,000.55\)
Paintersville, south part of town, at bend in road west, south side of road ; iron post stamped " 1014 "
\(1,013.715\)
Paintersville, 1.04 miles southeast of, southwest corner of concrete floor of steel bridge; chiseled square painted " 1025.8 T. B. M."--- 1, 025.68

Paintersville, 1.93 miles east of, 4.1 miles west of Bowersville, at \(\boldsymbol{T}\) road east, on south end of stone culvert; chiseled square painted Feet. "1029.4 T. B. M." 1, 029.24
R.owersville, 2.9 miles west of, at T road south on Xenia pike, northwest corner of stone pier of wooden bridge ; chiseled square painted " 1028.6 "

1, 028.48
Bowersville, 2.01 miles west of, southwest corner of crossroads at Gunnerville ; iron post stamped " 1044 "
\(1,043.824\)
From point 3.5 miles northeast of Deserted Camp northwest along highway to Port William, thence northeast 2 miles.
Port William, 2.5 miles southeast of, south end of west pier of small concrete bridge ; painted " 1029.7 T. B. M."
Port William, 1.5 miles south of, south side of pike, 2 feet south of property line, in root of walnut tree 24 inches in diameter; copper nail painted " 1033.8 T. B. M."
\(1,033.95\)
Port William, southwest part of, southeast side of railway crossing, near grain elevator, 300 feet east of railway bridge over Anderson Creek; iron post stamped " 1028 Ohio" 1, 028. 460
Port William, 1 mile northeast of, 150 feet south of Troad east, in telephone pole east side of road; copper nail painted "1034.3 T. B. M."

Port William, 2 miles northeast of, 2 miles southwest of Bowersville, south side of road, 800 feet west of right-angle road turn, in telephone post ; copper nail painted "1041.8 T. B. M."

1, 042.02
From Port William west along Detroit, Toledo \& Ironton R. R. to McKays, thence west and south along highway to South Kingman.
Port William, southwest part of town, southeast side of railroad crossing near grain elevator, 300 feet east of Detroit, Toledo \& Ironton R. R. bridge over Anderson Fork; iron post stamped " 1028 Ohio" \(1,028.460\)
Port William, 1 mile west of, south side of Detroit, Toledo \& Ironton R. R. track and east side of wagon road at crossing, on capstone of stone culvert ; chiseled square, painted "1031.6 T. B. M." 1, 031.80
Port William, 2.01 miles west of, 1.01 miles west of railway crossing, in railway tie in center of track; copper nail painted " 1029.1 T. B. M" \(1,029.4\)
Port William, 2.68 miles west of, 200 feet south of railway viaduct, east side of wagon road; iron post stamped " 1025 Ohio"
Port William, 3.68 miles west of, at railroad crossing at Mount Pleasant, south side of track and west side of road, in large granite bowleer ; chiseled square painted "1020.6 T. B. M"
\(1,020.90\)
McKays, 0.41 mile east of, in center of Detroit, Toledo \& Ironton R. R. track, in tie ; copper nail painted "1016 T. B. M"
McKays, west side of railroad crossing, 20 feet south of store, in south end of railway tie of switch track; copper nail painted "1011 T. B. M." 1, 011.3
McKays, 0.75 mile southwest of, southwest corner of Detroit, Toledo \& Ironton R. R. crossing; iron post stamped " 1010 "
\(1,010.459\)
McKays, 1.66 miles west of, 3.5 miles northeast of Kingman, northwest corner of crossroads, in concrete floor of schoolhouse porch; chiseled square painted " 1004.7 T. B. M."
\(1,005.03\)
McKays, 2.5 miles west of, at T road east, in northwest stone pier of bridge over branch of Buck Run; chiseled square painted " 967.5 T. B. M "
McKays, 3.3 miles west of, northeast corner of stone pier of steel

Feet.

935.31
New Burlington, 1.5 miles south by 0.8 mile east of, 0.75 mile east of Buck Run schoolhouse, south end of stone culvert at \(\mathbf{T}\) road north; chiseled square painted "901.4 T. B. M" \(\qquad\) 901. 81
New Burlington, 1.5 miles south of, southeast corner of crossroads at Buck Run schoolhouse; iron post stamped " 900 " \(\qquad\)
North Kingman, 2 miles north of, east side of stone culvert; chiseled square painted " 991.5 T. B. M"
900.827
North Kingman, 0.65 mile north of, southeast corner of concrete pier of steel bridge; chiseled square painted " 931.8 "
991.93
North Kingman, southeast corner of crossroads in town, in footstone of old pump; chiseled square painted "1008.5 T. B. M" \(\qquad\) \(1,008.85\)
From point 1.5 miles south of New Burlington north along highway to point 2 miles north of New Burlington.
New Burlington, northeast corner of stone abutment of steel bridge over Anderson Fork of Caesars Creek; chiseled square painted " 856.7 "
857.08
New Burlington, 1 mile north of, east side of Burlington pike, at
angle with road northeast, on flint bowlder; painted square,
painted " 952.5 "
From point 4.5 miles south of Xenia north along highway to Xenia.
Xenia, 3.5 miles south of, 300 feet north of crossroads, southeast concrete wing wall of steel bridge; chiseled square \(\qquad\) 946. 54
Xenia, 2 miles south of, 900 feet south of G. W. Hull's blacksmith - shop, east end of stone culvert; chiseled square \(\qquad\) 980.12
Xenia, 1 mile south of, northeast cnncrete wing wall of bridge; chiseled square marked " 949.1 "
949.22

\section*{From point 4 miles northeast of Alpha northeast to Goes.}
Alpha, 4 miles northeast of, southeast corner of crossroads, on stone
at west end of tile drain; chiseled square------ 922.06
From point near West Bowersville north along highway to Duncan schoolhouse, 3 miles northwest of Jamestown.
Bowersville, 2.1 miles west of, southwest corner of crossroads; iron post stamped " 1044 " \(\qquad\) 1, 043.824
Bowersville, 2.1 miles west by 0.7 mile northeast of, northeast corner of road forks, in base of fence post; spike
1, 045.84
Bowersville, 2.1 miles west by 1.5 miles north of, 700 feet north of Irvin schoolhouse, on northwest corner of concrete floor of small iron bridge; chiseled square
1, 048.98
Bowersville, 2.1 miles west by 2.5 miles north of, in bend of road at A. F. Campbell's residence, in base of telephone pole; spike_..... 1,056.52
Jamestown, 2 miles southwest on northwest corner at T road south, in base of fence post; copper nail
1, 049.36
Jamestown, 2.5 miles southwest of, 670 feet east of crossroads, east abutment north end of steel bridge over South Branch of Caesars Creek; chiseled square
\(1,020.73\)
Jamestown, 2.5 miles southwest of, northwest corner of crossroads, in base of telephone pole; spike
\(1,040.41\)
Jamestown, 0.5 mile southwest by 1.1 miles west of, in center of crossroads, on stone; chiseled square
1, 056.33
Jamestown, 1.3 miles west of, road crossing Cincinnati, Hamilton \& Dayton R. R.; top of north rail
1,052. 0

Jamestown, 2.4 miles west of, on Cincinnati, Hamilton \& Dayton R. R., northeast corner of road crossing, on east end of tile drain; Feet. painted square 1, 051.15
Jamestown, 2.2 miles northwest of, on Xenia pike, northwest corner of crossroads, in base of fence post; spike
Jamestown, 3 miles northwest of, on Xenia pike, 0.5 mile north of pike, in southeast corner of crossroads at Duncan schoolhouse, on stone; painted square
Jamestown, 3 miles northwest of, on Xenia pike, 0.5 mile north of pike, northeast corner of Duncan schoolhouse yard at crossroads; iron post stamped " 1048 " 1, 048.408

From point 4.5 miles southeast of Cedarville along highways to Cedarville. (An error of 0.4 foot has been adjusted on this line in 4.7 miles.)
Cedarville, 3 miles southeast of, northwest corner of T road southwest, on north end of tile drain pipe; highest point

1, 059.83
Cedarville, 3 miles southeast of, in northwest corner of T road southwest ; iron post stamped " 1062 Ohio"

1,061. 983
Cedarville, 1.9 miles southeast of, southeast corner of crossroads, on stone culvert under Federal road; chiseled square \(1,066.12\)
Cedarville, 0.4 mile southeast of Pennsylvania R. R. station, at road forks, on north end of stone culvert; chiseled square
\(1,063.59\)
Cedarville, 200 feet west of station, at road crossing Pennsylvania R. R.; top of north rail
\(1,034.5\)
Cedarville, southwest corner of United Presbyterian Church, in south face of foundation wall, 2 feet above ground; aluminum tablet_-_ 1,054. 587

\section*{Near Old town.}

Oldtown, 2.4 miles northwest of, 500 feet east of Ross Harner's residence, on north end west side of concrete retaining wall to twin steel culvert under wagon road; chiseled square
939.22

Oldtown, 1.5 miles northwest of, 200 feet east of W. H. Ginaven's residence, on east side of road opposite \(T\) road west ; chiseled square on large sandstone rock
916.72

Oldtown, 1 mile north of in forks of road, 75 feet west of electric railroad; iron post stamped " 834 Ohio"
834. 479

\section*{YOUNGSTOWN QUADRANGLE.}
[Latitude \(41^{\circ}-41^{\circ} 15^{\prime}\); longitude \(80^{\circ} 30^{\prime}-80^{\circ} 45^{\prime}\).]
Precise leveling by the Coast and Geodetic Survey and the Baltimore \& Ohio R. R.
From point near Niles, Trumbull County, southeast to Struthers, Mahoning County.

Niles, about 1.5 miles southeast of, 2.8 miles east of Boenna Crossing, at southeast corner of road crossing, 49 feet from Baltimore \& Ohio R. R. tracks, in corner of fence, on land owned by John Dove; red-metal cap on iron post (C. \& G. S. b. m. G \(\mathrm{G}_{7}\) )
879. 375

Girard, about 0.5 mile west of, on Baltimore \& Ohio R. R. right of way, culvert at telegraph pole \(81 / 28 \frac{1}{2}\), in middle of south coping; chiseled square marked " U.S.B.M." (C. \& G. S. b. m. H
879. 759

Youngstown, Mahoning County, about 3.5 miles northwest of new Baltimore \& Ohio R. R. station, at telegraph pole \(79 / 28 \frac{1}{2}\), west end of large cut, on side of hill, 82 feet south of Baltimore \& Ohio R. R. tracks, set in clay at an offset in the right-of-way fence; redmetal cap on iron post (C. \& G. S. b. m. 17) -

Youngstown, 1 mile west of new Baltimore \& Ohio R. R. station, on Baltimore \& Ohio R. R. right of way, north end of the top step of east abutment of bridge 410 ; chiseled square marked " U.S.B.M." (C. \& G. S. b. m. J7)

Feet.
865.312

Youngstown, 1 mile west of, at telegraph pole \(76 / 23\), on old line east of river, section of rail set vertically in ground beneath the semaphore bridge; top (B. \& O. b. m. 381)
842.094

Youngstown, 200 feet east of old Baltimore \& Ohio R. R. passenger station, on the old line east of river, in second course of masonry at west end of the retaining wall ; copper bolt (B. \& O. b. m. 380) _--
Youngstown, near Lake Shore \& Michigan Southern Ry. station, northwest corner of foundation of west beam supporting the overhead highway bridge, between Baltimore \& Ohio R. R. and Pittsburgh \& Lake Erie R. R. tracks ; seat cut (C. \& G. S. b. m. Railroad)_
Haselton, on Baltimore \& Ohio R. R. right of way, at Andrews Bros. crossing, top course of north wing wall of east abutment to bridge 24 ; aluminum tablet stamped " 837 Adj" \(\qquad\)
Struthers, 1 mile west of, on Baltimore \& Ohio R. R. right of way south of tracks, on west abutment of bridge 22, in concrete flume; copper bolt (B. \& O. b. m. 377)
843. 707
847.118
836.450
847.135

Struthers, north end of highway bridge over Pittsburgh \& Lake Erie R. R. tracks, in southwest corner of the bridge seat; copper bolt (B. \& O. b. m. 376)
844.766

> Primary leveling by R. C. Seitz in 1905.
> From point near Chadwick south to Niles.

Niles, 4 miles north of, 140 feet west of crossroads; primary-traverse iron post stamped "936 Adj 1903" "Sta. No. 33"
936. 471

\section*{From Warren east along highway to Brookfield and Sharon.}

Vienna, 1.5 miles west of, in north face of stone post at top of hill on north side of road; aluminum tablet stamped " 1140 Adj 1903 "-
\(1,140,641\)
Vienna, 1.5 miles east of, 3.5 miles west of Brookfield, house at northwest corner of crossroads, southeast corner, east face; aluminum tablet stamped "1180 Adj 1903"
\(1,180.529\)
Vienna, 1.5 miles east of, 3.5 miles west of Brookfield, primarytraverse station 41, inside of fence, at southwest corner of crossroads; iron post stamped " 1173 Adj 1903 " \(\qquad\) \(1,172.773\)
Brookfield, 0.02 mile south of crossroads, in east face of southeast corner of Christian Church; aluminum tablet stamped "1170 Adj 1903"
\(1,170.660\)

\section*{From Brookfield south along highway to Hubbard, thence west to Girard.}

Hubbard, north part of, 1,200 feet south of Lake Shore \& Michigan Southern Ry., 110 feet south of crossroads, in west wing of north abutment of iron highway bridge; aluminum tablet stamped " 928 Adj 1903"
928. 360

Churchill, 2 miles east of Girard, in north face of foundation of M. E. Church ; aluminum tablet stamped "1080 Adj 1903" 1,079. 627
Girard, in east end of east wing wall of abutment of highway bridge over Mahoning River at Baltimore \& Ohio R. R. station; aluminum tablet stamped " 861 Adj 1903 "

\section*{From Haselton station (Youngstown) east along highway to Coitsville, thence} south to Struthers.

> Haselton, at Andrews crossing and Baltimore \& Ohio R. R. right of way, on top course of north wing wall of east abutment of bridge 24 ; aluminum tablet stamped " 837 Adj 1903 "--.-...-.-.-. 836.451 Coitsville (crossroads), in south wing wall of east abutment of iron bridge; aluminum tablet stamped " 1068 Adj 1903 "

At Lowellville (set from Baltimore \& Ohio R. R. bench mark 371).
Lowellville, in north retaining wall of dam across Mahoning River; aluminum tablet stamped " 813 Adj 1903"
812.830

From Youngstown southwest along highway to Cornersburg, thence southeast to Boardman, thence east to Poland, thence northeast to Struthers.
Youngstown, opposite Ohio Steel Works, in west wing wall of north abutment of highway bridge across Mahoning River; aluminum tablet stamped "852 Adj 1903"
853.031

Cornersburg, 1,050 feet south of, in west wing wall of north abutment of iron bridge over creek; aluminum tablet stamped "1037 Adj 1903" \(\qquad\) 1, 037.445
Boardman, 1.6 miles west of, south end of bridge seat, west abutment of iron bridge over Mill Creek; aluminum tablet stamped "997 Adj 1903" 997.683

Poland, in north end of west retaining wall at highway bridge over Yellow Creek; aluminum tablet stamped "1016 Adj 1903"
\(1,015.959\)
ZALESKI QUADRANGLE. [Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(82^{\circ} 15^{\prime}-82^{\circ} 30^{\prime}\). ]

Precise leveling by the Coast and Geodetic Survey.
From Athens west along Baltimore \& Ohio Southwestern R. R. to Zaleski.
Moonville, on east abutment of railroad bridge over Raccoon Creek; chiseled square marked "B M" (C. \& G. S. b. m. LI)
712.160

Zaleski, 1 mile south of, on south abutment of railroad bridge over Raccoon Creek; chiseled square marked "B M" (C. \& G. S. b. m. LII)

Primary leveling by E. O. Garvin in 1904.
From Marshfield southwest along Baltimore \& Ohio Southwestern R. R. to Zaleski.
Mineral, 150 feet southwest of station, east side of street, on stone over gutter; square cut
710.27

County line between Athens and Vinton counties, north side of track; top of iron monument
709. 405

Moonville, 50 feet from station, south side of road, in rock ledge; bronze tablet stamped " 718 Adj 1903 "
717. 937

Zaleski, in northwest corner of foundation of Fisher's store; aluminum tablet stamped " 741 Adj 1903 "

Zaleski, 1 mile south of, on south abutment of railroad bridge over Raccoon Creek ; chiseled square (C. \& G. S. b. m. 52)
741.313
714. 303

From Nelsonville along Hocking Valley Ry, lines to point 2 miles north of Haydenville and via Orland to McArthur.
Haydenville, 3 miles southeast of, north side of railroad bridge over Hocking River, in top stone of west abutment; bronze tablet stamped " 690 Adj 1903 "
689.468

Haydenville, in top stone of west entrance to Methodist Church; bronze tablet stamped " 710 Adj 1903 "
Union Furnace, 0.3 mile north of, 600 feet west of railroad crossing, in corner stone at northeast corner of brick school; aluminum tablet stamped " 724 Adj 1903" \(\qquad\)
Feet.
723. 689
Union Furnace, in southeast corner of foundation of United Brethren Church; bronze tablet stamped " 759 Adj 1903 "
759.134
Starr, 300 feet west of, in north end of east abutment of bridge, second stone below rails;"aluminum tablet stamped " 776 Adj 1903 "--
New Plymouth, in south foundation wall of vestibule entrance to Presbyterian Church; aluminum tablet stamped " 837 Adj 1903 "--
776. 228
Creola, 2.5 miles north of, railroad bridge 42 , in top stone of south abutment, east side; aluminum tablet stamped " 752 Adj 1903 "
837. 200
Creola, Kirkendall's store and post office, in top stone of south foundation wall, 7 feet from east wall and front of store; bronze tablet stamped " 760 Adj 1903 "
752.020
760.159
From Orland north along highway to Ilesboro.
Hlesboro, in east foundation wall of Methodist Church, top stone; aluminum tablet stamped " 1064 Adj 1903" \(1,064.234\)

\section*{ZANESVILLE QUADRANGLE.}

> [Latitude \(39^{\circ} 45^{\prime}-40^{\circ}\); longitude \(\left.82^{\circ}-82^{\circ} 15^{\prime}.\right]\)
> Precise leveling by W. H. Monahan in 1906.
> From point east of Chalfants post office east along Zanesville \& Western Ry. to Zanesville.

Mount Perry, 254 feet west of station, in abutment at northeast corner of covered highway bridge ; aluminum tablet stamped " 801 "-
Mount Perry, in front of station; top of rail
801. 499

Mount Perry, 2.31 miles east of, 30 feet south of track, in northwest corner of foundation of highway bridge; aluminum tablet stamped " 797 "
797. 587

Fultonham, 0.09 mile west of, in northwest corner of stone foundation of water tank; aluminum tablet stamped " 763 "
762.935

Fultonham, in front of station; top of rail.
762.3

White Cottage, in front of station; top of rall
734.0

White Cottage, 0.76 mile east of, in abutment at southeast corner of bridge; aluminum tablet stamped " 717 "
716. 939

Elizabeth, in front of station; top of rail
723.7

Elizabeth, 2.12 miles northeast of, 1.72 miles southwest of South Zanesville, at crossing of Zanesville \& Western Ry. and Cincinnati \& Muskingum Valley R. R.; top of rail
715.2

South Zanesville, 0.36 mile southwest of, on east side of railroad, in stone; aluminum tablet stamped " 709 " \(\qquad\) 709. 576

South Zanesville, in front of station; top of rail
728.6

Zanesville, in front of station; top of rail
704.0

Primary leveling by W. H. Monahan in 1907 and T. A. Green in 1908.
From Zanesville northwest along Baltimore \& Ohio R. R. to Dillon.
Dillon, in front of station, at road crossing ; top of rail
722. 2

Dillon, 443 feet northeast of station, in southeast corner stone foundation of iron bridge over Licking Creek; aluminum tablet stamped " 713 "

\section*{From Mount Perry north along highway to Cottagehill.}

Coaldale, 3 miles south of, at south side of M. E. Church, in fifth row of brick, 12 feet from east end; aluminum tablet stamped " 939 "

Feet.
938.324

Coaldale, 1.2 miles north of, in east side of north abutment of small bridge; aluminum tablet stamped " 969 "
969. 091

\section*{At Zanesville.}

Zanesville, in front of Cincinnati \& Muskingum Valley R. R. station; top of rail
702.9

Zanesville, 0.6 mile north of, 6 feet north of milepost "T-16," 7 feet west of railroad; top of rail set vertically in ground
701.17

From South Zanesville south to Crooksville.
South Zanesville, 0.36 mile southwest of, in stone on east side of railroad; aluminum tablet stamped " 709 "
709.576

South Zanesville, in front of station; top of high rail
728.8

South Zanesville, 2.3 miles southwest of, east of Cincinnati \& Muskingum Valley R. R.; point on sandstone rock marked " 711 "--
South Zanesville, 3.3 miles southwest of, 495 feet south of private road crossing, in southeast corner of west stone abutment of iron railroad bridge over Johnson Creek; aluminum tablet stamped " 726-1908" \(\qquad\)
South Zanesville, 6.46 miles southwest of, at Ironspot, 125 feet south of Cincinnati \& Muskingum Valley R. R., 300 feet north of Ransbottom Bros.' pottery factory, in west end of concrete shutment of bridge for railroad siding leading to factory; aluminum tablet stamped " 732-1908" \(\qquad\)
Roseville, 2.1 miles southwest of, 390 feet south of milepost "T-29," 30 feet west of railroad, in north end of sandstone culvert over running stream; aluminum tablet stamped " \(743-1908\) "
742.6
742. 873

Crooksville, 60 feet south of Cincinnati \& Muskingum Valley R. R. station, 3 feet west of tracks, 4 feet east of foot bridge, on west end of north abutment of iron railroad bridge over creek; chiseled square marked " 752 "
752.28

\section*{From Mount Perry south to Rehoboth.}

Mount Perry, in west side of south abutment of covered bridge; aluminum tablet stamped " 801 "
801.499

Sego, in west side of north abutment of bridge at crossroads; aluminum tablet stamped " 832 "
Sego, 0.86 mile south of, on east side of north wing of abutment of iron bridge; chisel cut, marked " 843 "
843.12

Sego, 2.8 miles south of, on stone in southeast corner of barnyard of William Hull; chisel cut, marked " 1062 "

1, 062. 11
Mount Perry, 6.09 miles south of, in south side of west end of Wesleyan Chapel; aluminum tablet stamped " 1031 "
\(1,030.725\)
Wesleyan Chapel, 1.8 miles south of, south of road, on stone; chiseled square marked " 1068 "
\(1,067.57\)
Rehoboth, 2.24 miles west of, in foundation at east side of schoolhouse; aluminum tablet stamped " 1017 "

1, 016. 488
Rehoboth, 2.09 miles west of, on stone at top of hill; chisel mark, marked "1108"

\section*{APPENDIX.}

\section*{SECONDARY ELEVATIONS.}

Secondary elevations from records and topographic maps of the United States Geological Survey, including altitudes of well-known summits, water-surface elevations of prominent lakes, and other useful elevations are given below. The figures are approximate only and should not be used for accurate work.
\begin{tabular}{|c|c|c|c|}
\hline Locality. & Quadrangle. & County. & Elevation. \\
\hline & & & Feet. \\
\hline Adamsville & Conesville.
West
Colum & Muskingum. & 1,020 \\
\hline Alton..... & West Colu & Franklin. & \({ }_{934}^{913}\) \\
\hline Apple Creek & W ooster & Wayne. & 1,035 \\
\hline Atlas. & Woodsfie & Belmont & 1,288 \\
\hline Aultman & Canton. & Stark. & 1,108 \\
\hline Aurora Pond, water suriace & Chagrin Falls & Portage.. & \({ }^{936}\) \\
\hline Austintown & Warren... & Mah ning & 1,133 \\
\hline Ayersville. & Continenta & Defiance.. & 732 \\
\hline Bald Hill. & Chillicothe & Ross & 1,231 \\
\hline Barlow & Parkersburg & Washington. & 757 \\
\hline Bass Lake, water surface & Chardon & Geauga. & 1,141 \\
\hline Bethany & Mason & Butler. & 845 \\
\hline Blackleyvili & West Salem & Wayne. & 1,007 \\
\hline Brady Lak & Kent... & Portage & 1,056 \\
\hline Brandt. & Dayton. & Summit & \({ }_{893}^{991}\) \\
\hline Bristol. & New Lexington & Perry. & 1,085 \\
\hline Browns Knob & Caldwell & Noble. & 1,170 \\
\hline Buckeye Lake, water surfac & Thornville-Thurst & Fairfield-Licking & \\
\hline Burbank. & Wooster.. & Wayne.. & \\
\hline Burton City. & Massillo & & 1,009 \\
\hline Camp Ground. & Wellsville. & Jefferson. & \\
\hline Campbell Hill (highest point i & East Liberty. & Logan. & 1,550 \\
\hline Carrollton triangulation station
Castine & Carroliton. & Carroll & 1,376 \\
\hline Castine. & West Manchester & Darke.. & 1,079 \\
\hline Caywood. & Marietta........ & Washington & \\
\hline Chagrin Falls. & Chagrin Falls... & Meauga & 616
940 \\
\hline Chambersburg. & Dayton.. & Montgomery & 981 \\
\hline Chatham. & Newark & Licking & \\
\hline Crpowa Lake, & Chardon & Geauga & \\
\hline Clarion & Cuardun & Geauga & 1,323 \\
\hline Clirton & Berea & Cuyan & \\
\hline Cuinton. & Massillon & Summit & \\
\hline Coffee Knob triangulation stat & Caldweil
Jeffers n & A Shtabul & 1,180 \\
\hline Congress.. & West Salem & Wayne.. & ,163 \\
\hline Constant & Wester ville & Delawar & \\
\hline Creston.. & Wocster & Wayne. & 991 \\
\hline Culbers & Irontun. & Lawrence & \\
\hline Custar. & McClure & Wood.. & \\
\hline Datzell. & Macksburg. & Washington. & 1,067 \\
\hline Dilworth. & Kinsman. & Trumbull & 1,064 \\
\hline Donnelsvill & Springfield. & Clark. & \\
\hline Dover... & Massilion. & Wayne.. & - \({ }_{1} 2726\) \\
\hline Downingtow & Pomeroy. & Meigs. & 827 \\
\hline Drexel Park & Miamisburg & Montgomery & 955 \\
\hline Durgan.. & Wilkesville. & Gallia....... & 683 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline Locality. & Quadrangle. & County. & Elevation. \\
\hline & & & Feet. \\
\hline East Claridon. & Chardon. & Geauga & 1,224 \\
\hline East Greenville. & Massillon & Stark. & 1,163 \\
\hline East Rochester. & Carroliton & Colum & 1,088 \\
\hline Enon. & Springfield. & Clark. & 896 \\
\hline Ewington.. & Wilkesville. & Gallia & 674 \\
\hline Fairfield. & Dayton & Montgomery . & 836 \\
\hline Fairport. & Mentor & Lake.......... & 616 \\
\hline Fallsburg. & Frazeysburg & Licking. & 989 \\
\hline Farmington. & Bristolville. & Trumbul & 844 \\
\hline Forest.... & Arlington & Hardin. & 926 \\
\hline Fort Seneca & Tiffin.. & Seneca. & 699 \\
\hline Fritch Lake, water & Kent. & Portage & 1,140 \\
\hline Funk. & West Salem & Wayno & 978 \\
\hline Gahanna & Westerville & Franklin. & 795 \\
\hline Galena. & , & Delaware & 931 \\
\hline Gallia. & Oakhill & Gallia. & 859 \\
\hline Galloway & West Columbu & Franklin & 886 \\
\hline Garrettsville. & Garrettsville. & Portage...... & 1,000 \\
\hline Geauga Lake, water surface & Chagrin Falls.... & Cuyahoga-Porta & 1,007 \\
\hline \begin{tabular}{l}
Gomer \\
Grand Reservoir, water
\end{tabular} & Columbus Grove
Spencerville..... & Auglaize-Mercer & 779
870 \\
\hline Griffith.................. & New Matamoras & Monroe....... & 1,153 \\
\hline Gustavus. & Kineman.... & Trumbull & 1,071 \\
\hline Hampden & Chardon. & Geauga & 1,301 \\
\hline Harlem. & Westerville. & Delaware & 1,003 \\
\hline Harmony & South Charleston & Clark. & 1,047 \\
\hline Harrisburg & Alliance. & Stark. & 1,292 \\
\hline Hawk. & Wilkesville & Vinton. & 640 \\
\hline Hebron & Thornville & Licking. & 891 \\
\hline Hendrysburg & Flushing & Belmont & 983 \\
\hline Hinckley. & A kron... & Medina. & 1,103 \\
\hline Hilliard. & Dublin & Franklin & 937 \\
\hline Hockingpor & Keno & Athens. & 593 \\
\hline Hollister. & New Lexington & do & 709 \\
\hline Huntington & Wellington. & Lorain. & 970 \\
\hline Huntsburg. & Chardon.. & Geauga. & 1,250 \\
\hline Hyattsville & Dublin.. & Delawaro & 928 \\
\hline Independence. & Cleveland & Cuyahoga & 860 \\
\hline Indian Lake, water surface & Alger-Bellofontaine & Logan... & 997 \\
\hline Inland.. & Canton ............ & Summit. & 1,189 \\
\hline Irville. & Frazeysburg. & Muskingum. & 783 \\
\hline Jacobsburg & Clarington & Belmont & \\
\hline Jacobsburg triangulation sta & Clar & & 1,385 \\
\hline Jacks \({ }^{\text {ntown........ }}\) & Thornvill & Licking & 1,013 \\
\hline Jaysville. & Greenville & Darke. & 1,064 \\
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\hline Junction & Continent & Paulding- & 716 \\
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\hline Kossuth. & Spencerville. & Auglaizo & 828 \\
\hline Laings. & New Matamoras.. & Monroe. & 1,032 \\
\hline Lake Erie, water surface... & Ashtabula, etc.. & Ashtabula, etc & 1,573 \\
\hline Lake Pippen, water surface... & Kent............. & Portage........ & 1,038 \\
\hline Lake St. Marys, water surface & Celina.... & Mercer.. & 870 \\
\hline Langsville. & Pomeroy & Meigs.... & 580 \\
\hline Lathrop... & West Salem. & Athens. & 635
\(\mathbf{1} 165\) \\
\hline Leroy..... & Medina..... & Medina. & 1,103 \\
\hline Letart Falls. & Ravenswood. & Maigs. & 590 \\
\hline Lilly Chapel & London. & Madison. & 977 \\
\hline Lightsville.. & St. Henry. & Darke. & 1,041 \\
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\hline Meyers, Lake, water surface.. & Canton. & Stark. & 1,104 \\
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\hline Millfield....... & Athens... & Athens.. & 678 \\
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