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ECONOMIC SURVEY

FRANCE

FINANCE

THE FALL OF THE FRANC.

Next to the occupation of the Ruhr the chief topic in the Press is the recent slump of the franc. The chief tendency appears to be to treat the slump as quite natural and normal, and somewhat elaborate explanations are given of its causes. There seems to be a consensus of opinion that the chief of these causes are the following: The payments due at the end of the month, although the needs of trade of the present season are comparatively small and although the demand for foreign guarantees in the banks and on the Bourse are not individually important; the exceptional purchase of coal and fuel in England by French firms; the sale by German industrialists through Switzerland and Holland of the stocks of francs possessed by them in the banks of those countries, which are probably considerable, of which they have need for the purchase of coal and other raw material abroad, notably in England; the repatriation of deposits of francs or of *Défense Nationale* bonds due to the atmosphere of uncertainty created by the French action in the Ruhr; finally—and there is no blinking the fact—the bad impression produced on foreign speculators by Parliament's failure to balance the Budget. This last circumstance deserves particular attention. The announcement of M. Lasteurie's financial proposals, apart from their intrinsic value, had been looked upon abroad as the sign of financial recovery. The foreign holders of francs and *Défense Nationale* bonds have been alarmed, not so much by the opposition which these proposals have aroused as by the apparent procrastination of the Chamber in dealing with them and the possibility of their coming to nothing. Thus on Feb. 1, the 1923 Budget still showed a deficit of 4 milliards, which is tantamount to inflation. If to this circumstance be added the exaggerated rumours which are afloat as to the cost of the operations in the Ruhr, the slight decline of confidence from which the franc is suffering will be easily understood.

The present slump, therefore, was predicted, and it was even expected to have been worse. The real

danger lies not in its present violence but in the possibility of its continuance.

Current rumours relating to a combined offensive against the franc by international financiers headed by the leading British banks are referred to in the Press, which notes that London has on more than one occasion taken the lead in the offer of francs, and that the last occasion coincided with the Franco-British misunderstanding on the French Note to the Angora Government. One journal asks whether the alarm displayed on the subject by the London Press would be sufficient explanation of the sale of francs by British holders, or whether such sale should be looked upon as a reprisal. The journal in question, which quotes the *Temps* in support, appears to decide against the latter explanation, and thinks that it would be difficult and dangerous to organise a concerted plot among all the leading exchanges. It is well known that considerable orders for sale have come from Germany through Switzerland and Holland, and it is possible that the present time of depression was deliberately chosen for giving these orders. But it must not be forgotten that German manufacturers have got to make considerable purchases abroad, especially of coal in England. The policy of resistance by Germany in the Ruhr compels Germans to purchase sterling, and that they should have exchanged francs for pounds is practically a normal matter. There is no doubt, moreover, that during the last week the fortunes of the franc have closely followed political events. The strikes in the Ruhr and the growing aggravation of the Franco-German conflict of which an important section of the foreign press has taken care to make the most, have naturally contributed to create a movement of panic among holders of francs. On top of this, too, comes the sharp resentment, fortunately of short duration, caused in London by the Angora note. It must not, however, be forgotten that British finance has for several months past pursued a policy of repatriation of British stocks held abroad, especially in France. This circumstance explains why London has during the last few days played a preponderating part on the market for francs, but offers no proof of a deliberate bear movement. The French people are

France

apt to forget, moreover, that Paris often forestalls foreign exchanges in the sale of francs. During last January the quotations of the franc in Paris were even lower than in New York. (*Information Financière*, Feb. 6; *Journée Industrielle*, Feb. 5.)

A COMING GOVERNMENT LOAN.

The Minister of Finance has decided to issue a loan during March for the consolidation of the two-year Treasury Bonds issued in 1921. The amount of the Bonds about to fall due is some Fr.9,665 mill. The rate of interest and terms of issue will be made public at a later date. (*Information Financière*, Feb. 3.)

THE CUSTOMS DUTIES BILL.

By an Act of May 6, 1916, the Government was authorised during hostilities to prohibit by Decree the import of foreign goods or to increase the duties on such goods. This Act has been extended from time to time, the expiration of the last period of extension being Dec. 31, 1922. As the Government, acting under the advice of the Commissions of the Chamber and Senate, have not applied for a further extension, it may be assumed that from Jan. 1, 1923, the normal system is again in force whereby Customs duties can only be imposed or altered by Act of Parliament. Some anxiety is shown by certain industries, and petitions have been addressed to the Government to continue to exercise the powers accorded by the 1916 Act. M. Haudos, the Chairman of the Customs Commission of the Chamber, has expressed the following views on the subject: "It is my belief that many industries are far from having benefited by the system of altering duties by decree. Many of them have had to wait months and years before obtaining the readjustment of the tariff which they claimed. The legal procedure which will henceforth govern the matter will afford no obstacle to the legitimate demands of those concerned. The Co-efficient Commission, an expert organisation outside Parliament, will continue its functions and the Government, when acquainted with the demands of the manufacturers, will continue to submit them to the Commission. The Government will be able to introduce bills as will private members and I guarantee that the Customs Commission of the Chamber will lose no time in reporting on them." (*Journée Industrielle*, Jan. 28.)

THE MERCANTILE MARINE ESTIMATES.

The report of the Commission of the Mercantile Marine shows the loss caused to the country by the creation of a State-managed merchant fleet. The figures given by the reporter are beyond dispute, and the deficit shown is the following:—Construction and purchase, Fr.1,118 mill.; working, Fr.608 mill.; total deficit, Fr.1,796 mill. This figure, says the reporter, may easily reach 2 milliards when all the accounts shall have been audited. It should be noted, however, that the reporter takes no account of certain incidental expenses, general costs of administration, publicity, costs of promotion and above all, taxes, a very heavy burden on private companies. The State merchant fleet has worked with a capital of 2 milliards for nearly five years. The supplemental annual sum to be debited to the State merchant fleet should be about 3% on capital, i.e. 60 millions a year, or 300 millions for the five years. The State fleet, therefore, will have made a hole of about 2.5 milliards in the State finances. (*Journal des Débats*, Feb. 6.)

STOCK EXCHANGE QUOTATIONS.

In a previous issue (see THE ECONOMIC REVIEW, Jan. 26, p. 70) we gave the quotations on the Paris Stock Exchange at the end of December of the leading securities (French Government stocks, Railway Debentures) at fixed interest. Following are the quotations

on Dec. 30, 1922, compared with the closing quotations of previous years, of ordinary shares with varying interest of various classes of French enterprises (in francs):—

		<i>French and Algerian Railways.</i>			
		1913.	1914.	1921	1922.
Est	... ..	911	800	615	839
Lyon	... ..	1,282	1,130	820	968
Midi	... ..	1,111	990	725	835
Nord	... ..	1,705	1,400	910	1,335
Orléans	... ..	1,315	1,125	880	930
Bône-Guelma	... ..	618	589	447	495.50
Est-Algérien	... ..	641	550	480	468
Ouest-Algérien	... ..	628	—	425	465
		<i>Banking.</i>			
		1913.	1914.	1921.	1922.
Banque de France	... ..	4,655	4,625	5,550	5,900
Banque de l'Algérie	... ..	2,990	2,520	3,750	4,315
Crédit Foncier	... ..	880	695	805	1,050
Crédit Lyonnais	... ..	1,671	1,175	1,424	1,475
Comp. Nal. d'Escompte	... ..	1,050	800	954	958
Société Générale	... ..	815	510	709	726
Créd. Industr.	... ..	710	675	748	815
Banque de Paris	... ..	1,660	1,120	1,244	1,345
Union Parisienne	... ..	1,015	658	722	750
Banque Nat. de Crédit...	... ..	—	—	700	616
Crédit Mobil. Français	... ..	623	400	420	467
Compagnie Algérienne	... ..	—	—	1,220	1,220
Crédit Fonc. Égyptien	... ..	755	639	1,070	1,459
Banque Ottomane	... ..	643	450	688	718
B. Nat. du Mexique	... ..	473	398	525	635
Cr. Fonc. Franco-Canad.	... ..	740	725	1,591	2,100
		<i>Transport.</i>			
Canal de Suez	... ..	4,955	4,200	5,950	7,130
Transatlantique (ordin.)	... ..	156	100	224	199
Chargeurs Réunis	... ..	620	450	480	505
Havraise Péninsulaire	... ..	617	590	3,300	1,200
Omnibus de Paris	... ..	600	400	635	739
Voitures à Paris	... ..	184	180	599	957
Métropolitain	... ..	591	438	408	478
Nord-Sud	... ..	160	115	178	207
Cie Paris de Tramways	... ..	159	135	135	180
		<i>Gas and Electricity.</i>			
Compagnie Parisienne de Distribution d'Electricité	... ..	621	398	315	644
Thomson-Houston	... ..	725	490	775	808
Forces Motrices du Rhône	... ..	631	—	649	716
Compagnie Générale d'Electricité	... ..	1,245	950	881	985
Gaz de Paris	... ..	278	—	254.50	281
Eclairage, Chauffage et Force Motrice (Banlieue)	... ..	267	235	163	247
		<i>Coal.</i>			
Carmaux	... ..	2,636	2,230	702	955
Courrières	... ..	4,900	1,600	323	479
Lens	... ..	1,499	1,175	214	276
La Grand'Combe	... ..	1,985	1,950	628	800

From the above survey it will be seen that between Dec. 31, 1921, and Dec. 30, 1922, an appreciable and all-round improvement has taken place in the values of the shares of the principal classes of undertakings, due mainly in the case of stocks at fixed interest to a slight drop in the rate of interest on new issues, and to easier money, as shown by the reduction of the bank rate. Shares at variable interest, which came back into favour towards the middle of the year, have improved in sympathy with the revival of business. There is a tendency on the part of those who fear a depreciation of the franc to give the preference to shares in productive undertakings. (*Economiste Français*, Jan. 27.)

GERMAN RESISTANCE TO PAYMENT IN KIND.

Herr Stinnes, in accordance with the policy of resisting payment of reparations, organised by the present rulers of the Reich, has just rescinded the agreement with M. de Lubersac, representing the French Reconstruction Co-operative Societies, dated Aug. 14. This action has checked for the time the realisation of a programme which has, on the whole, given satisfactory results. The final contract was signed on Oct. 15, 1922, and since that date, thanks to the activity, energy, and perseverance of the managers and members of the Confederation, and in spite of the trickery and evasions

which they encountered, an appreciable result was obtained which gave promise of efficient assistance to the work of reconstruction and substantial relief from the burden which it imposed upon the country. Up to Dec. 22, 1922, material in the quantity and to the value shown below had been ordered from Germany by the Confederation:—

Material.	Quantity. Tons (1,000.)	Frontier	Destination
		Value. (Fr. (1,000.))	Value.
Tiles	3,738	1,036	1,595
Ridge tiles	45	57	91
Cement	5	400	600
Slate	478	88	124
Timber (c.m.)	55	—	9,900

Of these the following amounts had been delivered by Dec. 31 :

Tiles	1,648	461	659
Ridge tiles	22	28	44
Cement	2	105	158
Slate	403	71	96
Timber (c.m.)	36	—	6,480

The difference between the price at frontier and on delivery is due to French Customs duties and railway rates. Since Dec. 31, 500 t. of lime have been delivered of an order of 2,000 t. Of cement 144 truckloads of 15 t. each have been delivered since the beginning of the year. The Hoch und Tief further offered for Jan. 2, 2 mill. flat tiles (Alsatian form) at Fr.220 the thousand, 300,000 longitudinal at Fr.320, and 300,000 tiles with double joinings at Fr.360. It also undertook to deliver 300,000 c.m. of worked and unworked wood. (*Journal des Débats*, Feb. 7.)

INDUSTRY

THE RUHR AND THE METAL INDUSTRY.

The Société des Cokes des Hauts Fourneaux has fixed the minimum price of coke for metallurgy at Fr.150 per t. (price 1) from Feb. 15. This price applies to coke delivered to the foundries up to 40% or 50% of their consumption capacity, and for all quantities delivered in excess of this proportion Fr. 200 per t. (price 2) will be charged. Originally the 1 and 2 prices were fixed at Fr.110 and 153 respectively, as from Feb. 1, but a recent circular from the Society announced that these prices would be valid only until Feb. 15. The cutting off of the supply of German coke has caused several works in Eastern France, Lorraine and Luxembourg to extinguish their blast furnaces. In Lorraine 10 have been extinguished, and in Luxembourg 5, leaving 13 alight. In the Langwy-Nancy field some 5 blast furnaces have been extinguished. Soon the only blast furnaces alight will be those which are not exclusively dependent on German coke. A number of steel works and rolling mills have also had to close down.

Although the market for metal products is steady, with an upward tendency, manufacturers, owing to shortage of material, notably fuel, hesitate to undertake orders even at short dates. Certain middlemen, and even producers who have held in reserve small stocks of products, raw, semi-manufactured and finished, are commanding prices which have no connection with the ordinary market prices. Since the entry of the French troops into the Ruhr, practically no coke has come to hand for the French metal industry, and, what is more serious, there is no saying when the supply will be resumed. The Société des Cokes des Hauts Fourneaux, which is the distributing agent of this class of fuel, is practically dependent on German coke. Belgium has little more than sufficient for its needs, and British coke is very dear; before the recent fall of the franc it cost Fr.216 per t. c.i.f. Rouen.

It is a matter for regret that the iron and steel industry is still dependent on the State. In fact, the latter alone benefits by the delivery of Reparations fuel, and the purchase money for this fuel which it receives from the French iron and steel industry is practically the only cash which finds its way into its coffers under the Treaty of Versailles. If only the industry were free to

obtain its supplies where it liked, even from the Ruhr, it would probably not be in its present position. M. Robert Pinot, Vice-Chairman of the Comité des Forges, has, within the last few days, refuted certain insidious insinuations appearing in the German Press by definitely stating that the German industrialists have offered to supply French iron works with all the coke they need, on condition that they pay for it in the way in which they did before the war. This proves, contrary to the German assertions, assiduously propagated in the foreign press, especially in that of England and America, that Germany is perfectly in a position to supply coke under the Reparations clauses, and if it has not done so it is owing to its persistent refusal to make reparation. Therefore, the position is: No coke by way of Reparations, but plenty of coke if paid for as in 1914. The French ironmasters patriotically declined to further the machinations of Stinnes and Co., and, consequently, now suffer in their interests. (*Information Financière*, Feb. 3; *Nord Industriel*, Feb. 3; *Journée Industrielle*, Jan. 28.)

AGRICULTURE

THE WHEAT CONGRESS.

For some time past considerable anxiety has been shown in Government circles as the wheat supply, there having been a shortage in the 1921 harvest. Recently, a Congress was held at Paris, presided over by a former Minister of Agriculture, M. Ricard, to discuss methods of increasing production. The President opened the Congress by stating that it was necessary that the country should be self-supporting, and that, with this object in view, efforts should be made to increase the yield per hectare, ensure sufficiently remunerative prices and organise the home market in accordance with modern conditions. Highly interesting reports were read and discussed at the Conference, which showed that in order to increase the yield per hectare it was necessary to improve existing classes of wheat, and in certain districts methods of cultivation. French agriculture, it was stated, was not carried on under equal conditions of soil and climate, but the best districts gave as good a yield as any other country, especially Flanders, Artois, la Brie and the Vexin, which produce an average of 38 to 40 metric quintals per hectare. The statistics published were over-hastily interpreted as showing that the average yield was less than in England and Germany. M. Ambroise Rendu, in his report on economic conditions of wheat cultivation in France, announced that French agriculture devotes a relatively much larger area to the cultivation of wheat than almost any other country, and supplies the inhabitants of the country with an appreciably larger quantity, making due allowance for density of population. The following table, given by M. Ricard, shows that the yield per hectare varied in the five districts into which he divided the agriculture of the country:—

	M. qu.
1. North	2.6
2. North-East and Centre	18.4
3. North-West and West	16.1
4. East and South-East	13.6
5. South and South-West	10.4

Although this output varies, the sale price is practically uniform all over France, but cost of production, which it is impossible to ascertain, varies almost at every harvest.

M. Georges Lefebvre, Counsellor of Foreign Trade, showed that production might safely be intensified, as any surplus production would easily find purchasers in neighbouring countries. According to this authority, these countries purchase annually 325 mill. qu. of cereals abroad, including 160 mill. of wheat. This he believed to be the real form of protection for agriculture. While all countries shut their doors on French wine, they were quite willing to welcome French wheat, and it was the more necessary to intensify the output of wheat, as its increased consumption in the world outstripped its

France

production, and unless France were self-supporting she would soon find herself unable to purchase wheat abroad. He pointed out that in past years when large quantities of wheat had to be imported Customs duties on the commodity were suspended. It must be admitted that at present this was not the case, as the duty of Fr.7 per quintal has been raised to Fr.14. This duty had not stimulated an increase of the sowing of wheat, which had given place in some districts to vine-growing, and in others, to stock-breeding.

France, stated M. Edouard Loewe, might well join the ranks of European world producing countries, as owing to the defection of Russia from the export markets Europe was reduced to supplying itself from overseas. The other granaries of Europe, Rumania, Bulgaria and Yugo-Slavia had been rendered incapable of exporting by the war. It would be a long time before the great wheat-growing countries from overseas would be able to make up the deficit of Europe, as in each of them there is a struggle between the increase of production and increase of population. The increase of population over production had long since deprived Hungary of its title of the "Granary of Europe." Russia, which inherited the title, was not so near losing it as some people supposed. He then enumerated the Trans-Atlantic wheat-growing countries, and the amount which each could supply.

M. Storione advocated the seeking of outlets for flour which might be found :

(1) In the Colonies, by re-modelling of their Customs tariffs ;

(2) Abroad, by granting facilities of export by means of bounties or otherwise.

The improvement of agricultural implements, he continued, offered a sure guarantee of success, should grain be obtainable of such quality as to permit of competition with the foreigner. But it was only by full freedom to trade that the milling industry could play its proper part.

One member of the Congress suggested the creation of a trade organisation with the consent of all concerned, producers, manufacturers and consumers, which would ensure a regular price (Fr.80 per qu.) and stability of wheat prices in France. Another member opposed this suggestion as chimerical, as it was impossible in this domain as in others to evade the law of supply and demand. The average total output of wheat and the average output per hectare since the beginning of the century (except the war years 1914-18) are given by the *Statistique Agricole Annuelle* as follows :—

	Total. Qu. (mill.)	Average per hect. Qu.
1900	88.5	12.91
1901	84.6	12.45
1902	89.2	13.59
1903	98.7	15.24
1904	81.5	12.49
1905	91.1	14.00
1906	89.4	13.72
1907	103.7	15.77
1908	86.1	13.13
1909	97.7	14.81
1910	68.8	10.50
1911	87.7	13.63
1912	90.9	13.84
1913	86.9	13.28
1918	60.4	—
1919	49.6	—
1920	64.4	—
1921	88.0	—
1922	64.0	—

(*Economiste Français*, Feb. 3.)

GERMANY

FINANCE

THE FLOATING DEBT.

Herr Georg Muench, in his article in the *Vossische Zeitung* of Jan. 7 (cf. THE ECONOMIC REVIEW, Jan. 19, p. 47), would appear to have under-estimated the amount of the floating debt, which on Dec. 31, 1922, was as follows (in milliards of marks) :—

1. Treasury bonds issued—		
(a) At 3 months, discounted by the Reichsbank	1,485.0	
(b) Issued at longer dates	9.9	
		1,494.9
2. Further liabilities on Treasury bonds and bills		303.6
3. Treasury bonds and bills issued for securing supplies (282 milliards for corn supply)		294.1
Total		2,092.6

The progress of the floating debt since the beginning of the year appears below (in milliards of marks) :—

	Discounted Treasury bonds and bills.	Total floating debt.	Increase on previous month.
End Jan. 1922...	255.7	270.3	6.0
„ Feb. „ ...	262.8	277.3	7.0
„ March „ ...	271.9	281.1	3.8
„ April „ ...	280.9	289.4	8.8
„ May „ ...	289.2	299.8	10.4
„ June „ ...	295.1	311.6	11.8
„ July „ ...	307.8	329.0	17.4
„ Aug. „ ...	331.3	355.6	26.6
„ Sept. „ ...	450.9	528.4	172.8
„ Oct. „ ...	603.6	720.7	192.3
„ Nov. „ ...	838.9	1,166.0	445.3
„ Dec. „ ...	1,494.9	2,092.8	926.8

(*Berliner Tageblatt*, Jan. 12.)

RECEIPTS FROM STATE UNDERTAKINGS.

The earnings from the State undertakings in November and for the first 11 months of 1922 are as follows (in millions of marks) :—

	Nov. 1922.	11 months.
I.—Post and Telegraph.		
Postal charges	7,543.7	19,247.1
Telegraph charges	3,040.1	7,095.5
Telephone charges	1,425.9	5,499.2
Postal order fees	207.3	1,045.8
Total	12,420.1	33,860.1
II.—Railways.		
Passenger fares	4,691.0	18,749.9
Goods rates	85,818.5	220,392.9
Passengers' luggage, etc. ...	2,449.6	8,615.2
Total	92,959.2	247,758.0

(*Berliner Tageblatt*, Jan. 13.)

THE FORCED LOAN AGAIN.

Even political developments, writes Dr. Erwin Hirschfeld in the *Deutsche Allgemeine Zeitung* (Feb. 3), have not yet led to the setting aside of the Forced Loan Act, characterised by all competent critics as impracticable. Those subject to the impost are required to make their returns, and yet the most important elements required in making them are lacking. A preponderating number of taxpayers know as yet practically nothing definite as to the amount of their property. The catastrophic course of the mark makes any valuation increasingly difficult, and the directions for the assessment of the Property Tax and for that of the Forced Loan, which were issued sufficiently late (Dec. 29, 1922), shed no light on the subject. For the

principles laid down for valuation are merely—as they themselves state—such as *may* be observed, and are therefore neither fixed nor certain, but rather permit a certain deviation in one direction or another, and this both on the part of the taxpayer and the revenue officer.

The valuation principles, however, are in some respects favourable to the taxpayer. Thus, in the matter of stock-in-trade, raw materials, semi-manufactures and finished articles, etc., are to be entered at cost less 70%. In so far as stocks dating from the first half of 1922 are concerned (when the dollar exchange was about 300), this valuation is favourable. The law also gives the business man the advantage of calculating liabilities in foreign currency at the exchange of such currency as on Dec. 31, 1922, that is, at a high rate, and further, debts maturing later, which it is impossible to cover in view of the recent course of the exchange, he may apparently value still higher, whilst similar foreign credits in good foreign currencies can be entered at a more advantageous figure. Thus, for the conversion from foreign into German currency the basis is the average exchange of the foreign currency as ascertained from the sum of the rates at the end of the first half of the years 1920, 1921 and 1922 divided by three, on the one hand, and from the rates on Oct. 1, 1922, on the other.

Whether, in view of the increase in official salaries, including those of the revenue officials, the Forced Loan Law Act will bring in as much as its assessment costs the Treasury appears to me doubtful. Apart from this, it only gives the taxpayer and the banks unnecessary labour, paper will be needlessly wasted, and futile legal disputes will be fostered, and if at the moment one looks towards the Ruhr one would willingly see not only the coal deliveries and the Reparation payments stopped but also the Forced Loan Law set aside.

According to the *Frankfurter Zeitung* an application to permit dealings in the Forced Loan is now before the committee of the Berlin Bourse, and has either been granted or will be immediately. The board of the Reichsbank has authorised the loan banks on the collection of the loan to lend on it 75% of its quoted value or its nominal value as a maximum. The official quotation list giving the taxation rates governing the valuation of the Forced Loan has meanwhile been published in the *Reichsanzeiger*.

STOCK EXCHANGE INDEX NUMBERS.

The German Stock Exchange prices show a considerable rise corresponding to the rise in the exchange. It amounts to 98.4%. The dollar rose during the same period (from Jan. 24 to 31) 124.8%. Shipping shares show a noteworthy improvement, and with a rise of 140.6% far exceed the dollar. In the other groups no particular general tendency is remarkable. Coal shares, with a rise of 44.7%, remain this time farthest in the rear, whereas on last making-up day they showed the greatest rise.

Share Numbers.	Share Group.	Jan. 24.			Jan. 31.		
		a		(a1)	(b2)		
1. 9	Coal Shares ...	287.1	415.6	415.6			
2. 19	Iron „ ...	273.8	410.8	410.8			
3. 15	Metal „ ...	218.2	283.0	383.0			
4. 20	Machinery, „ ...	183.8	357.9	357.9			
5. 10	Railway „ ...	198.8	370.0	370.0			
6. 10	Shipping „ ...	335.8	808.2	808.2			
7. 14	Electrical „ ...	234.2	454.1	454.1			
8. 15	Chemical „ ...	234.8	440.3	422.1			
9. 19	Textile „ ...	263.5	571.9	571.9			
10. 10	Brewery „ ...	226.7	456.4	456.4			
11. 18	Bank „ ...	289.1	584.2	584.2			
159 Total Index		231.0	458.3	458.0			
Dollar ...		290.4	653.3	—			

The starting basis both for the *a* and *b* figures is Jan. 3, 1923. This basis was taken as =100. (1) The *a* figures include all rights since January 1923. (2) The (lower) *b* figures are calculated ex-rights. The percentage changes are as follows: Textiles +117%, Banks +102%, Breweries +103.3%, Machinery +94%,

Railways +81%, Metal +75.8%, Chemical +79%, Electric +72%, Iron +50%. All the 159 share scrips taken into account have risen.

The general index of Public Stocks rose exactly 20%, thereby continuing the pace set in last week's rise (+24%).

In the period taken into account (Jan. 24 to 31) all groups of Rentes follow fairly unanimously the rise in the exchanges. Altogether 35 securities rose, whilst 7 fell and 2 remained the same.

	Jan. 10.	Jan. 24.	Jan. 31.
1. Reich and State loans	112.9	238.4	265.0
2. 3% and 3½% State loans	135.2	169.6	194.3
3. Municipal loans ...	105.2	123.5	127.7
4. Provincial loans ...	111.0	141.7	177.6
5. Debentures of German Hypotheken Bank	116.0	127.9	177.8
6. Prussian Bonds ...	103.0	140.7	195.5
7. Industrial Debs. ...	100.1	89.9	117.8
Complete Index	112.8	142.6	171.0

The general index number of the Rentes index experienced the same rise in January (71%) as in both the years 1921–22 together (+71%). Reich and State loans, despite the isolation of the partially semi-currency 3% and 3½% Reich loans, which showed a certain sluggishness with a rise of only 94.3%, stand at the top of all the groups with a rise of 163%. Only industrial debentures with a rise in the last two years of 133%, compared with 17% in January, are unable to keep up the comparison.

For the rest of the remaining groups, as the following figures show, the rate of the upward movement has been maintained. Prussian Bonds: January 1923, +95%; 1921–22, +111%. Provincial Loans: January 1923, +77.6%; 1921–22, +77%. Debentures of the German Hypotheken Bank: January 1923, +77.8%; 1921–22, +47%. Municipal Loans: January 1923, 27.7%; 1921–22, +16%. (*Berliner Tageblatt*, Feb. 4.)

TRADE

THE BOYCOTT OF FRENCH FASHIONS.

The Association of German costumiers has bound its members to oppose the import of French and Belgian creations. Neither directly nor indirectly are these goods to cross the German frontier. This boycott is directed more especially against the Paris costumiers of the Place Vendôme and of the Rue de la Paix, in whose workrooms the fashions for cloaks, dresses, under-skirts, hats, and all articles of ladies' under-clothing are re-created twice a year. Some of the members of this Paris "Haute Couturerie" have already obtained a world-wide reputation—Doucet, Poiret, Paquin, Worth, Céonit, Béschoff-David, etc., for instance. Generally speaking, the import of Paris models into Germany is greatly over-estimated, and since the war it no longer has anything like its former importance. A few figures will illustrate this:—

	1913.		1920.		1922.	
	Total.	Mk.	Total.	Mk.	Total.	Mk.
Import.	(mill.)	(mill.)	(mill.)	(mill.)	(mill.)	(mill.)
Ladies' and girls' dresses, blouses, skirts, stays and underskirts ...	21,680	1.5	0.564	0.7	0.271	1.6
Ladies' hats ...	55,046	3.0	651	0.2	595	0.3
Furs ...	16	1.3	—	0.3	—	1.6
Kid gloves ...	9	0.8	—	—	—	—

From the above table the great decrease in the import of French goods can be clearly seen. For less than a thousand francs no Paris model from a first-class firm can be bought to-day, which means at the present rate of exchange a sum of about 2½ mill. paper marks in German money.

It can, therefore, easily be understood that alone on account of the exchange the import from France and Belgium can only be very limited.

The journeys from Germany to Paris for the purpose of studying the fashions have already ceased, and

Germany

Germans will no doubt get along without them, especially as the fashions for the Spring and Summer have already been decided upon. Germany was able to do quite well without French creations during the long war, and this circumstance has considerably assisted German fashions to become more independent. In place of the Paris costume artists the Vienna firms helped to animate German fashions with considerable taste during the war. A large number of capable concerns in Berlin have for years created their own fashions with artistic skill. These are presented to the buyers by skilful mannequins after the Paris manner in tastefully arranged rooms. Many foreigners are to be seen at these houses in addition to the home customers, and the considerable purchases of the former prove that they are pleased with the Berlin fashions. The models sent by Belgium to Germany were not numerous, and since the war they have almost entirely ceased. Thence fine hand-sewn lace lingerie and fashionable ladies' shoes were imported; now both these articles are equally well manufactured in Germany.

All models coming from abroad consist of ladies' wear exclusively; on the other hand German fashions in men's wear have already gained a reputation for originality and durability. Before the war the large Paris stores such as the Louvre and the Printemps, were regular customers for German men's and boys' wear, and they did their best business in these articles. Last year these Paris firms re-opened relations with Germany, and if the illegal occupation of the Ruhr had not interposed these relations would already have developed.

The German buyers of models were always welcome in Paris before the war, and at that period their large numbers formed a factor worth considering in the budgets of the Paris houses. The latter have been at pains once more to attract their long-missed clientèle, but the need of obtaining so many expensive Paris models no longer exists in Germany to anything like its former extent. During the last few years only a few German firms sent representatives to Paris to purchase models. Often a visit to the racecourse at Auteuil suffices them to ascertain the trend of the fashions from the toilettes of the mannequins promenading there, and afterwards to create their own novelties. Henceforward even these few buyers will avoid the Paris ateliers and their "dernier cri" will remain unnoticed by Germans. (*Berliner Tageblatt*, Feb. 4.)

KRUPP'S RUSSIAN CONCESSION.

The *Ekonomicheskaya Zhisn* gives the following particulars of the concession contract concluded between the Krupp company and Russia:—

The contract with the Friedrich Krupp firm was ratified on Jan. 16, 1923, its most important provisions being as follows: The Russian Government cedes to Krupp's 25,000 dessyatins of land in the Saale district of the Don Territory for agricultural cultivation and exploitation on the most modern methods. The concessionaire is not entitled to sub-lease the land without the Soviet Government's consent, and is bound by the contract to cultivate not less than 23,500 dessyatins in the course of six years, beginning with a minimum of 1,400 dessyatins for the first two workings and with a progressive increase in the area worked. The tribute is dependent upon the area worked under the agreement, and must be paid in full even if from any cause the area worked does not reach the agreed proportion. It is payable in grain, and is fixed at 17½% of the entire yield, delivered free at the nearest railway station. One half of the tribute is payable on Nov. 30 and the second half on Feb. 15.

The Soviet Government has also a preferential right to purchase the remainder of the products at the prices of the Rotterdam Corn Exchange, less the difference for

freight and other delivery charges. Besides the tribute and tax in kind the concessionaire firm has to pay the general State taxes as required by law, and must comply with all legal enactments and orders issued by the Soviet Government, and in particular with the Government's labour legislation. The firm has unrestricted right to effect banking operations of every kind in Russian banks, etc. It is under obligation to pay all Customs duties with the exception of duties on goods imported under the control of the Soviet Government in connection with the scheme for working the concession. On the termination of the term of the contract the firm has to deliver over to the Soviet Government the whole of the property and plant in full working order with the entire inventory. After 12 years from signature of the contract the Soviet Government has the right of acquiring the entire property by purchase. The working of the concession will be under Government inspection and control.

The application of the Krupp firm for the concession came before the Concessions Committee on Jan. 12, 1922. The negotiations were conducted by the commercial representative of Russia in Germany, by whom the application was forwarded to Moscow. Early in February the firm's application was examined by the Chief Concessions Committee and was approved on Mar. 21, 1922, after receiving several alterations and amendments. The contract was signed on April 23 by the plenipotentiary of the Soviet Government and by the Krupp firm. The concession was thereby to take effect as from April 1, 1922, and the concessionaire was to begin working the property in the ensuing autumn. It was found impossible, however, to give effect to the contract, as in view of the catastrophic situation of German finance the Krupp firm was obliged to postpone its fulfilment until the economic and financial position should become clearer. It was not until Nov. 9, 1922, after the Russian representative had requested a definite decision from the Krupp firm, that the negotiations were resumed.

In December Messrs. Krupp informed the Russian representative in Germany that, for the purpose of financing the German company, "Kruppsche Landkonzession Manytsch, G.m.b.H.," with a capital of one million marks (of which ¼ was paid by the Krupp firm and ¾ by English interests), an English company entitled "Russian Land Concession Manytsch Limited" had been formed in London with an initial capital of £40,000, the English financial group subscribing £30,000 and Messrs. Krupp £10,000. Both parties have undertaken, should it prove necessary, to double their subscriptions and increase the company's original capital to £80,000. (*Deutsche Allgemeine Zeitung*, Feb. 3.)

INDUSTRIES

DWINDLING PROCEEDS OF INDUSTRY.

That German industry, in the midst of all our economic distress, is still highly prosperous and producing brilliant profits is a fabulous story that has been palmed off on credulous people over and over again, although on closer observation anybody can immediately convince himself of its incorrectness. For us the worst and most dangerous part of the whole matter is that, whenever such rash reports crop up in our own country, they are eagerly seized upon by the enemy countries and used to our disadvantage. Thus in his latest speech M. Poincaré again referred to Germany's supposed industrial prosperity and the big dividends as reasons for fresh exorbitant demands and proof of the possibility of fulfilling them. Consequently there is no redundancy in showing, with the help of a few examples, how very much, on the contrary, the proceeds of German industry have in reality dwindled away, in cases where to a casual observer the high percentage dividends produce the appearance of a certain degree of prosperity.

Below are given the dividends in gold marks for the business year of 1912 and in both paper and gold marks for the business year 1921 of some of the best known German joint stock companies :—

	1912.	1921.	
	Mk. (mill.) Gold.	Mk. (mill.) Paper.	Mk. Gold.
Vereinigte Glanzstoff-Fabriken	2.0	18.0	404,500
Höchster Farbwerke	... 10.8	120.0	2,700,000
Rheinische Stahlwerke	... 4.4	18.5	415,700
Harp. Bergbau A.-G.	... 7.6	17.0	382,000

It must be noted that for the year 1921 the conversion of the paper marks into gold marks is based on the exchange rate of the American dollar at the close of the year (\$1=Mk.187). Calculated on this basis one gold mark was at that time equal to 44½ paper marks. The resulting figures speak volumes for themselves. They show beyond a doubt that in the year 1921 the profits of the companies mentioned had diminished enormously as compared with the pre-war period of 1912. The Vereinigte Glanzstoff-Fabriken yielded 20.2% of their pre-war profits, the Höchster Farbwerke 25%, the Rheinische Stahlwerke 9.4% and the Harpener Bergbau A.-G. only about 5%, although the dividends of these companies are all between 20% and 50%, and in spite of the fact that since the year 1912 their share capital has been considerably increased, in some cases even multiplied. A simple calculation will show that even if they had been able to declare 100% dividend their profits would have been much below those of the year 1912, in which the percentage dividends were by no means so high. But for the business year 1922, the results of which have not yet been published, the comparison with the profits of the year 1912 will be far more unfavourable than for the year 1921. The companies mentioned have not been specially chosen for this comparison. The list can be prolonged *ad libitum*, and no matter which companies are added the same feature is prominently noticeable; the profits of one and all are dwindling rapidly, so that they by no means show signs of prosperity, but of constantly diminishing economic efficiency. (*Deutsche Ueberseeische Zeitung*.)

ENGINEERING IN 1922.

The uncertain and unfavourable conditions from which German industry generally suffered during 1922 were especially acute in the case of engineering in the last quarter. The number of orders outstanding from 1921 and those placed in the early months of 1922 declined appreciably. Already in the third quarter of 1922, there was a marked falling off of the demand for labour in the machine-making workshops, a shortage of skilled workmen only still existed. In the final quarter there was no further question of a shortage of skilled or unskilled labourers or of technical and commercial employees, and the demand for skilled labour was reduced by half in comparison with the previous quarter. The supply of raw material and fuel left much to be desired in the fourth quarter. Certain kinds of coal for special purposes failed entirely. This shortage, however, in view of the apprehended falling off of business, did not make itself so acutely felt as it might have. Nevertheless in some cases failure of, or delayed delivery, seriously hampered the execution of orders. Communications, after the claims on the railways for the transport of the harvest were satisfied, improved considerably, although complaints of truck shortage were heard here and there. There was always a sufficiency of cargo space on the ships. New orders in the last quarter of the year were, as in other industries, very irregular. The rapid depreciation of the mark naturally caused a serious rise in the price of raw and auxiliary material, wages, salaries, transport rates, and aggravated the tightness of money and shortage of credit. The result was a slackening of home orders, which became especially noticeable in October. Stocks, owing to the shortage of orders, began to

accumulate, when not restricted by tightness of money. Hitherto reduction of output and of staff only appears to have occurred in isolated instances; prospects for the near future were, however, decidedly more unfavourable than in the preceding quarter. Several engineering works are now preparing to cut down output. Naturally the occupation of the Ruhr has rendered all predictions for the future impossible. Already complaints are heard of a falling off of orders from unoccupied Germany. (*Deutsche Allgemeine Zeitung*, Feb. 6.)

TEXTILE TRADE IN JANUARY.

The further catastrophic fall of the mark owing to the occupation of the Ruhr caused a further accentuation in the difficulty of obtaining raw materials and capital in the textile industry, and brought about restrictions in working. The partially more active inquiry in certain branches no doubt led to sufficient orders being booked to keep the factories busy again for some time. But on the whole business has again relaxed, and in most of the textile districts many factories are working only five days a week or even less.

Owing to the shortage of capital the spinning mills have been obliged, in accepting orders, to demand payment in advance to cover the entire contract. In view of the prodigious rapidity of the depreciation, however, only very few of the weaving mills can command sufficient fluid capital for their requirements. For this reason the calls on delivery contracts given earlier have come to a standstill, for on the one hand the dealers in raw material cannot grant any longer terms of payment. On the other hand more or less serious difficulties have arisen from the acceptance by the trade and the clothing industry of orders recently given on the basis of a foreign currency, and these difficulties have been materially increased by the recent sharp rise in the rates for foreign exchange. Goods ordered in foreign currency a few months ago and now being delivered are quoted considerably dearer—sometimes twofold or threefold—than the stock goods simultaneously offered at current prices by the spinning mills or the wholesale textile trade. Such stock goods are plentiful, as many works were compelled to manufacture for stock at times when the orders in hand were insufficient to keep their workers adequately employed. A very large number of purchasers who did not realise the degree of risk incurred in giving contracts on a gold mark basis, are to-day unable to fulfil their obligations in paper marks, which, as compared with November, have been increased by from three to fourfold and, as compared with earlier periods, by from six to tenfold.

Buyers on the Bremen cotton market showed reserve as a result of the occupation of the Ruhr and the continued depreciation of the mark. The uninterrupted rise in American cotton prices is followed with the closest attention. On Jan. 24 cotton in New York rose to approximately 29 cents, a record not reached for many years, and a further rise in the market is anticipated. The rise in foreign exchanges, in conjunction with the higher world market price, produced a sharp rise in the price curve on the Bremen Cotton Exchange. Standard quality raw cotton, fully middling, was quoted as follows :—

		Jan. 2.	Jan. 16.	Jan. 23.	Jan. 29.
Bremen	Mks. per kg.	4,696	10,980	13,948	22,832
New York exchange	Cents per lb.	26.45	27.40	28.75	28.00
Dollar exchange (Berlin)	Mks.	7,240	16,608	19,950	33,166

Cotton was quoted in Bremen on Jan. 30 at Mk.32,813. This is more than 24,000 times that of the pre-war price, and is nearly four times the price quoted less than a month ago.

On the French cotton market there was an active inquiry, but the fall of the franc made business difficult, manufacturers being forced by the rapid depreciation to increase their demands by private agreement. (*Deutsche Allgemeine Zeitung*, Feb. 2.)

Germany

COMMUNICATIONS

GERMANY'S AIR LINES.

Hardly any branch of German technical industry or German manufacture has had to suffer so much from the effects of the war, and especially from the peace treaties, as German civil aviation. Other States were already practising it whilst it was considered almost impossible of fulfilment for Germany. The first company to study the basis of this question in Germany was the German Aerial Navigation Co. (Deutsche Luft-Reederei), called for short the D.L.R., which was founded during the war. Behind the company powerful financial groups were interested, the Hamburg-American Line and the General Electricity Company (the A.E.G.). In February 1919, the D.L.R., with a few converted war machines, that is to say open machines, sometimes with no cabins for protection against the weather, oil from the motors, or noise, and of moderate horse-power, took up the traffic. At that time there was no peace treaty in existence nor any limitation as to type and power. Development, being therefore apparently unhindered, necessarily progressed. Numerous other companies, considering the times, also came into being. The first daily services with passenger aeroplanes were established during the flying season of 1920-21, but even these were still of a provisional character. Hardly any new machines were built.

In 1920 the flying was carried on according to timetable and on fixed routes, though these were not always adhered to. Mails were carried and even a regular connection abroad. Copenhagen-Hamburg-Bremen-Amsterdam was established between the D.L.R. and a Danish Company, but was soon stopped owing to objection to it being raised by the Entente. Former war-planes, according to the wording of the definitions of the peace treaty, were not allowed to cross the frontiers. Since that date foreign air traffic to the westward has not been renewed.

In 1921, traffic was again interrupted by order of the Entente, until towards the end of the year it was allowed to be continued to a limited extent. To a limited extent, because after the long interval the companies had first to shake themselves awake again out of their long sleep. The D.L.R. covered the stretches to Gelsenkirchen and Dortmund, to Hamburg, Westerland and Dresden. Sablatings air craft flew to Bremen and Münster; the D.L.R., in conjunction with the Danzig Air Navigation Co., flew to Danzig, Königsberg and Memel. Rumpler flew to Leipzig, Nuremberg, Munich and Augsburg; at the end of 1920 an attempt indeed made by Rumpler at foreign flight took him to Vienna, but his machine was confiscated by the Entente. Finally there was the German Air-Lloyd, which flew to Bremen, Hanover, Magdeburg, Leipzig and Dresden. In the winter of 1920 the Juncker Air Co., which hitherto had only gone in for construction work, began, in conjunction with the East German State factories, the service Berlin-Schneidemühl-Danzig-Königsberg.

On Feb. 5 an important decision for German Civil Aviation was taken, the preliminaries to which dated back a long way. The Ambassadors' Conference in Paris had interpreted Article 201 of the Peace Treaty in such a way that the time fixed during which Germany was not allowed to build any new aircraft began to run from the moment when Germany should have delivered all the stipulated war aircraft material. Germany protested energetically at the time, but unsuccessfully: she had to submit to the London Protocol of May 5, 1921. The consequence was the strictly enforced forbiddance to build any aircraft, which came into force on June 29, 1921, and according to which all new constructional work had to cease. This order was rescinded by the note from Feb. 5, 1922, to May 5, 1922. The fetters were falling off, for now only the so-called "definitions" hampered German aviation. According

to these "definitions" Germany may only build one class of aeroplane for civil aviation, which shall only be able to climb at the highest to 4,000 metres, develop 175 km. speed at average height, carry 600 kilos weight, and not have a greater effective radius than 3½ hours. Germany has always honourably observed these "definitions," which has been admitted by all foreign countries, even the former enemy countries, only lately, again on the occasion of the visit of the Juncker-going metal aeroplane in England.

In the year 1922 the flying season therefore began, to some extent, under friendly auspices. The impossibility of the existence side by side of single unimportant and financially weak companies soon appeared, and fusions took place in quick succession, resulting in a final crystallisation of two large concerns. One, the Aero-Lloyd-Union, in which the D.L.R., Sablatings, the German Aero Lloyd and the Lloyd East Aviation were amalgamated, and the other, the Junckers-Air-Line, which was composed of the Bavarian Air Lloyd, Rumpler, the Danzig Air-Mail and the Ad-Astra Air Co. The new names show that in the year 1922 civil aviation extended by preference abroad, and indeed following the political trend, no bridge yet existing towards the west, in an easterly direction. It is also significant that the D.L.R., for want of connection to the westward, allowed its Westphalian line, which was economically quite unprofitable, to cease.

Shortly after one another the line Berlin-Königsberg-Kovno-Riga was founded by Junckers, and the Berlin-Memel-Riga-Reval line by the D.L.R.; to the south, on the route Berlin, Nuremberg, Constance, Zürich, Geneva, a combine of Junckers and the Ad-Astra flew. This line connected at Geneva with the French to Lyons and Marseilles on the one side and Lyons-Paris on the other.

In September a mixed Danzig-Polish Company, with Juncker's machines, began a regular service to Danzig, Warsaw and Lemberg, which justified the experience of the Danzig Air-Mail. An entirely foreign line was also established in Moscow by the Aviation Society (Avia-Kultur), with Juncker machines flying to Nijni-Novgorod. Finally the Russo-German Aviation Company, called the "Deruluft" for short, took up its service in January with new Fokker machines.

The following routes were regularly served till Oct. 30 of last year: Hamburg-Berlin-Dresden, Hamburg-Westerland, Danzig-Königsberg-Memel-Riga, Bremen-Berlin, Berlin-Leipzig-Fürth-Munich-Augsburg, Hamburg-Stettin, Berlin-Stettin-Danzig-Königsberg-Kovno-Riga, Fürth-Constance-Zürich-Geneva, Bremen-Hanover-Magdeburg-Leipzig-Dresden, Munich-Constance, and finally Fürth-Stuttgart, altogether, including foreign routes, 4,760 kilometres of air-line routes. The development of this year's air-traffic is so far quite undetermined. As Germany's position in the International Air Traffic Convention is not yet sufficiently defined to allow her to declare her adherence, the conclusion of the negotiations which she has instituted especially with England is not yet possible. Another pre-condition of the conclusion of such treaties would be the modernising of Germany's ground organisation, lighting and wireless plants of the aerodromes. Berlin, which is called upon to be the centre of German air traffic, is especially ill-provided, as it has no convenient landing place either near the residential quarter or near the commercial quarter.

Air traffic must be thought out from the start in such a way as to leave aside small unimportant lines. It must establish great lines like the cables and telegraphs which join countries; it must, so long as night flying remains impossible, by a combination of day flying and night expresses effect a saving of time for the user, whether passengers or mails. These considerations cannot be long ignored by other nations making use of air traffic, and therefore the time is not far distant when Germany, as an equally privileged member, will be included in their air traffic and railway time-tables. (*Vossische Zeitung*, Feb. 2.)

HOLLAND

POLITICAL AND GENERAL

EFFECTS OF THE OCCUPATION OF THE RUHR ON THE ECONOMIC SITUATION.

The occupation of the Ruhr by France and Belgium has not affected the economic situation in Holland to any serious extent. In three directions only have any difficulties arisen. In the first place, there was for a moment some interference with the free navigation of the Rhine, as appears from the complaints of the *Nieuwe Rotterdamsche Courant* that a number of barges laden with coal and several Dutch steamers manned by Dutch subjects and flying the Dutch flag had been seized by the French at Mainz. According to the *Telegraaf*, however, these vessels were not sailing under their true colours, and this view is endorsed by the *Gazette de Hollande* (Jan. 31), which, moreover, relies on an official statement by the French authorities to the effect that peremptory orders had been given that no Dutch vessel was to be seized. This is further borne out by the Frankfort correspondent of the *N.R. Courant*, who states that the Dutch Consul-General at Frankfort-on-the-Main has received satisfactory assurances to the same effect. Moreover, the inland navigation section of the Federation of Transport Workers at Duisburg has issued a report in which it asserts that any stoppage of traffic on the Rhine and conjoint canals will not interfere in the least with Dutch-German navigation, at any rate so far as German cargo boats drawn by Dutch tugboats are concerned.

In the second place, the officious intervention of the Netherlands Federation of Trade Unions, the most important labour organisation from a numerical point of view, is calculated to cause serious embarrassment to the Government, which is anxious to maintain an attitude of strict neutrality. At a conference of the executive committees of the various unions affiliated to the Federation, the complexion of which is distinctly Socialistic, it has been decided to organise a campaign in favour of affording financial assistance to labour in the Ruhr, and a sum of Fl.150,000, equal to 2½% of the capital wealth of the Federation, was voted for the support of those working men "in their resistance to the Allied occupation." Further, the International Transport Workers' Federation has issued a manifesto declaring its readiness to obey any orders in connection with any action the International Trade Unions' Federation may decide to take. On the other hand, the Catholic labour organisations of the country have requested the Government to take prompt and effectual measures to check the influx of German labour, the only effect of which must be to swell the ranks of the unemployed to the injury of Dutch labour, and as a result of which the conditions in Limburg are already becoming intolerable. The Minister of Labour, M. Aalberse, in reply, has promised on behalf of the Government that serious restrictions will shortly be placed on the admission of foreign labour into Holland, and that the granting of the necessary visa will be greatly curtailed.

The third class of difficulties embraces the possibility of a general loss of trade and the question of the coal supply. The fall of the mark in conjunction with the first alarming reports from the Ruhr naturally reacted on the Netherlands Exchange, since when, however, confidence has been somewhat restored, and the basic tendency remains firm.

The Dutch Railway Companies, however, decided that as from January 22 no consignments of goods for Germany, or for other countries via Germany, would be accepted on the basis of payment on delivery. The report of the inland navigation section of the Federation of Transport Workers at Duisburg, already referred to, states that leading authorities in shipping, trade and industrial circles in the Lower Rhine have decided to boycott the Port of Antwerp, so that until further orders German and Dutch ports will be materially benefited. The coal supply, however, occasions some anxiety, principally owing to the rise in the price of English coal. Although the Dutch output in 1922 equalled the home consumption of Holland in 1918, the industrialisation of that country, begun during the war, has increased to such an extent since the cessation of hostilities that the country requires imports to the amount of some five million tons a year. The balance of imports from Germany over exports to that country in 1922 was over 830,000 t., any difference in which will have to be obtained from Great Britain, which already supplied Holland in that year with 4,601,118 t. *In- en Uitvoer* (Jan. 31) states that the supply from Germany was still normal on the 25th of that month, but even so it reckoned that the country would require an import of 4.3 mill. t. from England. Previous to the occupation of the Ruhr the price of Limburg and German coal had fallen Fl.1 per ton on the average, while household coal has since undergone a further reduction as the result of the mild winter. The rise in the price of English coal, however, will prove a serious disadvantage, and according to the *Gazette de Hollande* (Jan. 27) a material rise in the price of Limburg coal is confidently expected in well-informed quarters. The Dutch Consul at Essen, on the other hand, is satisfied, says the *Algemeen Handelsblad*, that there need be no anxiety with regard to the export trade of foodstuffs to Germany, as notwithstanding the many stupid and deliberately engineered reports to the contrary the Belgian and French Governments have no intention of reducing the Ruhr by the method of starvation.

FINANCE

REVENUE RETURNS FOR DECEMBER.

The Revenue returns for December were in keeping with those of the previous months, showing a falling off of Fl.3,221,000 as compared with the corresponding month of 1921. The returns for the year, however, are Fl.22,894,000 in excess of those for the previous year, and Fl.31,314,000 above the estimated revenue, thanks chiefly to the favourable records of January, February and August. The four sources of revenue which contributed most largely to this result were the Property tax, the Excise on Sugar, the Death Duties and the Import duties, which showed increases respectively of Fl.24,000, Fl.29,000, close on Fl.190,000 and Fl.14,500. (*In- en Uitvoer*, Jan. 24.)

TRADE

COMMERCIAL TREATY WITH CZECHO-SLOVAKIA.

The *Gazette de Hollande* (Jan. 24) announces that the Commercial Treaty with Czecho-Slovakia on the basis of the most favoured nation clause was duly signed at The Hague on January 20.

Holland

IMPORTS AND EXPORTS OF COAL IN 1922.

In- en Uitvoer (Jan. 24) publishes the following returns of the coal trade for 1922 :—

Imports.			
Total...	6,799,924 tons	as against	5,384,507 tons in 1921.
	Tons.	against	Tons.
From Great Britain	4,601,118		1,784,246
Germany ...	1,317,727	„	1,530,817
Belgium ...	688,345	„	1,485,587
United States	—	„	499,385
Exports.			
Total...	1,666,708 tons	as against	710,285 tons in 1921
	Tons.	against	Tons.
To Belgium ...	568,713		178,603
Germany ...	487,521	„	128,963
France ...	435,977	„	135,051

Bunker coal to foreign shipping 311,430 t. as against 696,734 t.

INDUSTRY

THE DIAMOND-CUTTING TRADE.

The Dutch Press reports the transfer to Holland of the books and stock of the diamond-cutting works established at Brighton during the war, a concern that has lately been forced into liquidation. The attempt to establish a branch of this industry in England aroused some anxiety at the time in Holland, which until then had shared with Antwerp a monopoly of the trade.

NEW USE FOR THE NIPA PALM.

The interest aroused in British North Borneo in the question of utilising the Nipa palm for the production of sugar and alcohol is attracting attention in the Netherlands East Indies, where the conditions in many localities are ideal for its cultivation. An acre of swamp land planted with palm would, it is estimated, yield 28 cwt. of sugar or 200 gallons of 95% alcohol a year. (*Gazette de Hollande*, Feb. 3.)

THE BALKANS

FINANCE

RUMANIAN FINANCES.

Consensus of opinion on the position and prospects of Rumania's finances is still very far from being achieved (*cf.* THE ECONOMIC REVIEW, Jan. 5 and Feb. 2), a circumstance which can only be explained by the supposition that the divergent views expressed are coloured by their authors' respective relations to the Government. The Bucharest journal, *Argus* (Jan. 12) quoted by the *Berliner Börsen Zeitung* (Jan. 23) inclines to the bright side. Rumania's financial situation, it writes, improved considerably in 1922 compared with the previous year, and to this result the following favourable factors contribute: (1) The consolidation of the foreign loans; (2) the introduction of a balanced Budget; (3) the restriction of inflation; (4) the reform of taxation. For the first seven months of the financial year 1922-23 revenue amounted to Lei 5,466.8 mill., and expenditure for the first six months to Lei 3,486.1 mill., so that if there be no large surplus for the year at least no deficit need be anticipated. Owing to the process of deflation, the Government has had no need to apply to the National Bank for loans, nor to issue new Treasury Bonds. An important feature of the Government's financial policy is the taxation reform introduced by M. Vintila Bratiano, which includes a scheme for a levy on capital.

The financial review, *Bursa*, however, strikes a very different note, as may be judged from the following extracts from the leading article of its issue of Jan. 21, the opening lines of which are in flat contradiction of the optimistic utterances of the *Argus*. The financial and economic situation of the country has not appreciably improved during the past year, although the Budget for the year 1922 was, it may be said, experimental, and promised a new financial system. But, in spite of hopes and promises, the country is practically in the same financial position as when the present Government came into office. After a year of experimental groping, surprising in view of the announcement that the new Government had come into office with a whole stock of carefully prepared measures, ready to be put into operation, the country has not yet a definite Budget, and still awaits the passing of an Act imposing direct taxes. The current Budget is, and presumably the succeeding ones will be, the same in substance as pre-war Budgets, although with larger figures. There is no sign that any drastic revision of the financial system has been undertaken, for a few timid retouches of expenditure and some increases of indirect taxes cannot be taken as a serious remodelling reform of the Budget system. This has been promised for the future after the reform of direct taxation, a case of the cart before the horse, as it is certainly necessary to ascertain

what the amount of necessary and imperative expenditure is likely to be before providing the means of meeting it. Instead of this, the Government offers a hybrid reform of direct taxes, which incurs the same reproach of being a mere fiscal measure, as did the reform introduced by M. Titulesco, upon which it is modelled.

THE FLUCTUATIONS OF THE RUMANIAN CURRENCY.

During the last fortnight of January the Rumanian leu suffered a set-back hitherto unequalled. A lull took place at the end of that period, and a certain recovery was recorded. Nevertheless its comparative stability after the temporary rally in August has entirely vanished. The fall of continental, compared with British and American currencies, produced a panic on the the Bucharest market. The fall of the franc, somewhat illogically, dragged the leu down with it, and this unexpected drop was aggravated by the alarming fact that the decline of the leu compared with the franc was much greater in Bucharest than in Paris. A certain firmness was shown by the leu on Feb. 1, when it stood at 6.45 compared with 7.95 on Jan. 12. The fluctuations of the leu on the Paris Bourse during the past two years are as follows (the first figure representing 1922, those in brackets 1921 :—January, 10½ (20.50); February, 9 (19.75); March, — (18.75); April, 7-9½ (16); May, 7½ (20½); June, 7.50 (19½); July, 7.45 (18½); Aug., 8.85-14 (16½); Sept., 8.76 (15); Oct., 7.95 (12); Nov., 8.85 (8.20); Dec., 9 (10.25).

The chief cause of the depreciation of the leu must be sought in the unfavourable trade balances in the years following the war; immediately after the armistice there was a debit balance of nearly 20 milliards. The imports for that year included 10% only of agricultural machinery, a very small proportion of raw material for industrial purposes, and 50% at least of luxury articles, which shows that Rumania consumed without producing.

Towards the end of 1921 the banking world, alarmed at the fall of the leu, which had then only fallen to 13, addressed a memorial to the Averescu Government showing the situation to be very serious, and demanding drastic and urgent measures of reform. This meant a shifting of the political scene, and, in fact, the Bratiano Government took office in January 1922 with a financial and economic programme, the substance of which was not disclosed, but on which great hopes were founded. At that period the leu stood at 10.9, and now at the end of a year of office what has the new Government to show? The leu continues to fall abroad, and, what is more serious, shows a declining purchasing power on the home market. (*Bursa*, Feb. 4.)

CAPITAL ISSUES IN RUMANIA.

The amount of capital raised by various classes of Rumanian undertakings in October and November last is the following (in millions of lei) :—

	New Companies.		Capital Increases.	
Banking	5	15.5	9	84.5
Building	—	—	2	11.5
Chemical	1	2.5	1	5.0
Trading	3	7.5	1	2.0
Printing	1	1.0	—	—
Wood	—	—	1	5.0
Leather	1	1.0	—	—
Food	1	0.2	1	2.0
Oil	3	7.5	3	80.8
Textile	2	6.2	1	8.0
Transport	1	1.0	—	—
Insurance	1	2.0	1	4.5
Miscellaneous	—	—	2	1.0
	19	44.4	22	204.3

(Berichte aus den neuen Staaten, Jan. 12.)

A RUMANIAN LOAN IN FRANCE.

A report is in circulation that negotiations are on foot and well advanced between the Rumanian Government and a French financial syndicate for a loan of Fr.100 mill. for a period of 15 years, redemption to begin three years from the issue, interest to be at the rate of 5%. (Zagreber Tagblatt, Jan. 26.)

BULGARIAN REVENUE.

Bulgarian revenue receipts between April 1, 1922, and Jan. 1, 1923, amount to Leva 3,158.9 mill. (Echo de Bulgarie, Jan. 28.)

INDUSTRIES

DISTILLING IN BULGARIA.

The spirit distilleries and refineries founded in Bulgaria since she gained her independence have rapidly become an important branch of the native industry. They converted the raw product of the sugar factories into sugar, whereby the waste of 20,000 t. of maize was saved. During the war 2,000 workmen were employed in these spirit works. The excise duty on alcohol contributed Leva 6 mill. to revenue out of a total of Leva 13 mill. yielded by all the excise duties together. In the last years before the war Bulgarian spirit was exported to Constantinople and to the Aegean islands. Moreover, the waste products served to fatten a large number of cattle destined for export, or for milking. To-day the position has changed. Output has stopped, and the cellars of the distilleries are full of spirit which finds no purchasers, and there is no question of fattening cattle. The situation must be attributed to the spirit duties, which are so high as to raise the price of spirit to such an extent that it cannot find a market at home or abroad. At present the price of spirit is fixed by Government at Leva 96.15 the litre, of which Leva 76.76 is taken by the State in the form of duties. At the same time prune spirit brings in to the State Leva 21, apple spirit Leva 16.35, and spirit of wine Leva 18.66, so that fruit brandies pay Leva 4.5 times less in taxes than alcohol properly so called. (Echo de Bulgarie, Feb. 2.)

TRADE

RUMANIA'S FOREIGN TRADE.

Rumania's foreign trade has shown some improvement during 1922, but by no means to the extent that had been hoped. The following table shows the value of exports

for the first 10 months of the year compared with the two complete preceding years (in millions of lei) :—

1922 (10 months)	6,023.4
1921 (whole year)	5,000.0
1920 " "	3,433.8

The chief articles of export for the same respective periods were as follows (in millions of lei) :—

	1922.	1921.	1920.
Cereals and products	1,121.8	1,472.7	926.7
Oil products	367.0	362.3	246.6
Timber	584.1	158.8	65.2

The value of exports for the two concluding months of 1922 is not yet available, but the quantity is shown below (in tons) :—

	Cereals.	
	Dec.	Nov.
Wheat	2,038	1
Wheat flour	4,553	12,924
Rye	100	120
Barley	109,656	100,177
Oats	33,411	44,527
Millet... ..	4,425	4,288
Maize... ..	995	1,470
Bran	446	87
Beans	7,093	11,971
Total	162,717	175,565

Mineral Oil.		
Raw petroleum	1	—
Petroleum Residue	2,261	247
Refined petroleum	24,540	14,189
Petrol	10,260	14,851
Paraffin	—	43
Other mineral oils	1,242	714
Total	38,304	30,049

Wood.		
Props	85,473	61,755
Planks of resinous wood	1,609	2,761
Oak	—	—
Other wood	252	—
Pine trunks (c.m.)	724	1,249

(Bursa, Jan. 21, Feb. 4.)

SOCIAL AND LABOUR CONDITIONS

COST OF LIVING IN BULGARIA.

The following study of the progress of the cost of living in Bulgaria appears in the *Ikonomiticheski Pregled* :

Expectation of a reduction of the cost of living after the war was not fulfilled, and in all countries index numbers underwent an upward curve until 1920, when a downward tendency began to show itself. This tendency, however, was not discernible in Bulgaria, where the cost of living continued to increase owing to the depreciation of the exchange, but the increase was not always proportionate to the depreciation.

The following table shows the fluctuations in the price of the principal articles of consumption since January 1918, the index for which month = 100 :—

1918 Jan. ...	100	1921 Jan. ...	182
July ...	77	May ...	163
1919 Jan. ...	175	July ...	164
April ...	197	Oct. ...	205
Sept. ...	129	1922 Jan. ...	225
Dec. ...	174	April ...	232
1920 Jan. ...	199	July ...	240
April ...	201	Aug. ...	250
Aug. ...	188	Sept. ...	256
		Oct. ...	259

The average index numbers for the above years are :— 1918, 76 ; 1919, 264 ; 1920, 194 ; 1921, 189 ; 1922, 239. The number of articles taken to form these index numbers is 34 divided into seven groups, of which those of animal and vegetable foods and clothing show the greatest rise. Of late a slight drop has been observed in the vegetable food group. If the index number for 1913 be taken at 100, that for 1921 will be 2,104. (Echo de Bulgarie, Jan. 20, 27.)

SPAIN

POLITICAL AND GENERAL

According to certain critics, the present Liberal Government is composed of so diverse and conflicting factions as to offer no prospects of a long reign. A sensational disruption at no distant date is predicted.

The problem of railway reorganisation still remains unsettled, and the Government goes on making advances to cover the deficits on the working of the lines.

FINANCE

DECEMBER REVENUE.

The revenue returns for December last were Pes.227.6 mill., compared with Pes.218.6 mill. in 1921, an increase of Pes.9 mill. The chief sources of revenue were lottery, Customs, and profits tax, representing respectively 23%, 18% and 10% of the whole. The chief increases were shown by tobacco, sugar, lottery, Customs and land tax, while profit tax declined appreciably. (*España Económica y Financiera*, Feb. 3.)

THE STOCK EXCHANGE IN 1922.

After the slump in Government securities in 1921, a fairly appreciable rise of some of them was recorded last year, since there was no recurrence of disturbances such as the Morocco crisis in 1922. The standard loan showed during the whole year an upward course, with monthly fluctuations which, on an average, did not exceed one point. The comparative quotations of the leading Government stocks are shown below:—

	Internal Loan.	External Loan.	4% Redeem-able.	5% Redeem-able.	5% Redeem-able.
			1900.	1917.	
1913 ...	80.78	—	91.72	99.88	—
1914 ...	76.88	—	88.16	96.58	—
1915 ...	71.92	81.44	86.05	93.20	—
1916 ...	74.63	82.25	88.82	97.07	—
1917 ...	74.60	85.71	85.81	93.75	92.09
1918 ...	78.99	89.07	86.52	96.36	93.39
1919 ...	77.31	88.16	89.48	95.93	96.75
1920 ...	72.52	84.20	87.12	95.23	95.15
1921 ...	68.25	82.34	86.82	92.34	92.24
1922 ...	60.87	85.80	86.84	95.34	94.91

The following table gives the maximum and minimum prices and fluctuation of the leading Government loans during the year:—

	Maxi-mum.	Mini-mum.	Differ-ence.
Internal ...	72.07	68.30	3.77
External ...	87.94	82.99	4.95
Redeemable 4% ...	90.40	84.20	6.20
Redeemable 5% (1900) ...	100.04	90.90	9.14
Redeemable 5% (1917) ...	100.21	90.74	9.47

Average quotations of shares in private undertakings were as follows:—

	Banks.			Difference in 1922 compared with 1921.
	1920.	1921.	1922.	
De España ...	539 %	537	551.50	+ 14.50
Hipotecario ...	247	260	279.15	+ 19.15
De Castilla ...	96	92.75	91.10	— 1.65
Hisp. Americano ...	250	172	190.35	+ 18.35
Espo. de Crédito ...	138	122	130.70	+ 8.70
Río de la Plata ...	268	255	226.40	— 28.60
De Bilbao ...	1,905	1,605	1,757.80	+ 152.80
De Vizcaya ...	980	835	9,080.90	+ 245.90
Crédit. U. Miner ...	870	538	587.55	+ 49.55
De Barcelona ...	237.50	50	51.30	+ 1.30
Español Colonial ...	335	305	313.60	+ 8.60
Crédito Mercantil ...	320	315	180	— 135
Vasco ...	682.50	630	571.85	— 58.15
Uruguayo Vascongado ...	360	205	229.15	+ 24.15

Railway Companies.

	1920.	1921.	1922.	Difference in 1922 compared with 1921.
Alicante ...	240 pts.	280.50	319.80	+ 39.30
Norte ...	230	293	316.40	+ 23.40
Vascongados ...	520	475	503.05	+ 28.05
Santdr.-Bilbao ...	372.50	365	355.10	— 9.90
La Robia ...	410	360	370.35	+ 10.35
Andaluces ...	182	217.50	44	— 173.50
Ovenses-Vigo ...	75	80.25	16.70	— 63.55

Iron and Steel.

Duro-Felguera ...	120	43	42	— 1
Altos Hornos ...	157	96	96	—
Euskalduna ...	1,000	800	775	— 25
Siderúrgica Poferrada ...	—	—	200	—

Shipping.

Marítima Union ...	315	150	151	+ 1
Sota y Aznar ...	1,600	1,290	1,384	+ 94
Marítima Nervion ...	1,275	555	495	— 60
Bachi ...	800	400	387	— 13
Bilbao ...	350	75	75	—

Mining.

Cala ...	215	215	215	—
Villaodrid ...	500	300	300	—
Hullera Española ...	200	100	158	+ 58
Sierra Alhamilla ...	1,300	1,300	1,012	— 288

Electricity.

Hidroeléct Ibérica ...	950	510	519	+ 9
Eléct. Vizcaina ...	700	695	740	+ 45
Cooprtiva. Electra ...	87.50	87.50	76	— 9.50
U.E. Madrileña ...	93	81	83	+ 2

Industrials.

Tobacco ...	290	285	253	— 22
Explosives ...	288	266	297	+ 11
Alcohol ...	95	79	66	— 3
Sugar Pref. ...	95	54.50	63.50	+ 9
Sugar Ordinary ...	37	26	31.90	+ 5.90
El Aguila ...	172	180	180	—
Resin ...	440	250	250	+ 6
Paper ...	123	90	85.50	— 4.50

(*España Económica y Financiera*, Jan. 20, 27, Feb. 3.)

TRADE

MODUS VIVENDI WITH GERMANY.

A modus vivendi has been concluded with Germany to remain in operation until Feb. 28, by which time it is anticipated that a full commercial treaty between the two countries will have been concluded. During the operation every country will recognise the status quo, whereby Germany accords to Spain the most favoured nation clause, and Spain concedes to Germany duties under the second (lower) column of the tariff. (*España Económica y Financiera*, Jan. 20.)

BARCELONA EXHIBITION.

An International Exhibition of Furniture and House Decorating will be held in the Montjuich Park, Barcelona, during the months of May and June, 1923. This exhibition is the first of a series of exhibitions to be organised under the auspices of the International Electrical Industries and Spanish General Exhibition. It was officially sanctioned by Royal Order on Aug. 8, 1922, having received a subsidy of Pes.10 mill. from the Government and a similar sum from the Municipality of Barcelona. A loan of Pes.60 mill. was also recently floated with the same object, the money being easily obtained. King Alfonso is President of the Honorary Committee, and it is assured of the support of all the more influential bodies and corporations in Catalonia. Further details, together with the rules and regulations, may be obtained on application to the British Chamber of Commerce for Spain, Barcelona. (*Report, British Chamber of Commerce for Spain*, Barcelona, Dec.)

SPECIAL ARTICLES

THE WEALTH OF THE RUHR.

The following account of the Ruhr and its industries is supplied by an anonymous writer in the *Information Financière*, Jan. 31, Feb. 1, 2:—

The districts of Germany at present occupied by the Allies represent about one-tenth of the country's total area and one-fifth of the population, which, according to the census of 1919, is 59,868,264, or 126 to the square kilometre. The population and area of the occupied territory are as follows:—

	Sq. km.	Population.	Inhabitants per sq. km.
Saar	1,480	589,778	396
Rhineland	24,482	6,709,288	276
Westphalia	20,225	4,488,115	222

The Ruhr district, which is about the size of an average French department, contains some four million inhabitants, of whom about 1 million are workmen. Fourteen towns contain upwards of 100,000 inhabitants, and include Essen (439,257), the property of Krupp, the eighth German town as regards population; Dusseldorf (407,338), the tenth, the administrative headquarters of the district; Dortmund (295,026); Duisburg (244,302), the river port of the district; Elberfeld (157,218) and Barmen (156,326), two adjoining towns devoted to the textile industry; Gelsenkirchen (168,557) and Bochum (142,700), iron and coal centres; Mulheim (127,017), of which Stinnes is feudal lord; Hamborn (110,102), founded at the end of last century by the firm of Thyssen; Oberhausen (98,955), the headquarters of the Haniel syndicate. The railway system gives 17.44 km. to the 100 sq. km. as against the average of 1.5 km. for the whole of Germany.

LOCAL INDUSTRIES.

The district possesses many industries. The textile industry flourishes around the twin town of Elberfeld-Barmen on the south of the district, and at Crefeld on the left bank of the Rhine. With the exception of Saxony these are the chief cloth and cotton producing centres, and have, together with Biebfeld in the North-East, made a speciality of silk goods. The allied dyeing industry is very active; the firm of Bayer, of which the chief works are at Leverkusen, comes originally from Elberfeld. Machine-made lace, embroidery and ribbons are chiefly made at Elberfeld-Barmen. The linen industry is carried on round Munster and Biebfeld. The district possesses an assortment of miscellaneous industries, such as toy-making, musical instruments, household utensils, aluminium goods, tanning (at Elberfeld), brewing (Dortmund), quarries near Dusseldorf, salt works at Unna.

METALLURGY AND COAL.

Iron and steel, and coal are the most important industries of the district; they work the ores of the Sieg and Lahn fields between the Ruhr and the Tannus, and above all imported ores which, before the war, came principally from Lorraine. The heavy metal industry is concentrated between the Ruhr and the Lippe and on the left bank of the Rhine. Before the war this branch of industry possessed 127 blast furnaces with an annual productive capacity of 26,125 t., out of 400 blast furnaces producing 60,000 t. for the whole of Germany. Of these, 150 blast furnaces, producing 22,000 t., were in Lorraine, Luxembourg and the Saar, and 40 blast furnaces of 3,000 t. output in Upper Silesia. The number of transformers in the steel works of the Ruhr was 54 out of 143 in the whole country, and that of Martin furnaces 280 out of a total of 539.

The output of steel, statistics of which have not been published, would appear to have nearly reached the

pre-war figure. The engineering shops, iron works, foundries, stamping and wire-pulling works, etc., are very numerous, especially between Elberfeld and Hagen. The district between the Wupper and the Ruhr has specialised in locksmiths' work; Solingen-Remscheid in cutlery, and Osnabruck in machinery. The following table shows the capital invested in the various industries of the district before the war (in millions of gold marks):—

	No.	Rhineland.	Westphalia.
Rock salt mines ...	33	337.32	25 282.85
Mines and works ...	9	381.82	8 481.08
Quarries ...	40	63.37	27 39.53
Metal workings ...	37	185.52	25 63.10
Machinery and instruments ...	72	339.58	33 68.01
Chemicals ...	27	173.01	6 10.40
Oil industry work ...	10	27.83	5 2.34
Textiles ...	47	92.36	19 35.06
Paper ...	11	21.03	1 0.63
Leather and hides ...	9	17.18	1 1.75
Wood ...	2	6.70	3 5.10
Food ...	79	87.70	14 85.80
Clothing ...	—	—	1 3.00
Building ...	5	10.10	— —
Printing ...	10	7.38	4 1.98
Trade and banking ...	82	432.77	15 19.16
Insurance ...	32	41.41	— —
Transport ...	40	114.25	19 60.99
Catering ...	7	5.53	3 0.24
Entertainments ...	6	3.31	2 1.11
Various ...	74	22.50	14 1.13
Total ...	632	2,370.65	255 1,163.26

THE COAL MINES.

The coal deposits, which are specially important to the Allies from the reparations point of view, cover an area of 2,500 sq. km. They are estimated by the mines counsellor, Schutz, at 54 milliards of t. down to a depth of 700 metres, 18.3 milliards to a depth of from 700 to 1,000 m., and 25 milliards between 1,000 and 1,500 m. The supply below 1,500 m. is, according to the same authority, 75 milliard t., but is estimated by Professor Krusch at 213 milliards. According to Professor Frech, the Ruhr will be in a position to yield 100 mill. t. a year until the year 4631. Finally, the known reserve of lignite exceeds 4 milliard t. The Ruhr coal fields produced in 1881 277 mill. t. of coal from 191 coal companies, and in 1913.

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Special Articles

110.8 mill. t., the number of coal owners being 221. If the nine coal firms on the left bank of the Rhine in the Crefeld district be added, the total coal output in 1913 was 114.9 mill. t., or 10% of the total output of the Reich. Thus in 1913 Germany was the third largest coal producing country in the world with a proportion of 15.56%, the United States coming first with 42.33%, and Great Britain second with 25.5%. Germany exported 35 mill. t. and Great Britain 73 mill. t.

The output of Germany had declined in 1919 to 71.1 mill. t., but rallied to 88.2 mill. t. in 1920 and to 94.1 mill. t. in 1921. The decline of output is due to the decrease in individual yield of the workmen. In 1913, 304,509 miners and officials produced in the Ruhr 111 mill. t. of coal, and in 1921 a staff of 500,888 only produced 917 mill. t. There was a slight improvement in 1922. The following table shows the monthly output in 1921 as compared with the preceding year and with 1913 (in mill. t.):—

	1913.	1920.	1921.
Jan.	9.7	6.6	8.0
Feb.	9.1	6.8	8.1
March	9.1	6.3	7.6
April	9.9	6.5	7.8
May	9.2	7.0	6.9
June	9.5	7.5	7.7
July	10.1	7.5	7.7
Aug.	9.7	7.4	8.0
Sept.	9.6	7.8	7.8
Oct.	9.8	8.1	8.0
Nov.	8.9	8.0	7.7
Dec.	9.1	8.2	8.0
Total	114.5	88.2	94.1

The quarterly output in the years shown below is as follows (in mill. t.):—

	1922.	1921.	1920.	1919.	1914.	1913.
1st quarter ...	24.8	23.9	19.9	17.9	27.9	28.1
2nd „ ...	22.6	22.6	21.0	13.5	28.1	28.8
3rd „ ...	24.4	23.7	22.8	19.8	21.9	29.6
4th „ ...	25.4	23.8	24.3	19.5	20.2	27.9
Whole year ...	97.4	94.1	88.2	70.9	98.2	114.5

The year 1922 is therefore the most productive post-war year, but it does not attain the output of 1914, five months of which show a deficit and show 17 mill., or one-third less than 1913. However, 1922 does not show a continuous upward curve. After the good results of the first three months, especially in March, there followed a period of stagnation, terminating in a setback in June. However, the third and fourth quarters were marked by a rally.

According to statistics published in November 1922 the various mines of the Ruhr employ 545,380 miners (51,000 of whom are employed in the State mines), as against 459,589 in December 1914. Of this number 463,425 are Germans, 52,700 Poles, 7,201 Austrians, and 6,324 Czech. The mine owners have tried to attract labour by increasing the number of workmen's dwellings. Between July 1, 1918, and Aug. 1, 1922, the coal mine owners of the Ruhr have constructed 3,062 houses containing 7,512 dwellings, and are constructing 193 more houses. These buildings have, during the past 20 years, increased out of all proportion to the increase of labour, as the following table shows:—

	Workmen.	%	Workmen's dwellings.	%
1901	243,926	100	26,250	100
1907	303,089	124	52,900	201
1st June, 1919 ...	413,069	169	112,826	429
1st Aug., 1922 ...	539,472	221	149,317	568

The composition of the cost of production of a ton of coal in the three periods shown below is as follows (in marks):—

	1914.	Aug. 1922.	Oct. 1922.
Wages	6.60	590	1,364
Wood for the mines ...	0.70	126	490
Taxes (e.g. transfer dues) ...	0.42	76	137
Various	0.12	21	42
Workmen's insurances ...	0.41	10	10
Insurance against accidents ...	0.05	6	6
Material	0.40	72	140
Sinking fund	1.20	216	420
Coal tax, 40%	—	410	1,114
Turnover tax, 2%	—	45	82
Overhead charges, 3%	—	30	123
Workmen's dwellings	—	12	36
Total	9.90	1,614	4,073
Sale price	11.0	1,513	4,105
Profit... ..	1.10	101	32

The Labourpress asserts that wages and salaries only constitute 28.77% of the cost of production, other expenses and profits 38.1%, and taxes, duties and discounts 33.13%. But up to August last, wages formed at least 60% of the cost price. According to a Dortmund journal the cost price is much below the general cost of living. The output of by-products in the Ruhr has not fallen off to the same extent as the coal output.

The output of coke was 24.4 mill. t. in 1913, and 22.4 mill. t. in 1921. During 1922 the increase was on an average 6% of the last pre-war year, and will probably soon attain the normal figure for that year. The output of briquettes is also approaching the pre-war output, and gives 4.3 mill. t. in 1921 against 4.9 mill. t. in 1913.

THE CHIEF TRUSTS.

In accordance with the integral principles which govern German economics, iron and steel and coal business is generally taken together, contrary to the practice in France. A dozen or so combines absorb the greater part of the output of the field by means of arrangements which create a common interest between various undertakings, of amalgamation, leasing, community of interest or financial control. The following are the figures of the output of coal and coke of the leading trusts or combines in the district:—

Trust.	Pit coal.		Coke.		No. of Miners.
	1913.	1921.	1913.	1921.	
Stinnes	10.7	16.7	2.6	4.0	96,092
Haniel	10.3	6.2	2.0	1.5	32,427
Krupp	7.5	6.0	2.4	2.0	33,279
Phœnix	7.5	5.0	0.8	0.8	26,192
Rheinische Stahlwerke	1.1	4.8	0.5	1.0	26,669
Thyssen	4.4	3.9	1.4	1.0	20,330
Hoesch	4.4	3.9	1.0	1.1	21,774
Mannesmann	2.9	3.5	0.6	1.0	27,748
Klœckner	3.5	3.1	1.2	1.2	16,143
Lothringer	3.7	2.6	1.1	1.1	19,238
Rœchling	3.0	2.5	0.7	0.7	18,357
Mumm	1.6	1.1	0.4	0.3	9,940
Mansfeld	0.6	0.2	0.2	0.1	—
State Mines	—	9.0	—	2.3	51,544

THE CHIEF IRON WORKS.

Statistics of the activity of the German iron and steel industry have not been published for the last three years, so that exact figures of output are not available. According to the *Iron Trade Review*, Germany produced during 1922 6.5 mill. t. of pig iron and 9 mill. t. of steel; imported 2 mill. t. of semi-products, and exported 2½ mill. t. of finished products. The place of Germany

among the world's chief iron and steel producers appears below (in mill.):—

	Pig iron.		Steel.	
	1913.	1922.	1913.	1922.
United States	30.6	26.5	31.5	33.8
Germany	19.0	6.5	18.6	9.0
Great Britain	10.3	4.9	7.7	5.8
France	5.1	4.9	4.6	4.4
Belgium	2.4	1.5	1.4	2.4
Luxembourg	—	1.6	—	1.4
World's output	76.6	49.8	74.6	61.0

Hereunder follows a list of the chief metallurgical works of the Ruhr :—

	Blast furnaces.	Converters and Martin furnaces.
A. G. Hüttenbetrieb, Duisbourg ...	5	18
August Thyssen-Hütte, Hamborn ...	6	18
Bochumer Verein, Bochum	5	15
Deutsche-Luxemburgische Berg-werks und Hütten A. G. Dortmund... ..	10	27
Duisburger Kupferhütte, Duisbourg ...	6	—
Eisen und Stahlwerk Hoesch, Dortmund	7	13
Gelsenkirchener Bergwerks A. G., Gelsenkirchen	11	4
Gelsenkirchener Gusstahl und Eissenwerke	—	11
Gutehoffnungshütte, Oberhausen ...	11	18
Fried, Krupp, A. G., Rheinhausen ...	17	70
Phœnix A. G., Hörde, Dortmund et Duisbourg	18	29
Rheinische Stahlwerke, Duisbourg ...	6	14
Westfälische Eisen und Drahtwerke, Aplerbeck	3	3
Bergische Stahlindustrie, Remscheid... ..	—	12
Deutsche Werke, Siegburg	—	7
Mannesmann Röhrenwerke, Gelsenkirchen, Duisbourg	—	11
Rheinmetall, Düsseldorf	—	7
Thyssen et Co., Mülheim	—	11
Westphalische Stahlwerke, Bochum... ..	—	9

THE STATE MINES.

The State mines, which serve as security for reparations, employ 51,544 miners, and comprise the old mines bearing the name of "Berginspektion," and the more recently acquired Hibernia group.

The output of these mines in 1921 was as follows :—

	Hibernia.	Berginspektion.	Total.
	Tons (1,000.)		
Pitcoal	4,440	4,621	9,061
Coke	844	1,537	2,381
Briquettes	83	23	107
Tar	25	31	56
Distilled benzol (1,000 c.m.) ...	3	7	10
Gas for industrial heating	92	49	142
Gas for engines	—	63	63
Electricity (1,000 kwt.)	92	79	171
No. of workmen	24,581	27,012	51,540
Fours à coke en activité	597	799	1,396

The State mines of the Ruhr rank second among the large undertakings of the field, the Stinnes' Trust, which exceeds their output by 17 mill. t. of coal and 4 mill. t. of coke, coming first.

The programme for the delivery of reparation coal fixed by the Reparation Commission, is 13.8 mill. t. of coal and coke, which could be almost supplied by the State mines alone. The maximum producing capacity of the combines forming the Kohlen syndicate is as follows (in millions of tons) :—

	Coal.	Coke.
Stinnes	19.8	3.5
State Mines	12.6	3.6
Haniel	7.7	1.3
Krupp	5.5	2.1

The value of the output of the German State mines during the financial year 1921-22 was Mk. 3.3 milliards, compared with Mk.1.9 milliard in the preceding year. Their profits during these two years amounted respectively to Mk.706 and Mk.288 mill.

THE STORY OF ARTIFICIAL SILK

M. de Prat, in the January number of *France Textile*, celebrates the 25th anniversary of the invention of artificial silk, by giving the following short account of its origin and development.

The idea of producing, by means of chemicals, a thread resembling that of the silk worm first occurred to the French scientist Reamur, who devoted considerable time and attention to the matter. His celebrated paper, "An examination of the silk of spiders," in 1710, gave rise to new ideas on the chemical composition of silk. In 1754 he wrote, "silk being nothing but dried-up liquid gum, why cannot we make silk with gum and resin?"

The first attempt at its manufacture was made in 1855, by Adhemar or Audhémar, a Swiss, who took out a patent for the production of a vegetable silk by the conversion into filaments of a solution of nitro cellulose. In 1885 MM. Frémy and Urbain submitted to the Académie des Sciences a "silk fibre" obtained by the elimination by chemical processes of certain substances contained in China grass and flax threads, the filaments of which had a silk-like gloss. In 1900, M. Blanchard notified the Académie des Sciences that he also was making researches for a chemical agent which would act as a substitute for the digestive processes of the silk worm, and would transform certain constituent parts of mulberry leaf treated by special reagents.

But it was Count Hilairi de Chardonnet, who, at the Paris Exhibition of 1889, caused a new kind of silk to be manufactured under the eyes of visitors to the Exhibition, which was really the ancestor of the new industrial product. It was manufactured in special factories at Besancon. But it was defective, inflammable as gun cotton, to which it was in some sort akin and difficult to dye. But between 1889 and 1898 the inventor improved it to such an extent, that in the latter year the company of which he was the founder was in a position to sell a smooth textile fabric easily dyed, strong and without any risk of fire; in fact, artificial silk had come into being. During the succeeding years this product was followed by the invention of others of a like nature. Duplessis was the first to utilise the process described in all chemical works, which consists

UNIVERSITY OF LONDON

The STANSFELD LECTURE on
"THE COMPETITION OF THE SEXES
FOR EMPLOYMENT"

will be given by
Professor GRAHAM WALLAS, Litt.D., M.A.,
(PROFESSOR OF POLITICAL SCIENCE IN THE UNIVERSITY)
at the

London School of Economics and Political Science
(HOUGHTON STREET, ALDWYCH, W.C.2.)

ON WEDNESDAY, FEB. 28th, 1923, at 5 p.m.

The Chair will be taken by Miss Christine M. Murrell, M.D.
ADMISSION FREE, BY TICKET to be obtained
from the Secretary, London School of Economics.

EDWIN DELLER,
Academic Registrar.

Special Articles

in dissolving cellulose in the Schweitzer reagent, and Pauly improved upon this discovery by preparing a cellulose well clarified by a process of his own invention, but neither inventor benefited by his discovery. In 1899 Frémy and Urbain invented a method of preparing cellulose for the purpose of its direct solution in oxide of ammoniated copper.

Finally, in 1892, the English chemists, Cross and Bevan, discovered viscose silk by making sulphate of carbon react on cellulose alkali at the ordinary temperature. The Englishmen, Swinburne, Crookes, Neston, Swan, Wyne and Powell, and the Swiss chemist, Schaublin, also contributed material to the invention of artificial silk. Some idea will be gained of the numerous improvements effected in the industry from the fact that during the past 20 years more than 2,000 patents for processes of manufacturing artificial silk have been granted. These processes were chiefly intended to render artificial silk stronger and more waterproof.

ITS COMMERCIAL DEVELOPMENT.

In 1902 the total world's output of artificial silk was 2 mill. kg. a year; in 1921 it was 20 mill. This figure represents 50% of the production of natural silk, which, according to official statistics, has reached 42 million kilogrammes.

Contrary to expectation, artificial silk caused no decline in the output of real silk, as it created its own market which supplies certain fabrics, specialities of artificial silk, and which were not always open to real silk. A proof that the production of real silk has in no way declined is that in 1914 it was only 30 mill. kg., or little more than 75% of the present figure.

In the chief artificial silk producing countries large trusts have been formed, and it may truthfully be stated that factories where it is made are all absorbed by these combines.

PRODUCERS AND CONSUMERS.

The chief producing and consuming countries are France, Germany, Great Britain, Belgium, Italy and the United States. Japan is a large consuming country. From these may be selected three typical producing and consuming countries: Belgium, the United States and Japan.

Belgium.—This country, which before the war produced a quarter of the world's artificial silk, has since made considerable progress. The chief Belgian firm has recently stated that demand outruns supply.

Before the war Belgium produced 2,700,000 kilos annually. Of the four factories which survived the war one resumed output in 1919 and the other three before the end of the following year, when 70% of the pre-war quantity was being produced. In 1914 the country only consumed 5% of its own output, the remainder going to Germany, which furnished a large quantity of raw material and chemicals.

Belgium's imports and exports of artificial silk are shown below (in kg.):—

Imports.	1920.	1921.	1922. (six months.)
Germany ...	293	1,127	161
France ...	2,882	1,419	354
Great Britain ...	1,441	1,133	253
Switzerland ...	1,357	104	153
Other countries	47	1	—
Total ...	6,020	3,784	920
Exports.			
Germany ...	9,028	1,307	—
Spain ...	1,064	600	—
France ...	1,874	1,874	3,517
Great Britain ...	7,856	29,451	6,032
Switzerland ...	5,278	111,463	92
Other countries	4,696	8,002	339
	29,796	152,697	9,980

The United States.—Dr. George Rucker, manager and chemical expert to the Du Pont Fibersilk Company, gives in the *Du Pont Magazine* an account of the development of the manufacture and use of artificial silk in the United States during the past 10 years. Consumption has risen from 2,500,000 lbs. in 1912 to nearly 20 mill. in 1921, that is to say, about half the world's output. Artificial silk began to be used in appreciable quantities in the United States in 1910. In 1912 the import from Europe amounted to 1 mill. lbs., and in 1914 to 2,500,000 lbs. The war reduced imports to 300,000 lbs. a year, and home production proportionately increased, until at the close of hostilities it amounted to 6 million lbs. From that time onward home production and imports have steadily increased until they reached together nearly 20 million lbs. in 1921.

Before 1915 it was chiefly used for making shirts and braid, but it had not yet attained the requisite qualities for use in other branches of the industry. After 1915, it began to be used in the manufacture of cloth. A better knowledge of its properties enables it to be used in various ways, namely for woven and knitted goods, and the making of lace, velvet and artificial fur. To-day only 40% of artificial silk is used in shirt making, as against 75% in 1914.

Japan.—Although Japan is a great producer of natural silk, the artificial variety is in growing demand on the Japanese market. The following figures supplied by Reuter's Trade Service show the growing importance of imports to Yokohama:—Japan imported in 1918 36,136 kins (the kin = 601.04 grammes) of artificial silk to the value of 234,000 yen; in 1919, 43,435 kins to the value of 431,000 yen; in 1920, 40,521 kins to the value of 361,000 yen; in 1921, 81,927 kins to the value of 368,000 yen, and in the first half of 1922, 64,000 kins, valued 323,000 yen.

The average price of a kin of artificial silk is 4.9 yen, whereas that of a kin of real silk is 18.6 yen.

Japan's chief purveyors of artificial silk during the first half of 1922 were:—

	Kins.	Yen.
Great Britain ...	29,998	153,000
France ...	14,138	65,000
Germany ...	3,169	18,000
Italy ...	1,814	8,800
Sweden ...	9,100	39,000

The natural silk industry of Japan is taking umbrage at this development of the artificial variety, and calls upon the Government for protection. As the price of artificial silk is only 28% of that of the real article, silk growers fear that they may be seriously prejudiced by the former's rapid progress.

The above may serve as a few typical examples of the important place which artificial silk has taken in the world.

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Reserve Fund	-	10,860,352
Deposits (June 30th, 1922)	-	358,230,331

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NOTES ON NEW BOOKS

BRITAIN'S MEAT SUPPLY

Supplying Britain's Meat. By George E. Putnam (Messrs. George C. Harrap & Co., Ltd., London), 5/- net.

A useful purpose has been served by Mr. Putnam, Consulting Economist to the great firm of Swift and Co., of Chicago, and a former Professor of Economics in Washington University, in making available in such an attractive form the essential facts about the meat industry and in providing a convenient source of reference for statistical data on meat imports, meat production, and meat supplies of the United Kingdom during the last three or four decades. He admits that since the publication in 1912 by Critchell and Raymond of *A History of the Frozen Meat Trade*, there is little new material to be added, so he has concentrated on the chilled beef trade, which, prior to the outbreak of war, had become greater in volume than the trade in frozen beef, and which to-day is practically the monopoly of North and South America. It may be stated here that the term "chilled beef" is applied to beef carried at a temperature of 29°F to 30°F, and arriving in a soft condition ready for immediate consumption. "Frozen beef" is beef that has been carried at a much lower temperature, arriving in a hard condition, and requiring to be thawed out before it can be used.

Though a large part of the book is naturally devoted to the activities of the great American packers, whose defence against war-time charges of profiteering and collusion Mr. Putnam undertakes with much skill and ingenuity, the situation of the meat industry is examined most thoroughly. The statistics showing the number of cattle and sheep in the United Kingdom per 1,000 of the population indicate that the country has clearly outgrown the stage where it can be self-sufficient in meat production. As a result we have had to draw our supplies from the world's surplus-producing areas, and it is primarily on account of the distance of these areas from Great Britain that the large packers have come to play an important part in our meat-import trade. Australia and New Zealand send us 41.3% of our total lamb and mutton supplies, and Argentina 31.7% of our total beef supplies. The United States can no longer be

considered the chief beef-exporting country, mainly owing to the growth of its population and the competition from the Argentine, but it should not be forgotten that the American packers since 1911 have been operating from the River Plate on a large scale. But what America has lost on beef, she makes up on hams and lard, which in 1920 amounted to 87% and 90% respectively of our imports. The statistics for bacon show a decided preference in this country for Irish and Danish bacon.

Mr. Putnam, in describing the functions of Smithfield, which he says is the largest and most important market of its kind in the world, shows a deep insight into the ramifications of British trade. The inference in the British Sub-Committee's report on the Federal Trade Commission's investigation into the packing industry that the American-owned companies in South America were a menace to the British consumer, can, he states, hardly be sustained by statistical facts. On the contrary, he contends that price control at Smithfield is and will continue to be beyond the power of these companies.

It is over this Commission that the author throws off his professor's gown and economist's calm, and writes with unusual warmth. "The report of the Commission," he says, "was so flagrantly unfair and unscientific that it defeated its own purpose. The Commission has been completely discredited, its jurisdiction over the packing industry has been taken away, and finally, not one of the recommendations it made as a result of its persecuting investigation has been adopted by the American Congress."

We agree with him that it is difficult for anyone who is not thoroughly familiar with American institutions to understand how an investigation of this kind could have been conducted except in the most impartial, judicial and scientific manner. Mr. Putnam has the gift, possessed by few economists, of writing in good, simple, and easily understood English. He avoids pedantic jargon, with the result that his book is so interesting that it deserves a wide circle of readers. R. F. H.

THE COMMUNICATIONS OF SWITZERLAND.

THE NAVIGATION OF THE RHINE.

The *Rheinquellen* publishes the proposed conditions for the equipment of the Rhine from Basle to Constance, drawn up by the Baden State Department of roads and bridges and submitted to the Swiss-Baden Commission of the Rhine as a basis for discussion. The type of barge to be used will be of 1,200 t., but the scheme of works will permit of the use of barges of 1,500 t. when the river is high. The locks will be constructed so as to hold at the same time a large tug and a barge of 1,500 t. with an aggregate length of 135 m., and a breadth of 12 m. The depth of water at the lower end of the lock will be 2.5 m. During the first period the locks will be single.

Similar terms have been drawn up as a basis for the construction of canals, tying-up stations, and lateral canals. In the navigable channel the depth of the water must be 2.5 m. Bridges must leave a space of 6 m.

above the highest level of navigable water, and ferry and electric cables must be at least 15 m. above this level. (*Journal de Genève*, Jan. 12.)

THE OPENING OF THE SECOND SIMPLON TUNNEL TO TRAFFIC.

The second Simplon tunnel was opened to traffic in October last. The trains running to Italy (in the direction North-South) use the old tunnel, and those from Italy to Switzerland the new one. This new tunnel is parallel to the old one. The clearance between the axes of the two tunnels is 17 metres, and both are connected at distances of 200 metres by means of transverse galleries. The first tunnel (19,728 metres in length, the longest in the world) was built in 1898 to 1906, and pierced the mountain at 2,150 metres below the summit. Electric engines are used for the traction. (*Exportateur Suisse*, December.)

CHART ILLUSTRATING TABLE I.

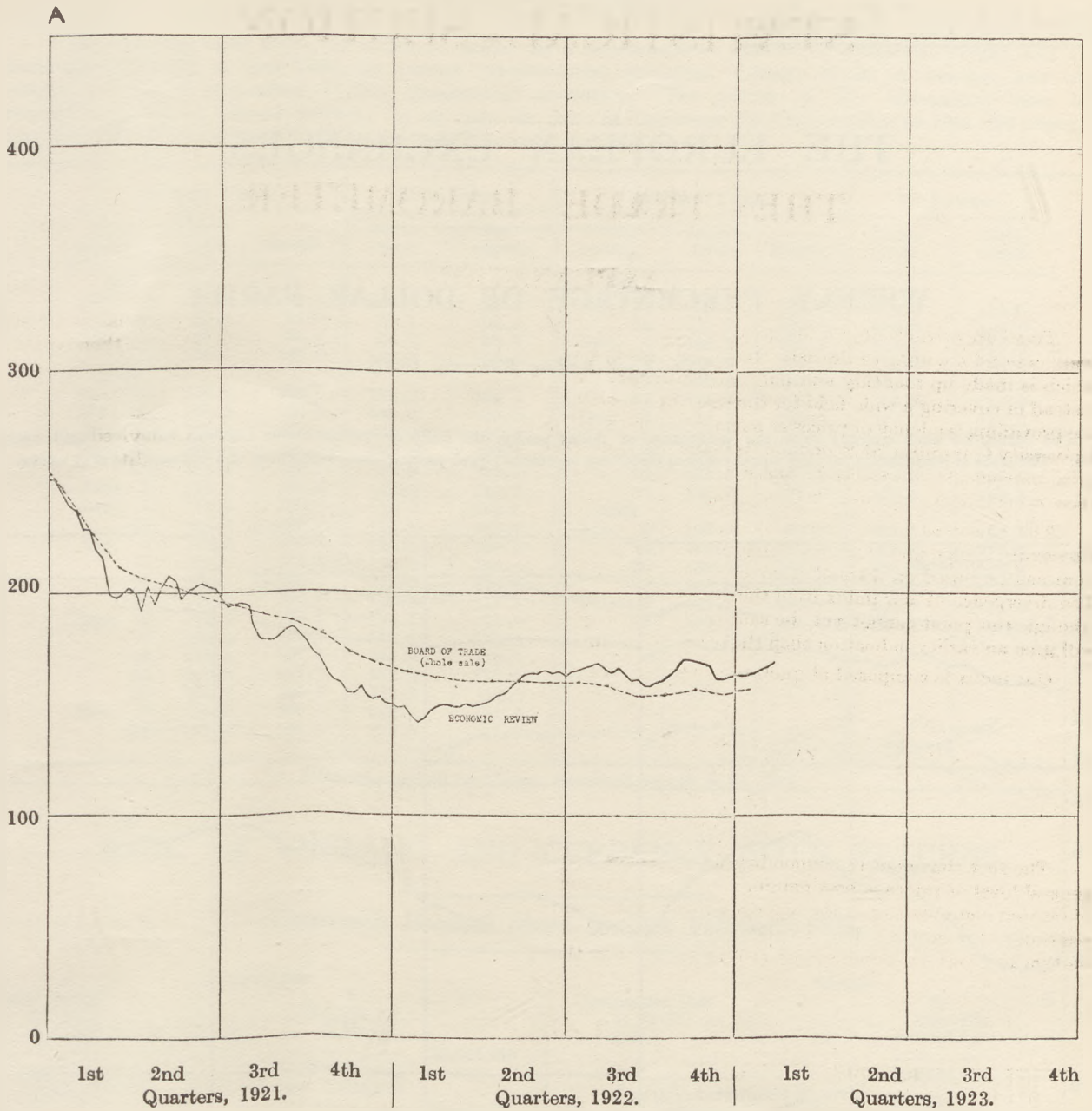


TABLE II.

Date.	Pig iron.	Tin.	Coal.	Linseed Oil.	Cotton.	Wool.	Hides.	Wheat.	Bacon.	Sugar.	Mean.	Date.
Dec. 30, 1921	100	100	100	100	100	100	100	100	100	100	100	Dec. 30, 1921
1922												1922.
Jan. 27 ...	90.6	90.5	92.4	108.8	85.3	100.0	82.6	101.1	94.4	96.1	94.18	... Jan. 27
Feb. 24 ...	101.4	85.3	94.3	136.9	90.0	106.7	76.8	106.4	104.4	94.1	99.77	... Feb. 24
Mar. 31 ...	94.3	84.2	93.4	126.3	90.3	106.7	87.0	116.2	97.1	103.8	99.93	... Mar. 31
Apr. 28 ...	92.9	89.4	89.6	149.1	87.9	106.7	78.3	113.5	115.8	107.7	103.09	... Apr. 28
May 26 ...	99.1	89.2	88.7	155.3	101.1	115.6	89.9	123.8	118.4	107.7	108.88	... May 26
June 30 ...	92.9	90.4	81.1	152.6	111.7	111.1	91.3	117.7	114.4	119.2	108.24	... June 30
July 28 ...	92.9	94.5	97.2	157.9	110.1	111.1	97.1	119.0	116.5	119.2	111.55	... July 28
Sept. 1 ...	92.4	93.8	94.3	121.1	113.9	111.1	92.8	108.9	112.8	148.0	108.91	... Sept. 1
" 29 ...	94.3	95.2	92.9	135.1	105.9	117.8	96.4	82.8	104.0	134.6	105.90	... " 29
Nov. 3 ...	95.5	107.5	100.0	140.3	119.9	133.3	106.5	91.9	104.8	134.6	113.43	... Nov. 3
Dec. 1 ...	95.5	102.6	94.3	136.9	121.5	133.3	107.2	93.9	96.3	134.6	111.61	... Dec. 1
" 29 ...	89.4	106.7	91.5	138.6	126.0	120.0	93.5	90.4	89.7	138.5	108.43	... " 29
1923												1923
Jan. 5 ...	90.1	104.9	91.5	135.1	125.2	122.2	95.7	89.9	89.7	138.5	108.28	... Jan. 5
" 12 ...	90.1	106.5	93.4	133.3	126.4	122.2	93.5	91.7	89.7	138.5	108.52	... " 12
" 19 ...	91.3	106.1	95.3	135.1	132.4	122.2	93.5	91.7	89.7	130.8	108.81	... " 19
" 26 ...	92.4	108.9	100.0	136.9	137.0	122.2	97.1	93.3	83.1	130.8	110.17	... " 26
Feb. 2 ...	96.0	107.8	113.2	138.2	129.2	122.2	95.7	93.3	86.0	130.8	111.28	... Feb. 2
" 9 ...	97.9	109.6	113.2	147.4	130.5	120.0	95.7	91.7	88.2	130.8	112.50	... " 9

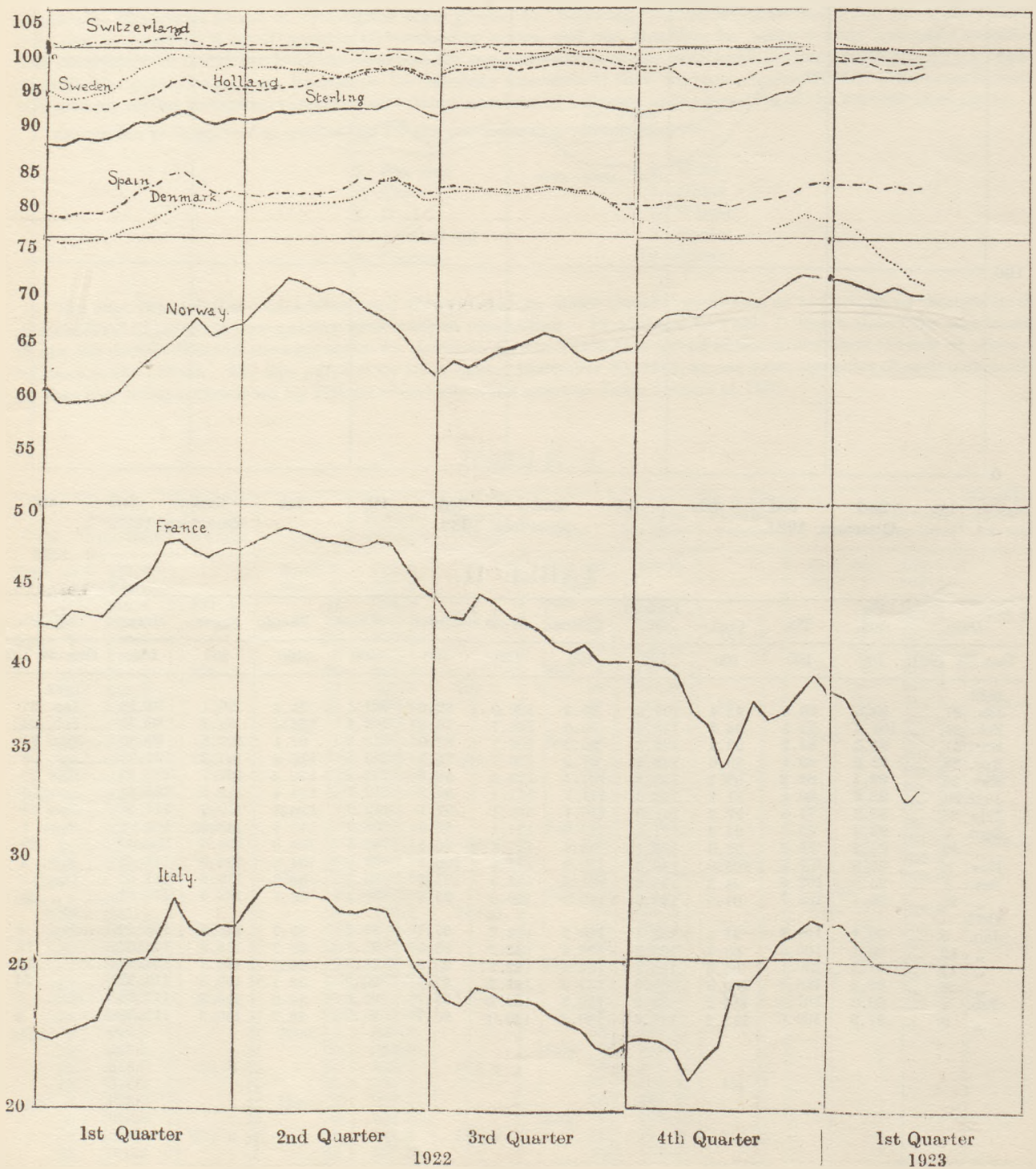
Statistical Section

THE EUROPEAN EXCHANGES

WEEKLY PERCENTAGE OF DOLLAR PARITY

(To Week Ending February 10th.)

The curves for each country show the percentage of dollar parity, the daily quotations (over London) being averaged every week. The scale is logarithmic, so that equal vertical distances represent equal *proportional* differences and changes in every curve.



SECURITY PRICES.

The following table gives the course of prices for a representative number of industrial stocks and long-dated railroad bonds in New York, for twenty representative industrial ordinary stocks in London, and for a selected number of long-dated British Government securities. The prices of the last-named have been averaged exclusive of accrued interest. In all cases the price at December 30, 1921, is taken as 100, this being the base for other statistical series compiled by THE ECONOMIC REVIEW :—

IN NEW YORK.			IN LONDON.		IN NEW YORK.			IN LONDON.	
Week ending.	Indus-trials.	Bonds.*	Indus-trials.	Gilt-edged.	Week ending.	Indus-trials.	Bonds.*	Indus-trials.	Gilt-edged.
1921					1922				
Oct. 1	88.4	91.3	104.5	94.4	Oct. 21	125.7	102.8	114.3	113.0
29	91.1	92.0	91.1	94.4	28	121.7	102.0	114.8	113.0
Dec. 2	97.4	99.4	94.2	96.0	Nov. 4	122.1	103.4	114.5	113.0
30	100.0	100.0	100.0	100.0	11	118.2	103.1	115.0	113.6
1922					18	117.6	102.4	114.7	114.5
Jan. 28	100.8	102.1	102.3	104.4	25	114.4	102.0	115.0	115.4
Feb. 25	105.2	100.8	103.6	109.0	Dec. 2	118.3	102.2	115.7	115.0
Mar. 25	107.4	101.7	102.8	110.7	9	120.5	102.8	116.2	114.3
April 1	109.8	101.5	103.5	112.2	16	121.1	103.1	116.1	113.8
29	114.4	103.1	117.6	116.9	23	121.6	102.9	118.3	113.5
June 3	118.8	102.9	113.5	115.7	30	121.7	102.5	119.5	113.3
July 1	114.5	103.6	110.0	114.7	1923				
29	119.4	106.0	112.8	116.7	Jan. 6	120.5	102.8	122.1	113.5
Aug. 5	119.6	106.0	113.3	116.4	13	122.2	102.6	122.3	114.0
12	119.7	105.5	113.6	116.4	20	120.4	102.0	123.3	116.8
19	122.1	105.7	114.0	116.0	27	120.8	101.1	122.2	115.8
26	123.9	100.9	113.5	115.5	Feb. 3	122.5	102.1	122.2	114.8
Sept. 2	124.9	106.6	114.1	112.1	10	125.4	101.6	122.5	115.1
9	125.4	106.7	115.6	113.5					
16	123.8	107.6	115.2	112.5					
23	122.2	107.0	113.5	112.2					
30	121.2	105.8	113.2	112.0					
Oct. 7	123.9	106.1	113.3	111.7					
14	127.6	104.4	114.5	112.3					

* Prices supplied by Messrs. Bernhard Scholle & Co., Ltd.

BANK OF ENGLAND AND CURRENCY NOTE RETURNS.

Combined Balance Sheet for 8th February, 1923.

LIABILITIES.			ASSETS.		
	£	£		£	£
<i>Notes Issued.</i>			<i>Government Debt.</i>		
B. of E.	144,115,230		B. of E.	11,015,100	
Less those in C.N. Reserve	21,150,000		C.N.	237,767,758	
		122,965,230			248,782,858
C.N. outstanding	279,377,323		Less C.N. Investment Reserve		
C.N. called in but not yet cancelled	1,509,842		Account	12,170,480	236,612,378
		280,887,165			
			<i>Other Securities.</i>		
			B. of E.		7,434,900
			<i>Gold Coin and Bullion.</i>		
			B. of E.	125,665,230	
			C.N.	27,000,000	
			C.N. Balance at B. of E....	139,887	
					152,805,117
			<i>Silver Coin</i>		7,000,000
					403,852,395
		403,852,395			403,852,395

Summary of Combined Balance Sheets.

January 1922 to date.

Date.	B. of E. Notes less those in C.N. Reserve.	C.N. outstanding inc. called in but not cancelled.	Total.	Gold.	% of Gold to Notes.	% of Gold & Silver to Notes.
1922 Jan.	125.9	304.3	430.2	155.5	36.1	36.8
Feb.	125.9	298.8	424.7	155.6	36.6	37.3
Mar.	125.9	300.4	425.3	155.6	36.6	37.7
Apr.	126.0	301.3	427.3	155.6	36.4	37.6
May	126.1	298.3	424.4	155.8	36.6	37.8
June	124.9	297.9	422.8	154.8	36.6	38.0
July	122.9	296.4	419.3	152.8	36.4	38.1
Aug.	122.9	293.3	416.2	152.7	36.7	38.4
Sept.	122.9	289.1	412.0	152.8	37.1	38.8
Oct.	122.9	288.0	410.9	152.7	37.2	38.9
Nov.	122.9	287.9	410.8	152.8	37.2	38.9
Dec.	122.9	301.3	424.3	152.8	36.0	37.7
1923 Jan.	123.0	280.3	403.2	152.8	37.9	39.6
Feb. 8	123.0	280.9	403.9	152.8	37.8	39.6

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