

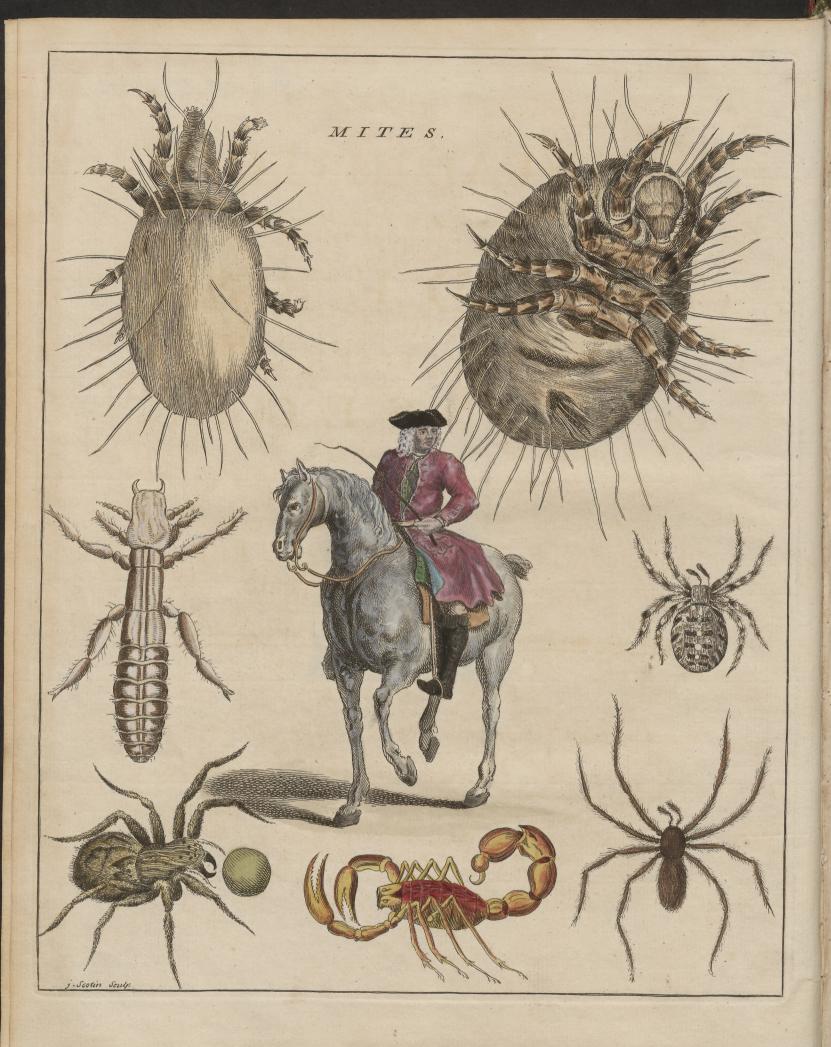


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D & 15



## NATURAL HISTORY

OF

# SPIDERS,

AND OTHER

# Curious INSECTS,

## BY ELEAZAR ALBIN.

Illustrated with Fifty three COPPER PLATES, Engraven by the Best Hands.

#### LONDON:

Printed by John Tilly, for R. Montagu in Great-Queen-Street, near Drury Lane; J. Brindley at the King's Arms in New Bond Street; O. Payne at Horace's Head in Round-Court in the Strand; J. Worrall at the Dove in Bell-Yard near Lincolns-Inn; T. Worrall at the Judge's Head in Fleetstreet; T. Boreman near Child's-Coffee-House in St. Paul's Church-Yard, and C. Corbett at Addison's Head against St. Dunstan's Church in Fleetstreet. M.DCC XXXVI.

A

# NATURAL HISTORY

OF

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Curious INSECTS,

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OPPER PLATES

Engraven by the Ben Hands.

LONDON:

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St. Plants Church in Heathrest.

M.DCC XXXVI.

Biblioteka Główna PG



To the LEARNED

# Doctor MEAD,

FELLOW of the Royal College of Physicians of LONDON,

tife, near two hundred different forts of spide

## Physician to HIS MAJESTY.



OUR approbation of this little work is sufficient to make it savourably received in the world.

For as your treatife on poisons has given the learned a universal esteem of your most nice judgment in the works of nature, so, this being introduced to them under your auspicious protection must necessarily recommend it to the acceptance of the publick.

A 2

THIS

#### DEDICATION.

This, SIR, compleats my ambition from those labours, which I have designed for the general improvement of mankind, in the many various intricacies in nature, concerning that insect, the Spider, of which the philosophical transactions of the year 1671 mention thirty three different sorts to be found in England, but this falls far short of the real number that nature has produced of this insect; for, here in this treatise, near two hundred different sorts of Spiders are described. Permit me, to express myself, with the prosoundest respect,

HONOURED SIR,

tection must necessarily recommend it to the ac-

Your most humble,

and obedient Servant,

Eleazar Albin.



me to the compiling porthis freatife on that one particular animal the Spider.

#### RITT as the world, in intricacies of nature are ly delous (fune fA relad, I Aure the accounts I t

have been from my own ocular observation

great man has, in conformity to his with, led



HE great Mr. Addison in his spectator, No, 121. speaking of those whose genius and talents carry them toward natural history, says thus.

"I COULD wish that out of several writers, " fome one would take each his particular spe-" cies, and give us a distinct account of the frame, " and texture of its parts, and particularly those " which distinguish it from other animals. This would

#### To the READER.

" would be one of the best services their studies

" could do mankind, and not a little redound to

" the glory of the all wife creator of them."

I AM proud to own that this fentiment of this great man has, in conformity to his wish, led me to the compiling of this treatise on that one particular animal the Spider.

But as the world, in intricacies of nature are commonly dubious of the facts related, I affure the reader, that the accounts I have here given have been from my own ocular observation, having made it my particular care to be extraordinary exact in the collections and observations I have made concerning this Insect.

On this useful wish of Mr. Addison, I have raised this building, and shall account myself very happy, if, among the several kinds and species of this insect, I shall here deliver any thing so new and useful, as shall be worthy the notice

#### To the READER.

ment to me to proceed, perhaps, farther in other productions of nature, no less curious than is this of the Spider. The particular advantages, which an acquaintance with the wonderful productions of nature bring to us, are to instruct our understanding, and gratify our commendable curiosity; both which ends I have endeavoured to answer in this treatise, in respect of all those curious priers into nature, whose desire leads them to be informed concerning the Spider.

EACH particular species of this little insect (of which I have with great pains and labour collected near 200) is here represented, and (for such as desire it) beautissed in its proper colours, that the reader may have his curiosity satisfied at one view, by what has taken me up a great deal of time and labour, to put so exactly together.

AND fince general enquiries into the works and productions of nature have been a study so agreeable

#### To the READER.

agreeable, that it has been the persuit of the finest genius's in all ages, I cannot help flattering myself, but that this my particular enquiry into the nature of the Spider will be no less agreeable than useful to the publick in the cure of intermitting severs; see description N°. 8. of the House Spider.

N. B. In the account of those insects, found on the bodies of birds, &c. contained in the three last pages of this work, they are in conformity to the learned author from whence they are taken, there call'd fleas; yet I cannot help differing from that curious gentleman, that those he has delineated have not the properties of the fleakind, but rather of the lice.

both which ends I have endeavoured to answer

in this treatile, in respect of all those curious

E. A.



agreeable

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TheRt. Hon. the Lord Tyrconnel.

The Hon. Mr. Richard Edgcombe.

Mr. Thomas Osborne.

Mr. Daniel Browne. I all moll affect!

Mess. Ward and Chandler.

Mr. William Meadows.

Mr. John Isted.

Mr. John Jolliffe.

Mr. Robert Dodsley.



Page 1.

Plate I.













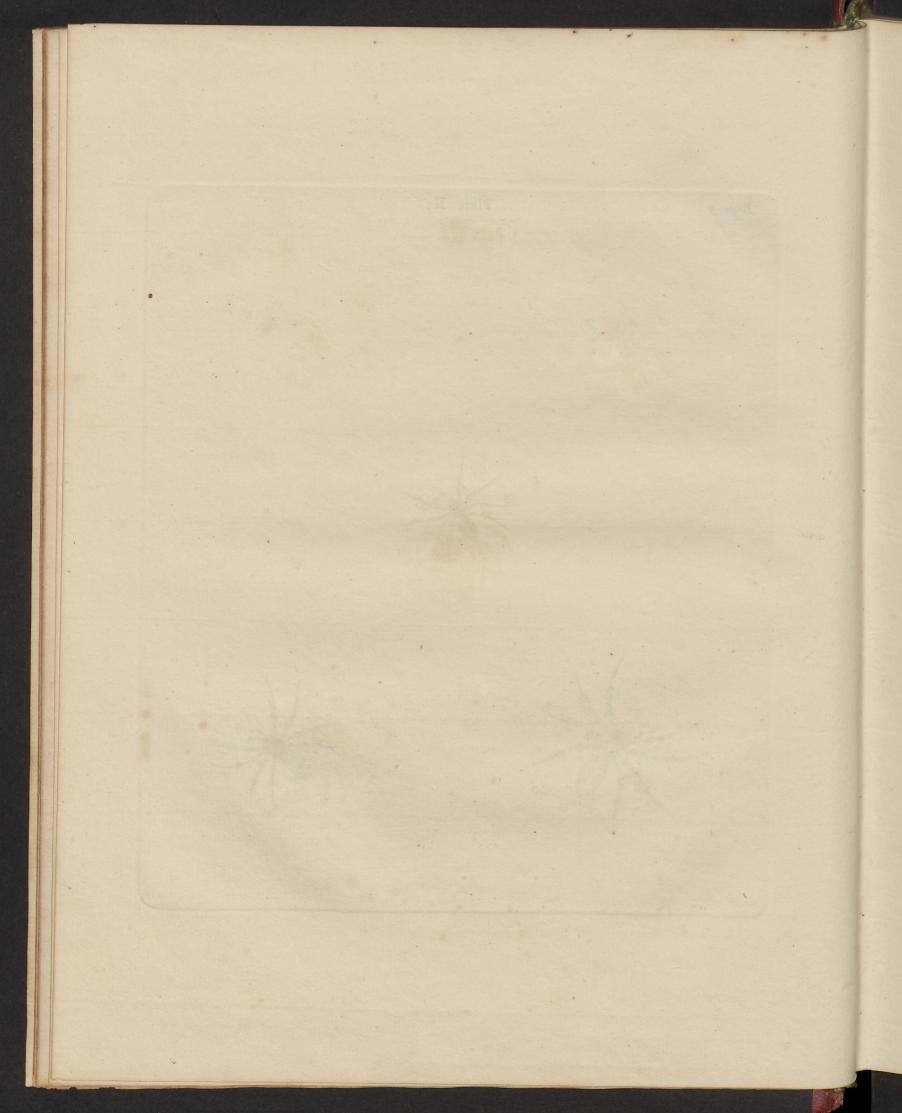








Ja Smith Soulp.



Page 5.

Plate III.

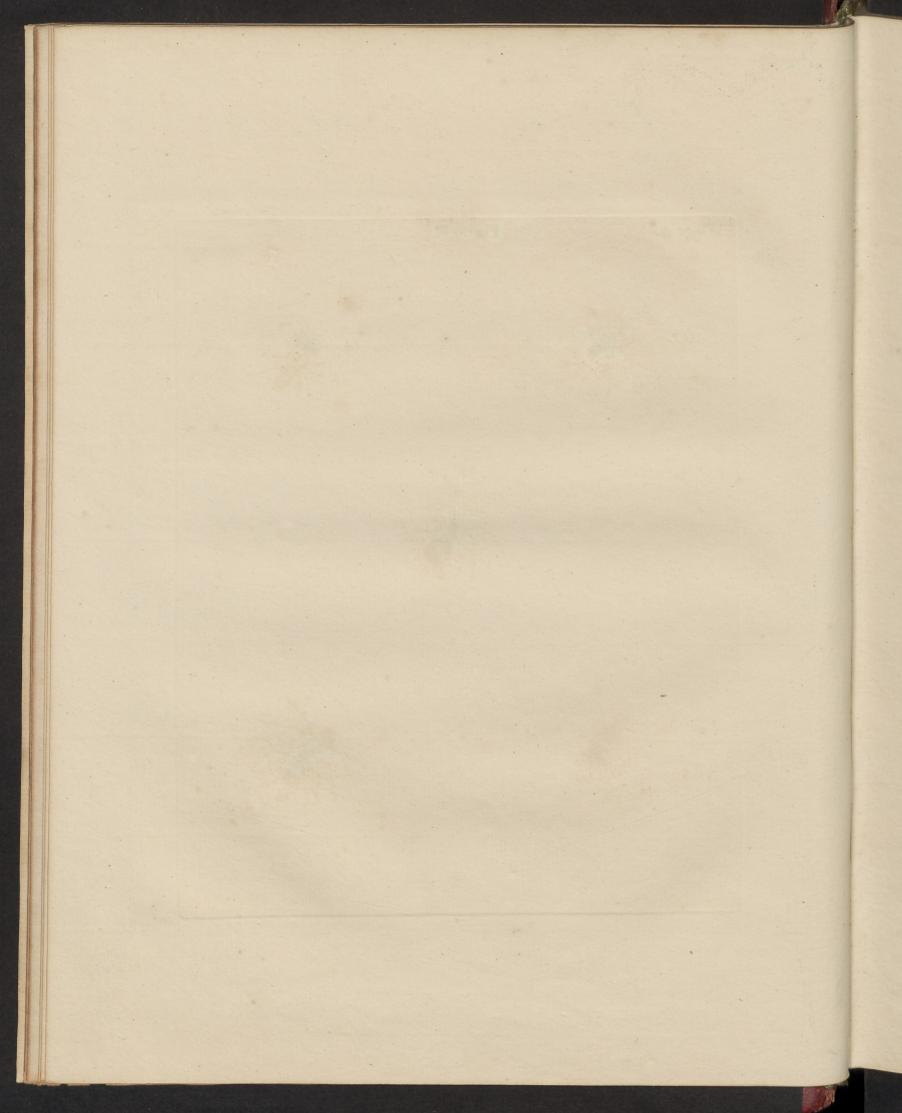








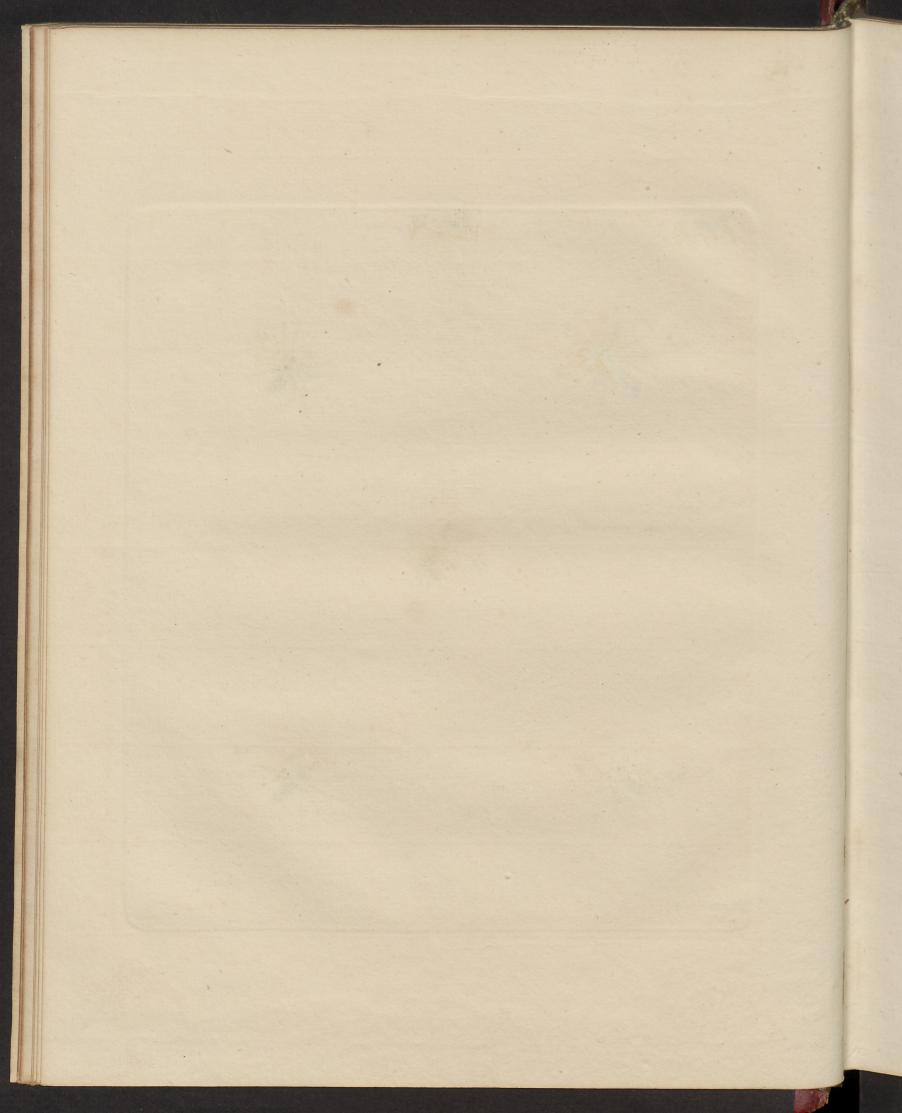




Page 7

Plate IV.

Ja. Smith Soule .



Page 8.

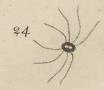
Plate V.





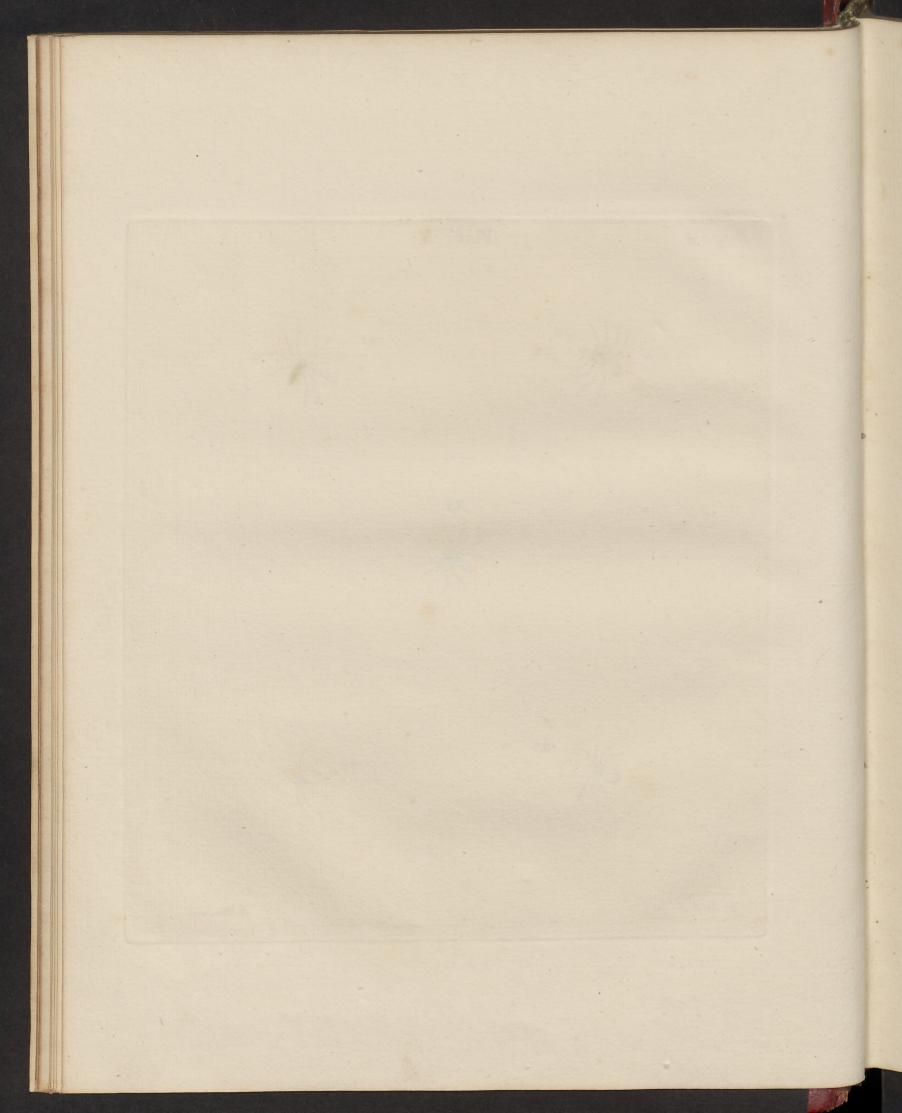






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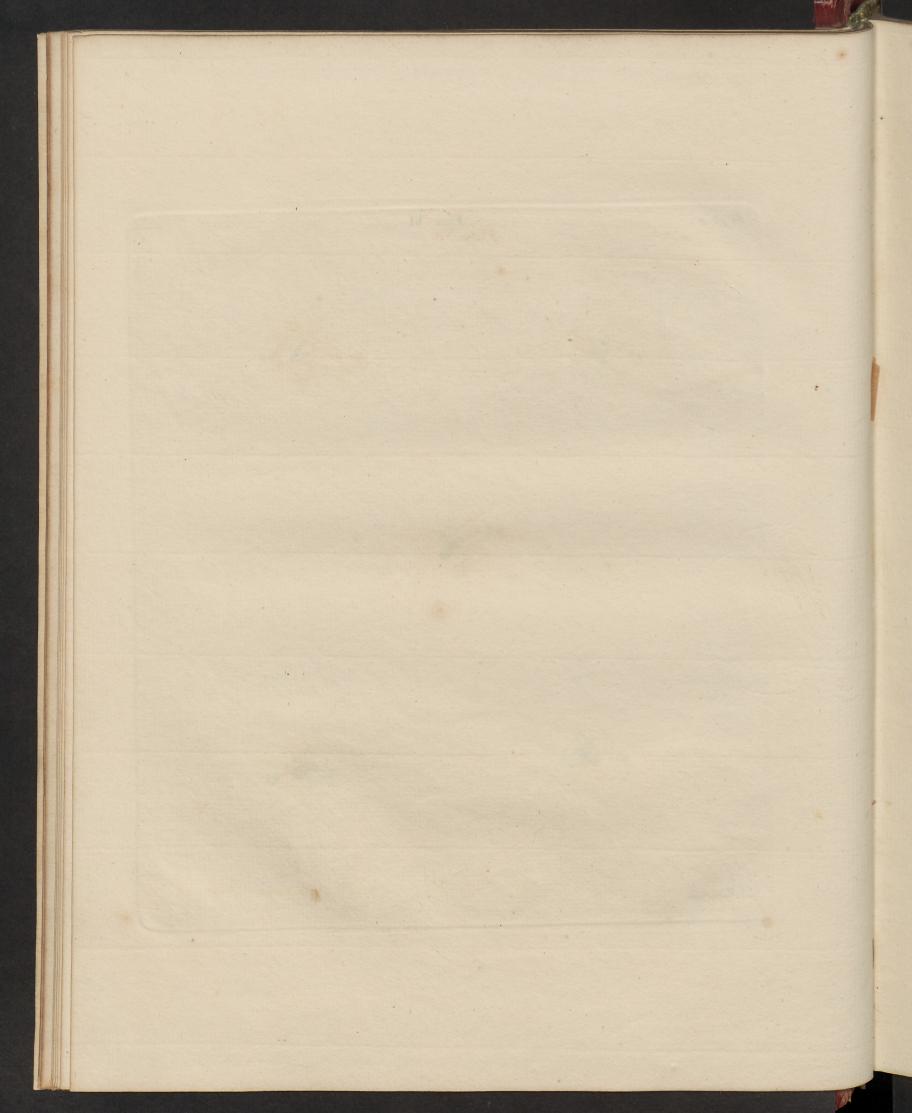
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Ja! Smith Sculp.

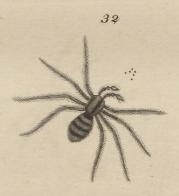


Page 11.

Plate VII.











I. Carnitham Sculp.



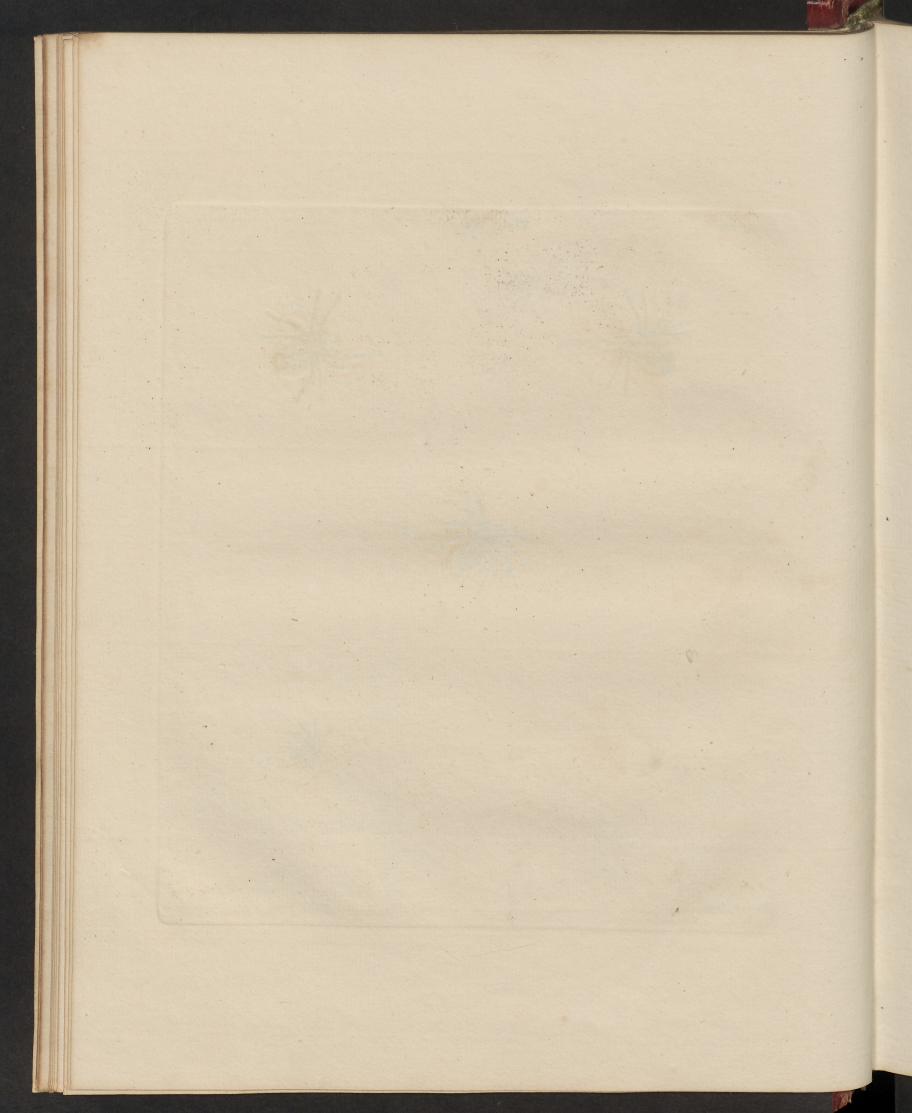








Ja. Smith Soulp.







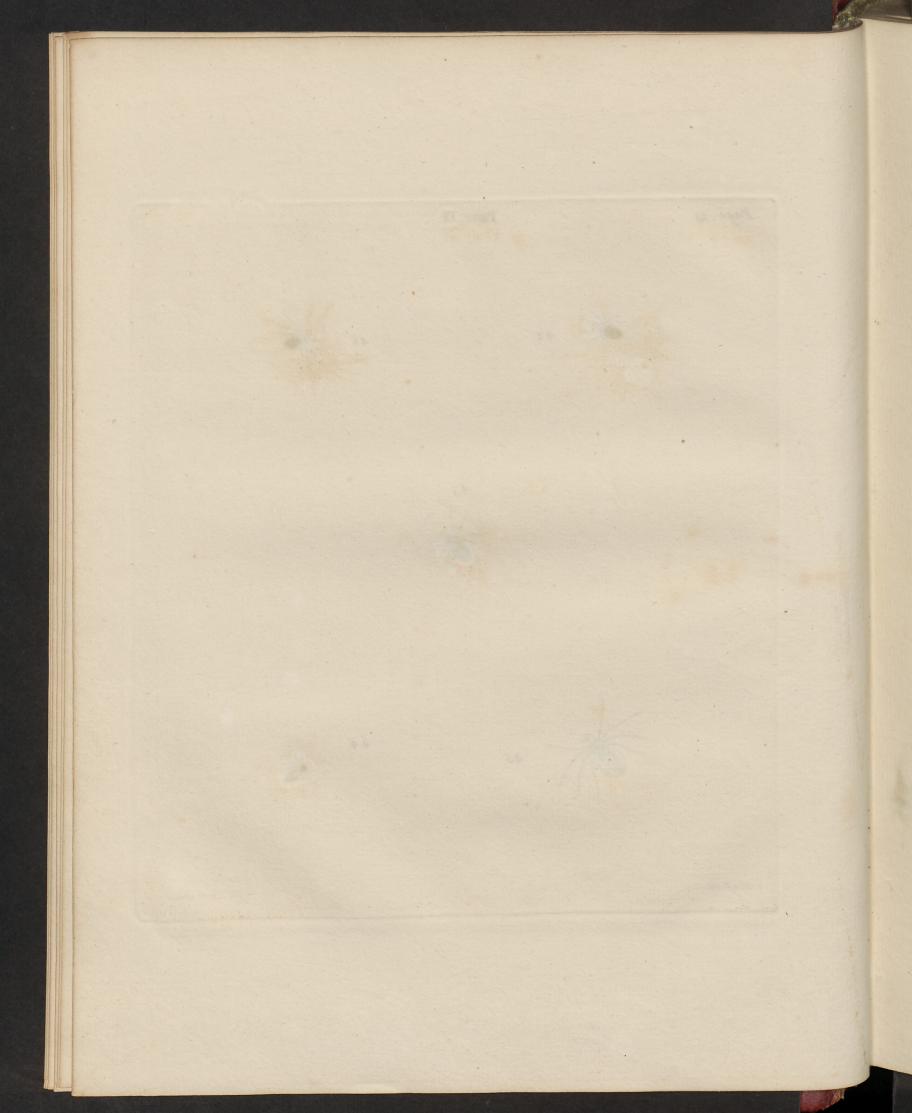






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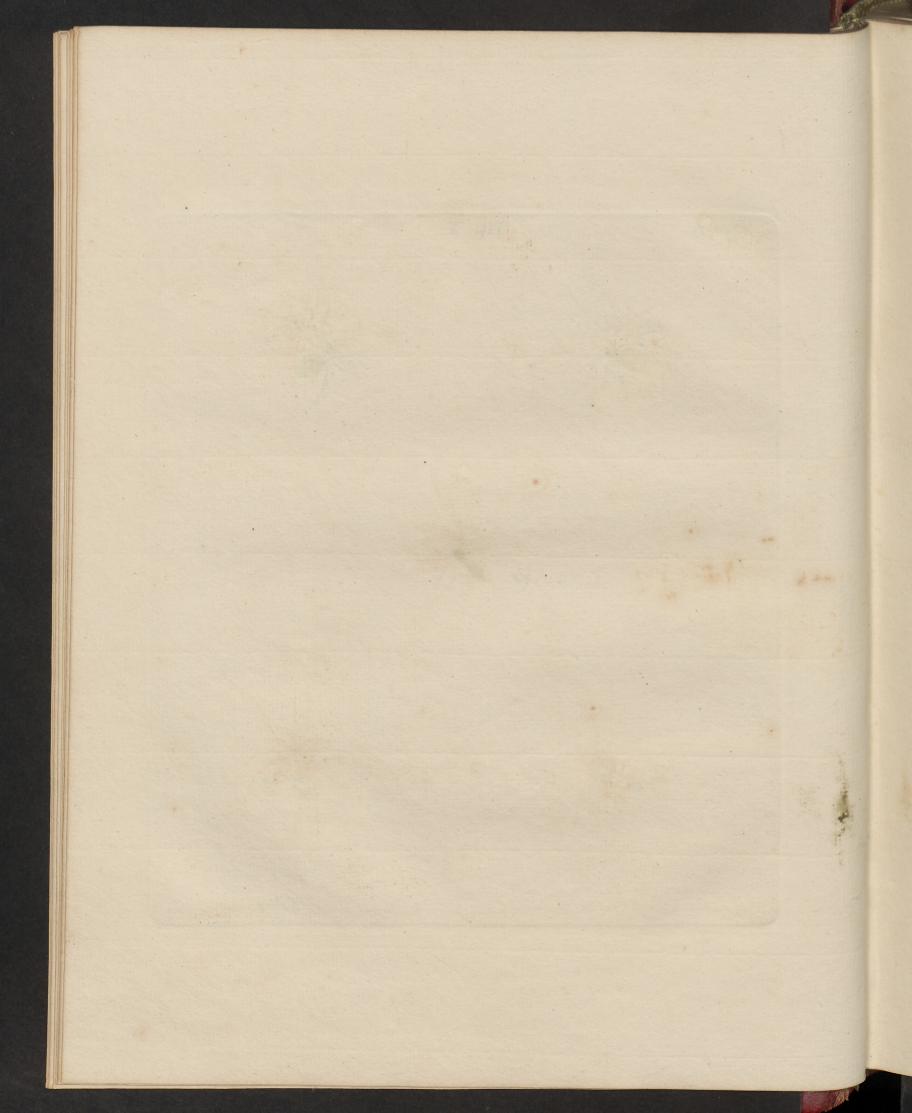






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I Smith Sculpt



Page 17

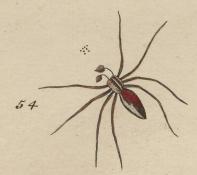
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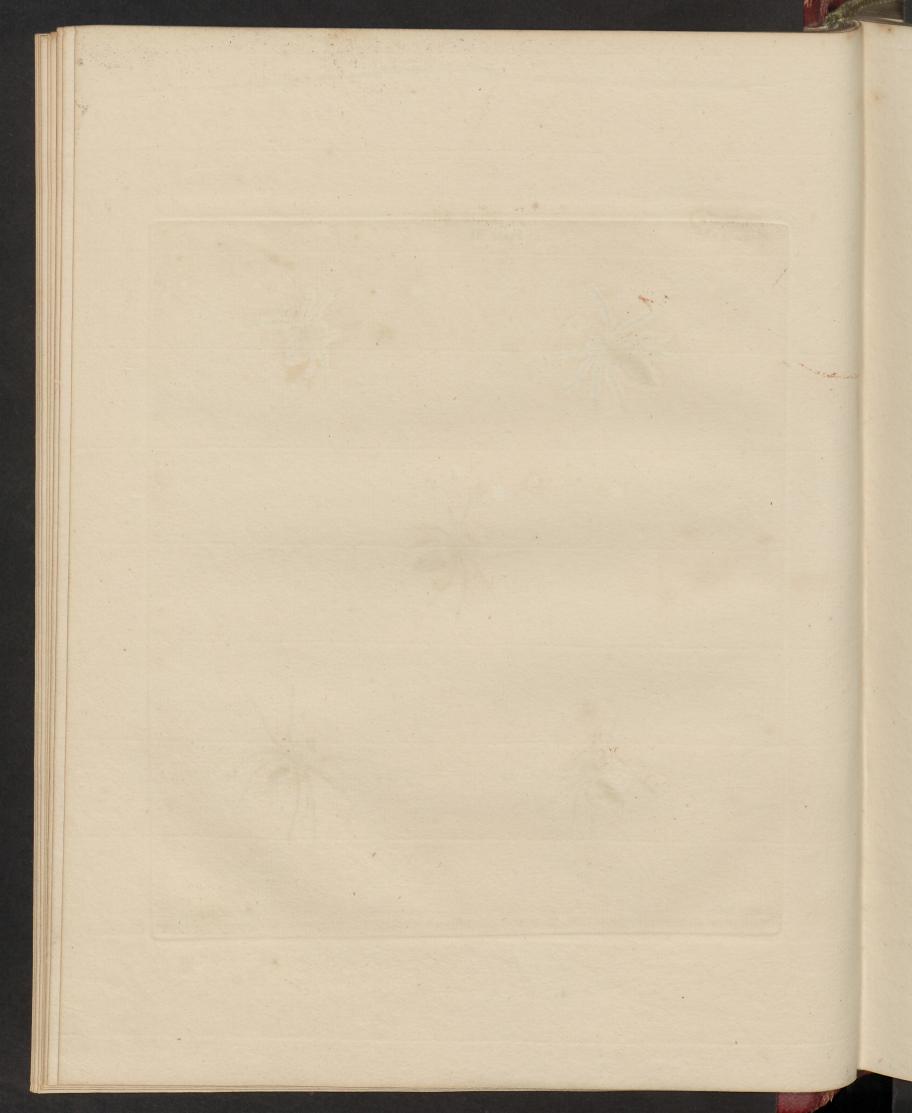






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Ja! Smith Sculp.



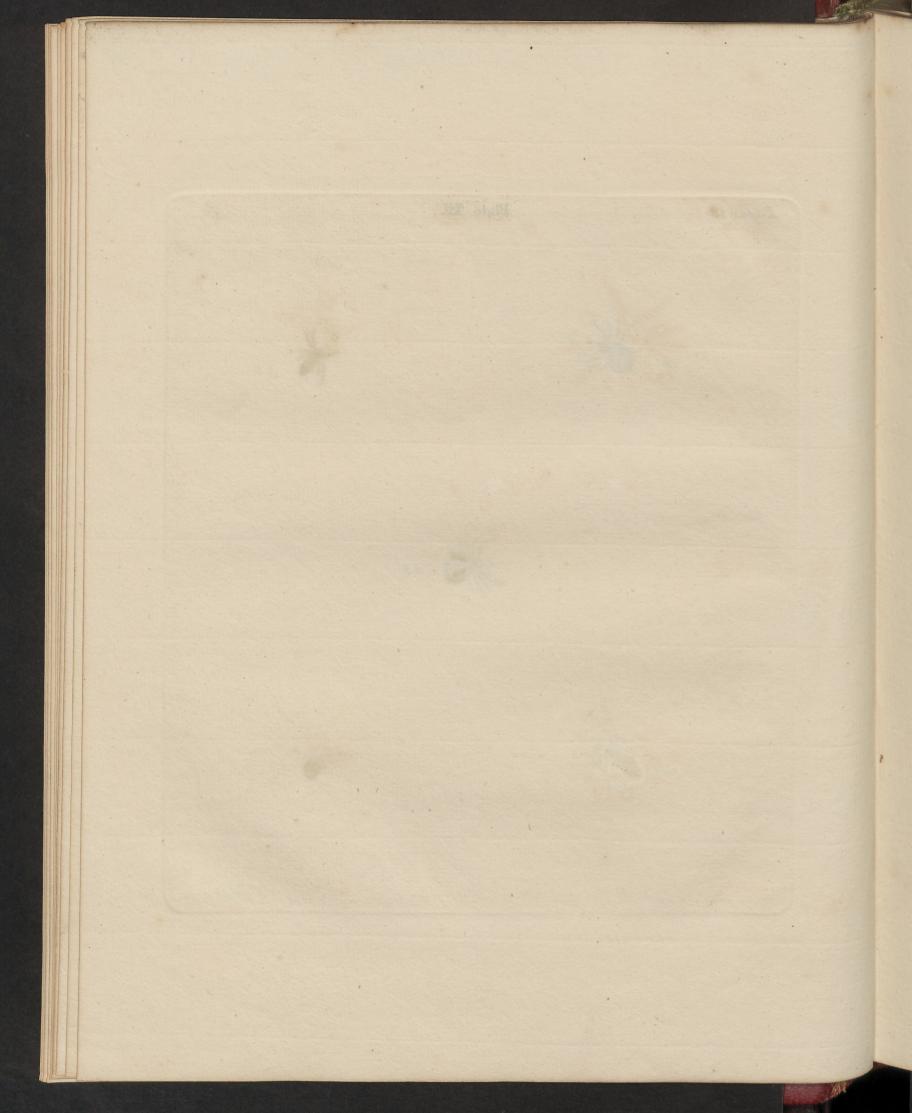
















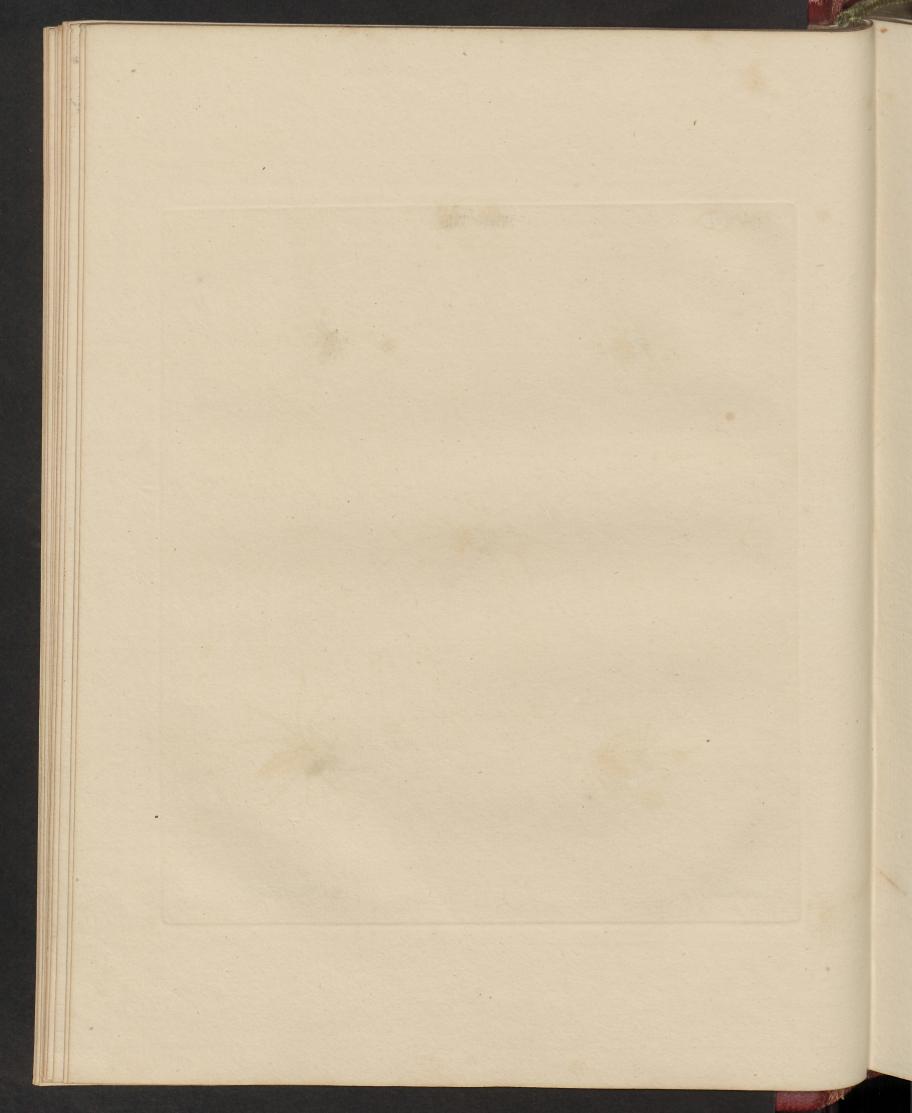






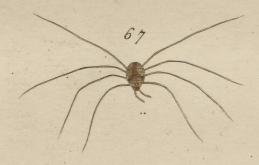
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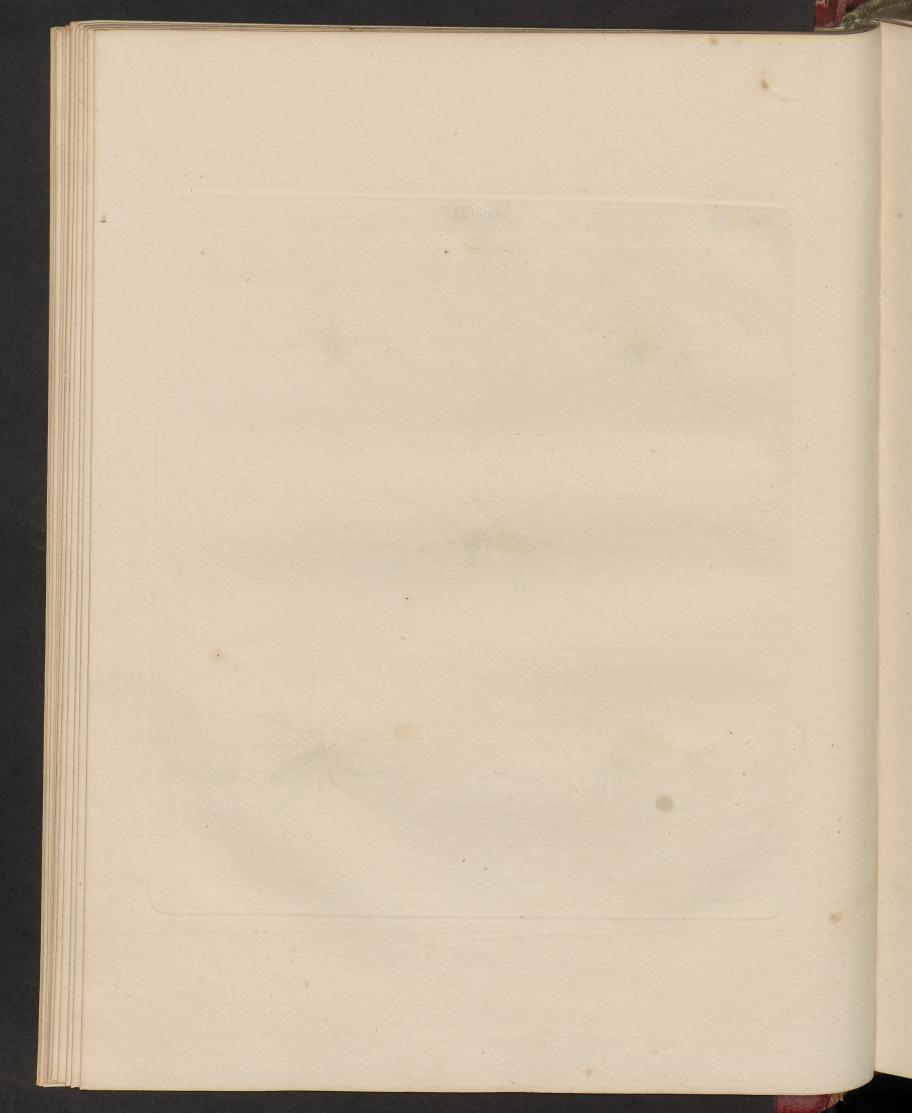








I Smith Sculp



Page 23.

Plate XV.

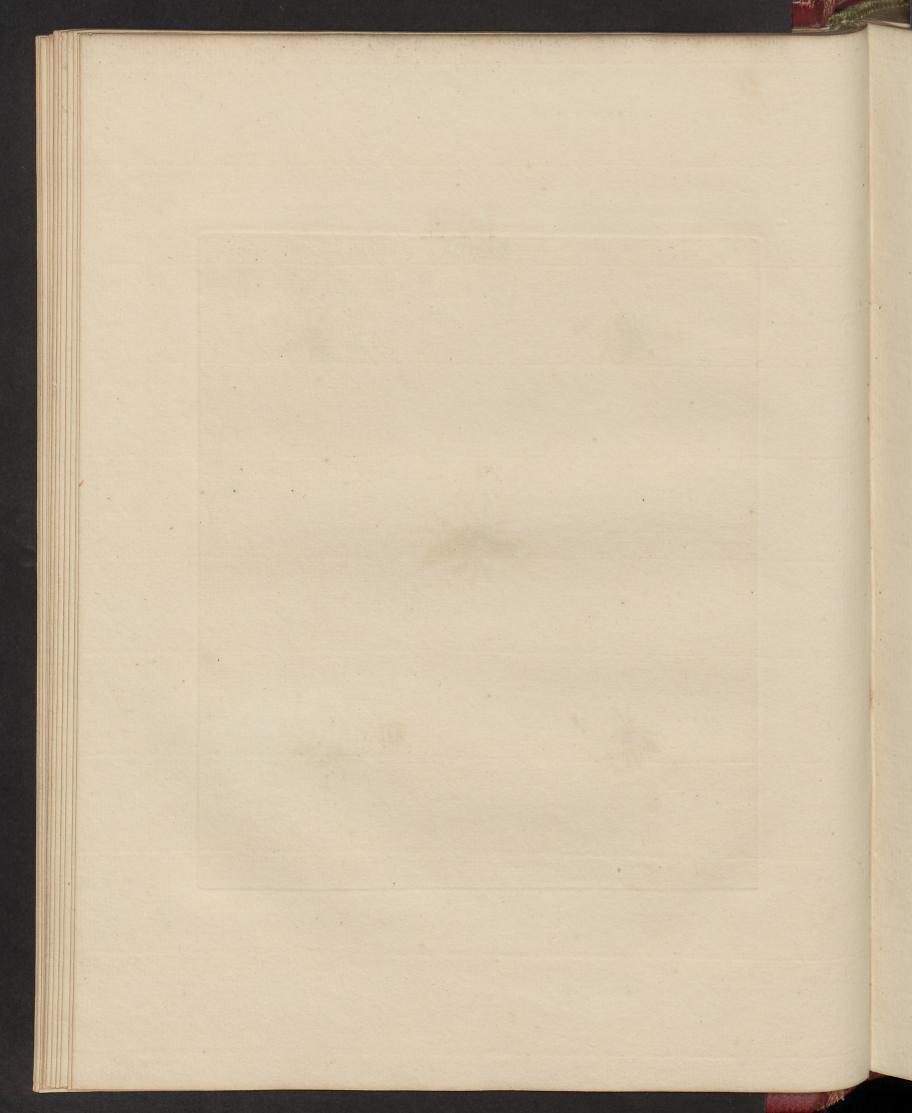






















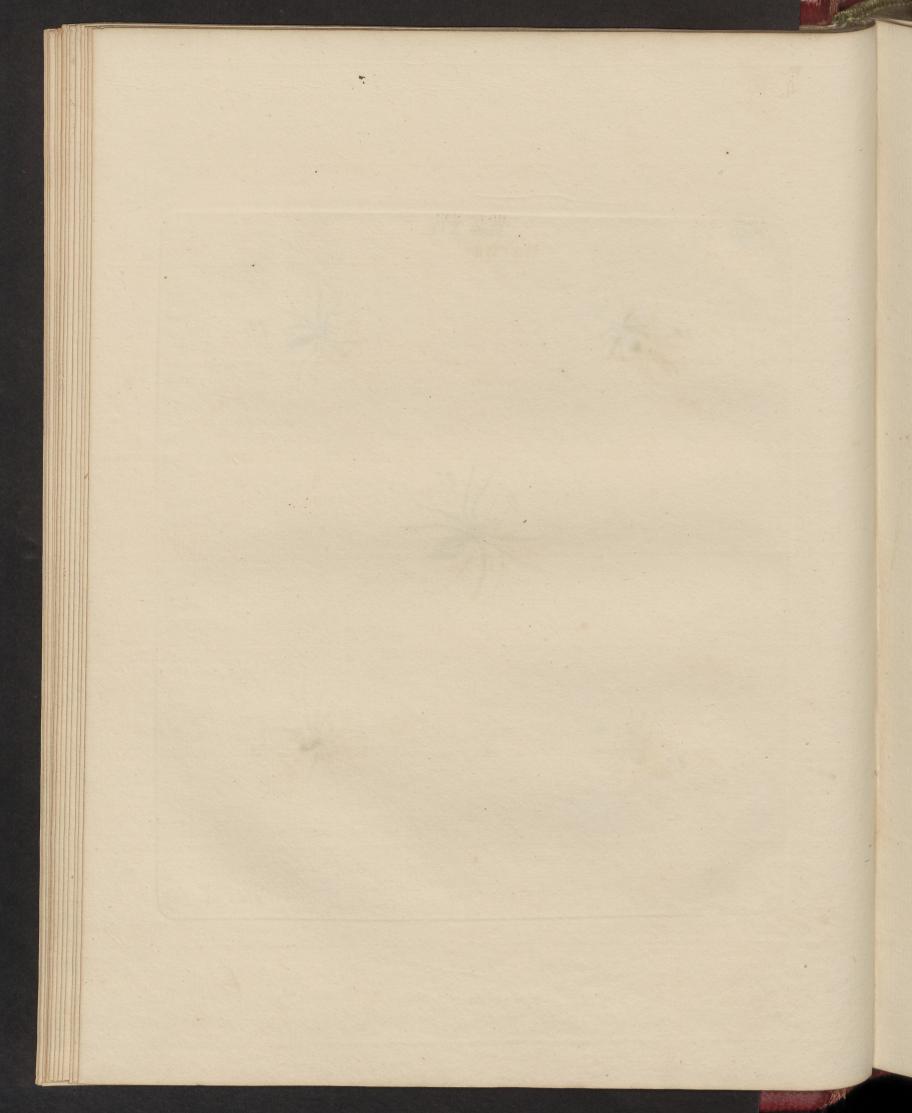




Plate XVII.











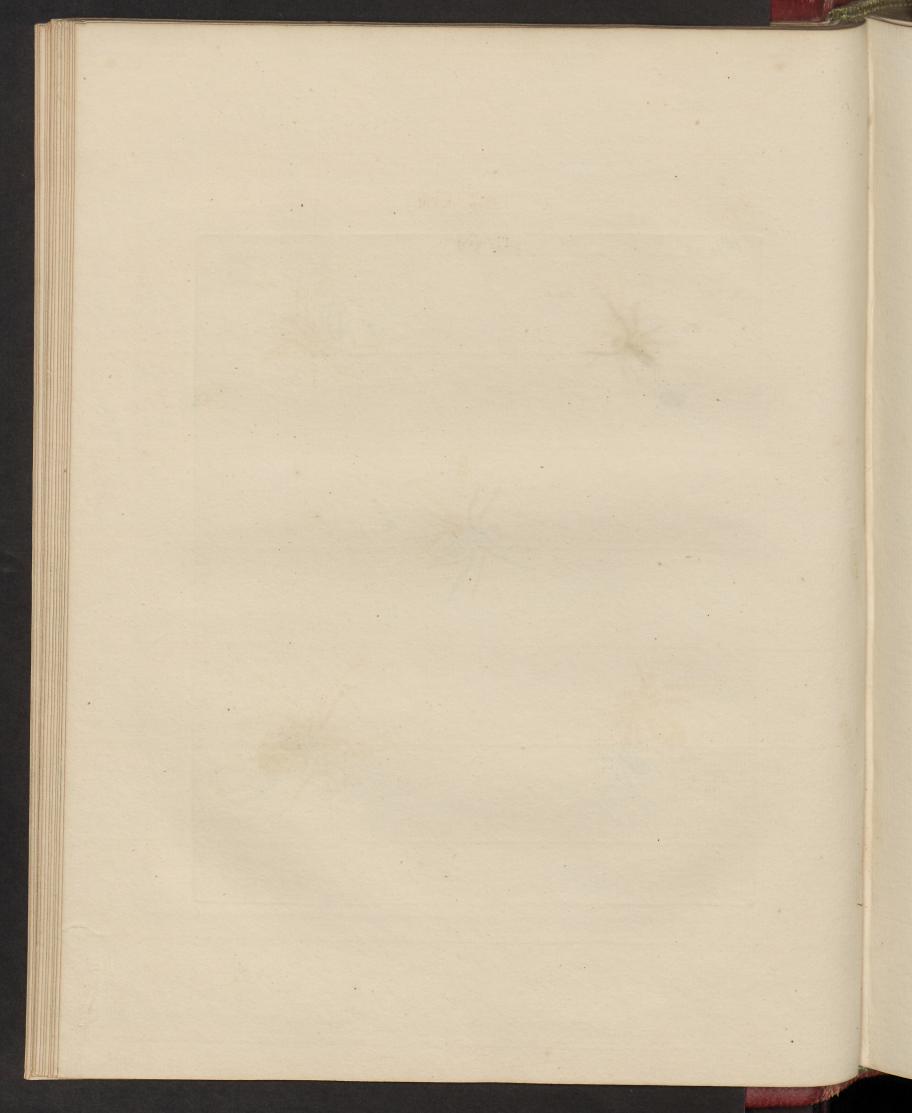
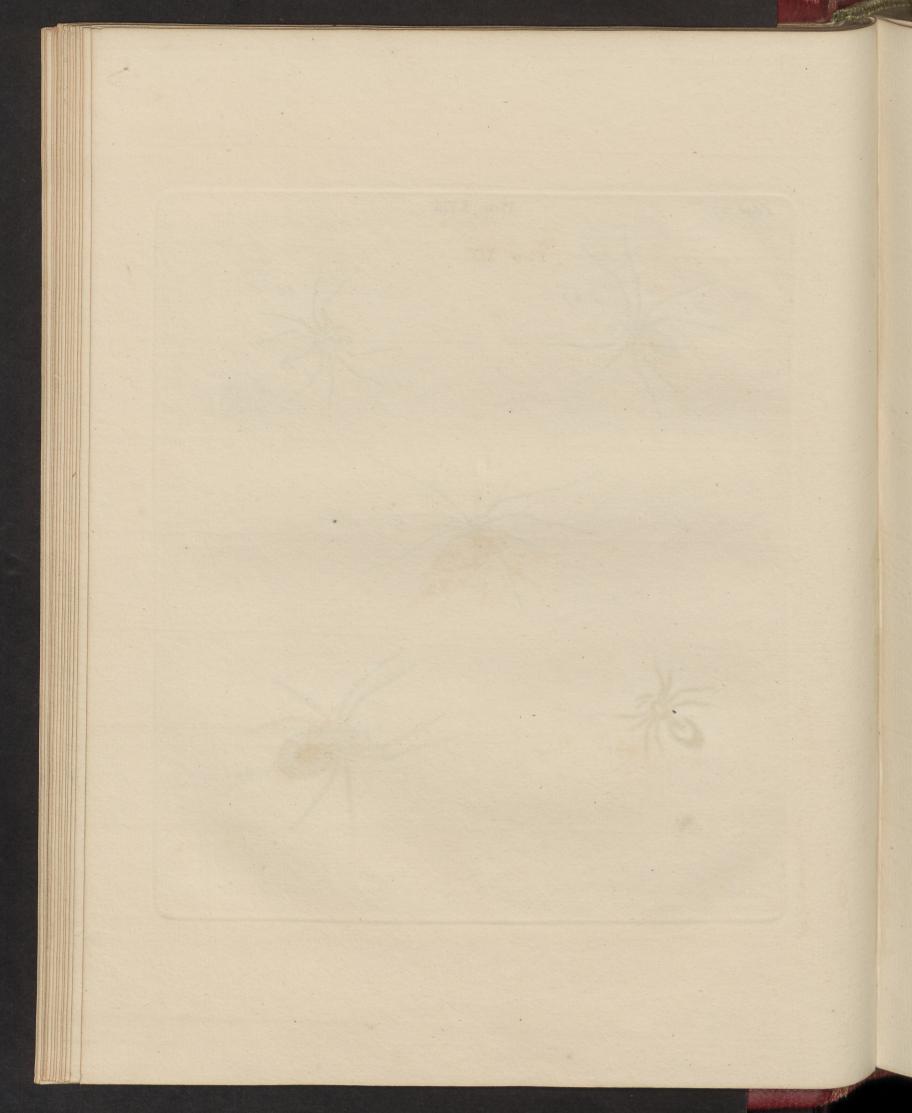




Plate XVIII.



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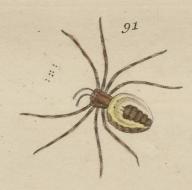


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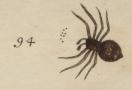
Plate XIX .

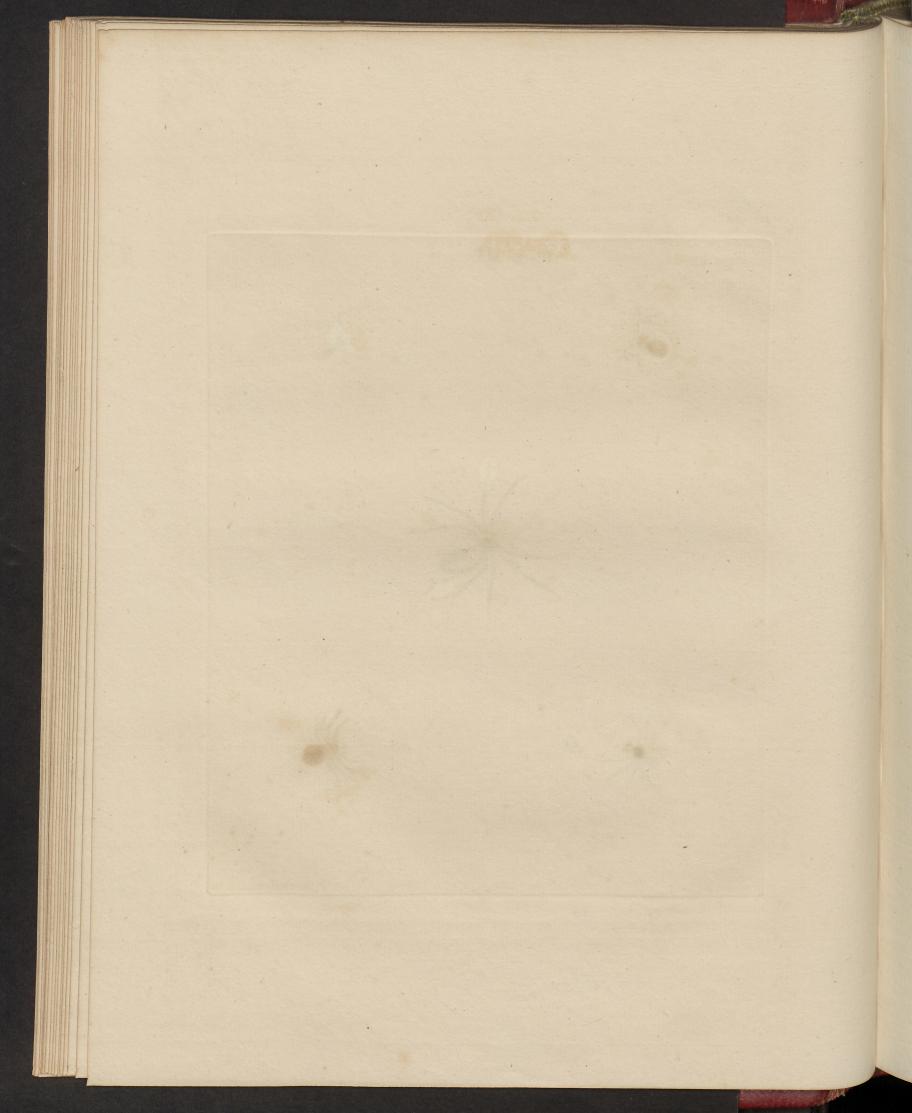






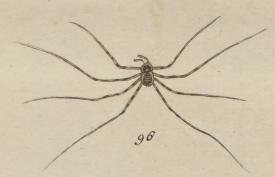








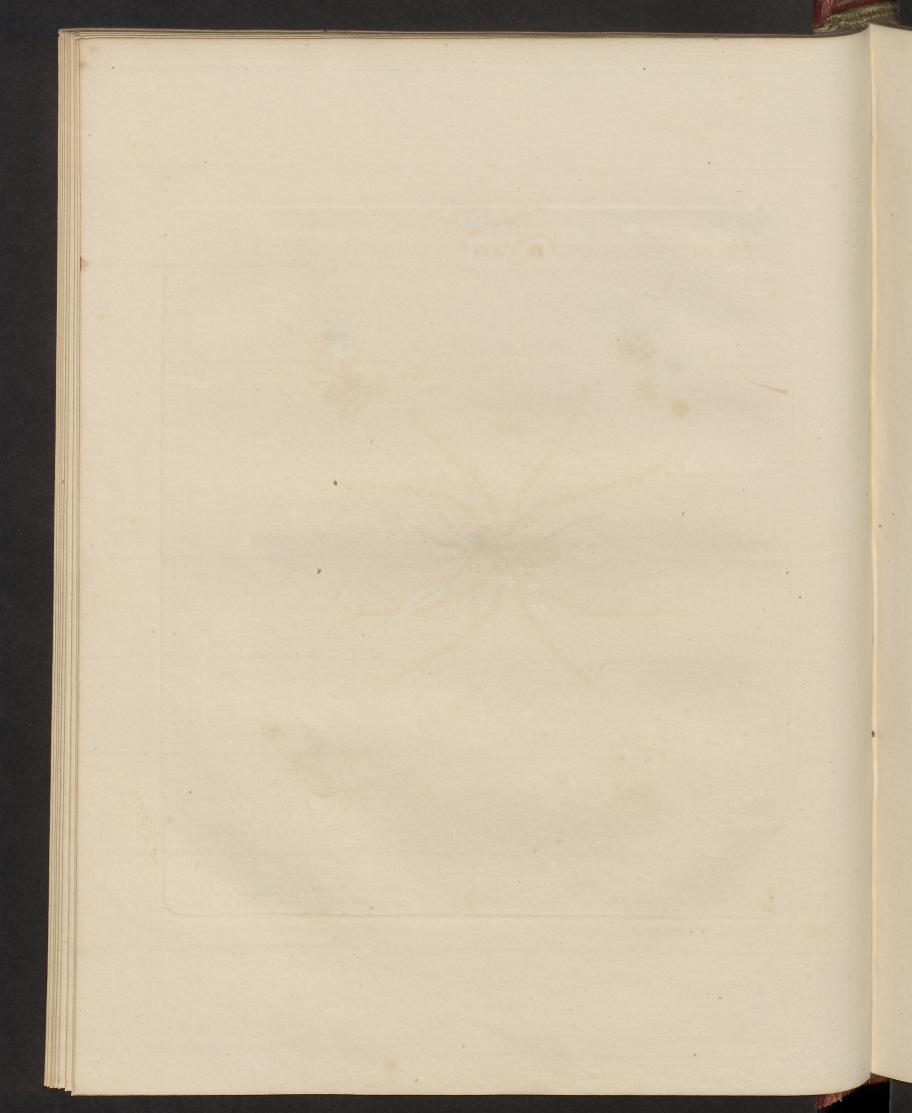


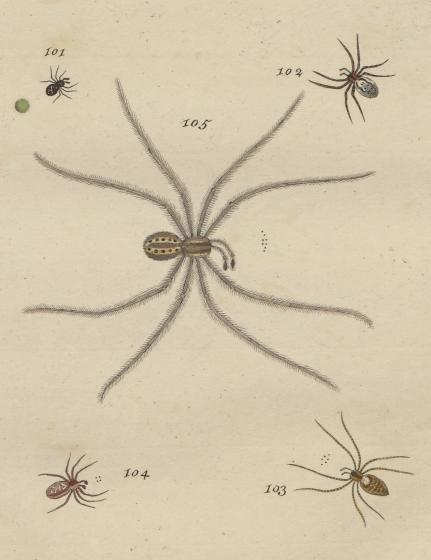




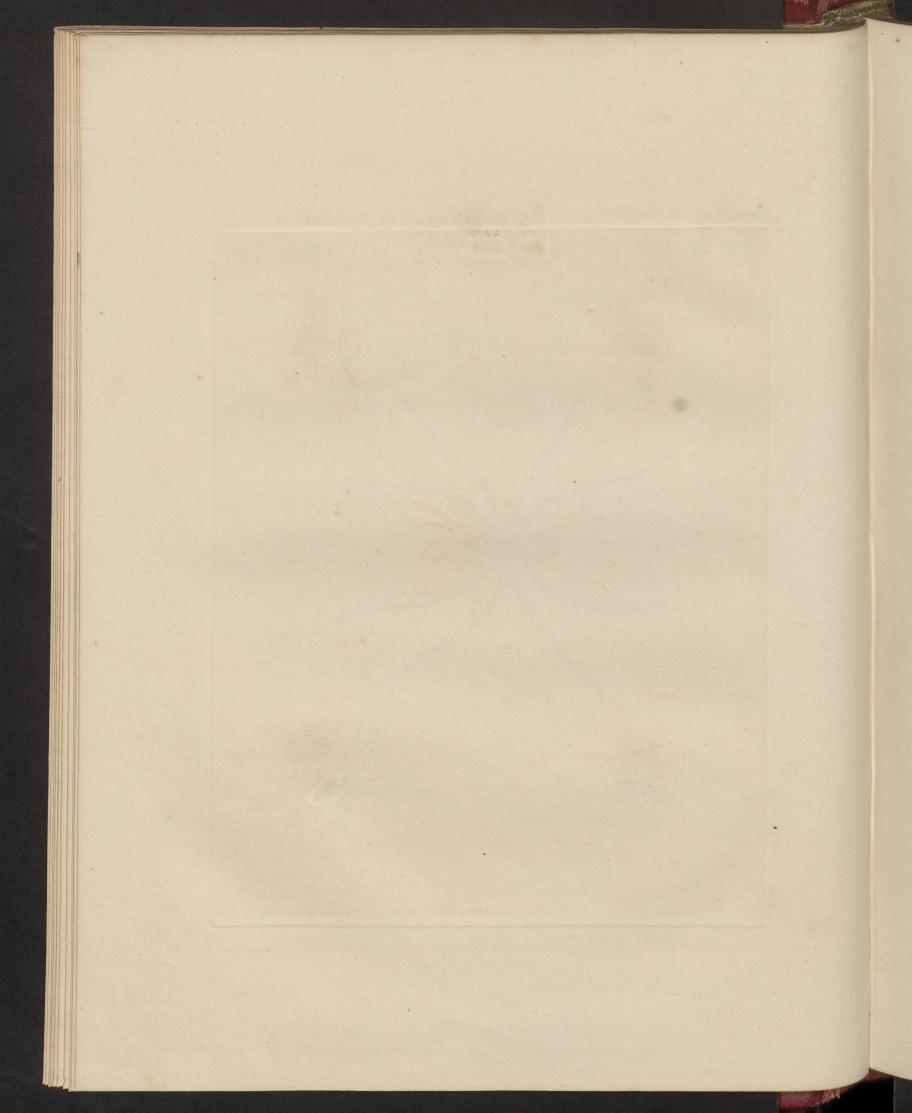


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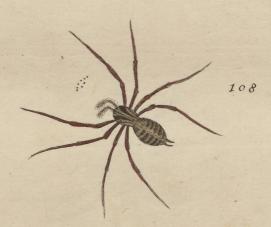


I. Carwitham Sculp.



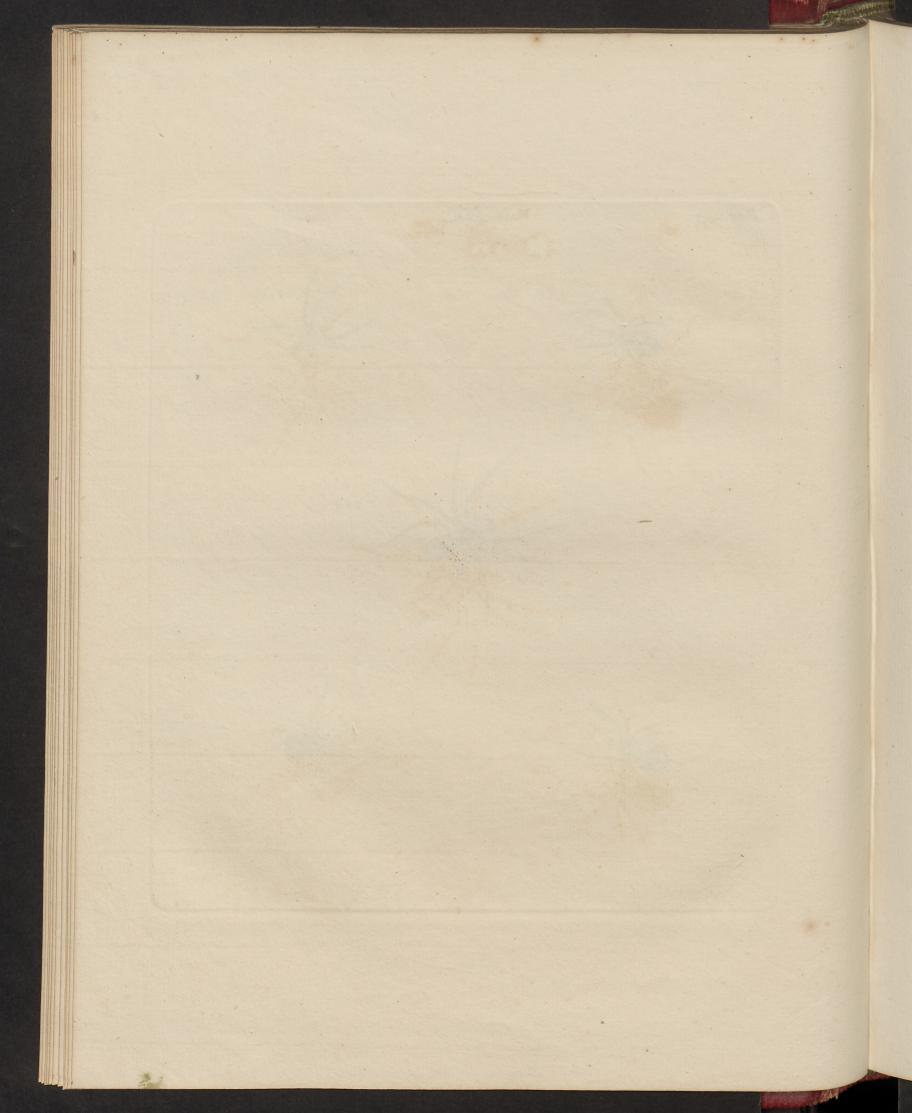






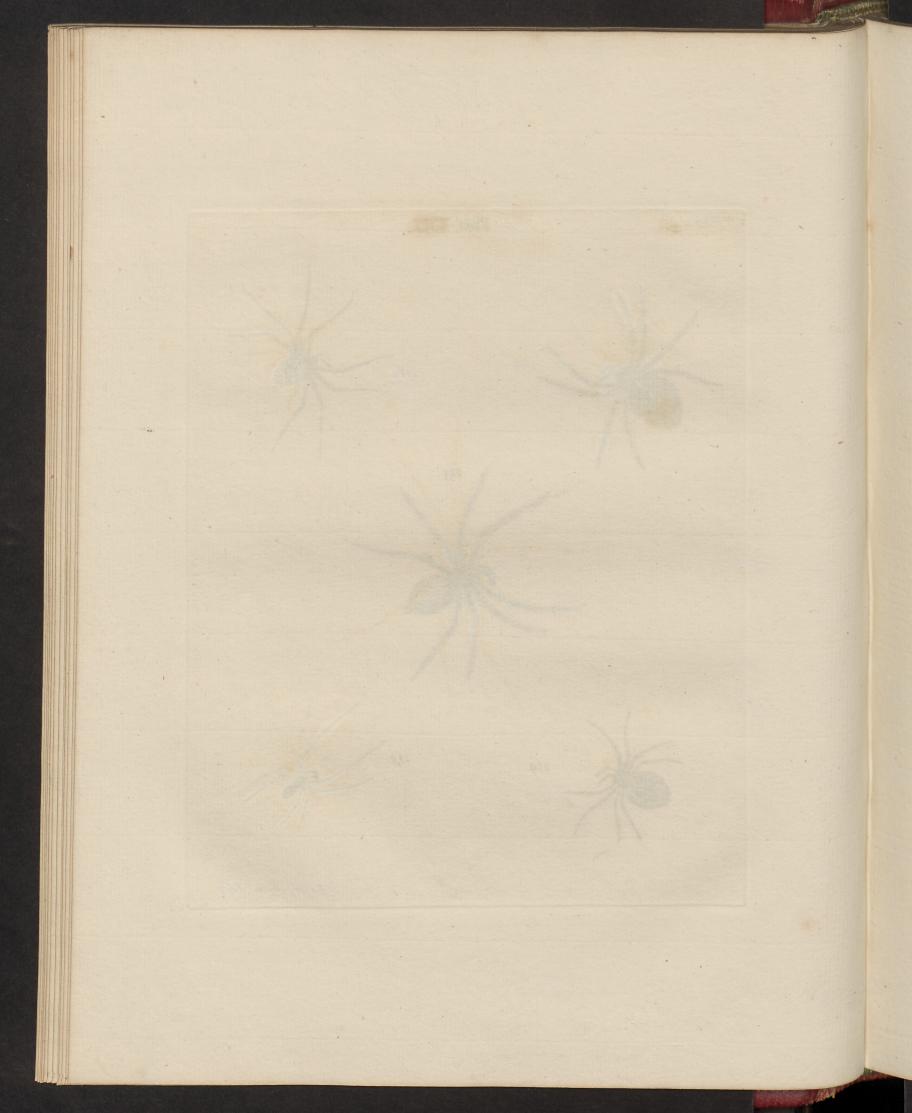


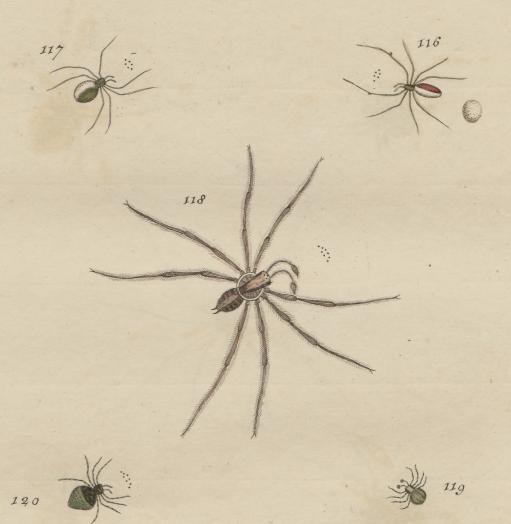


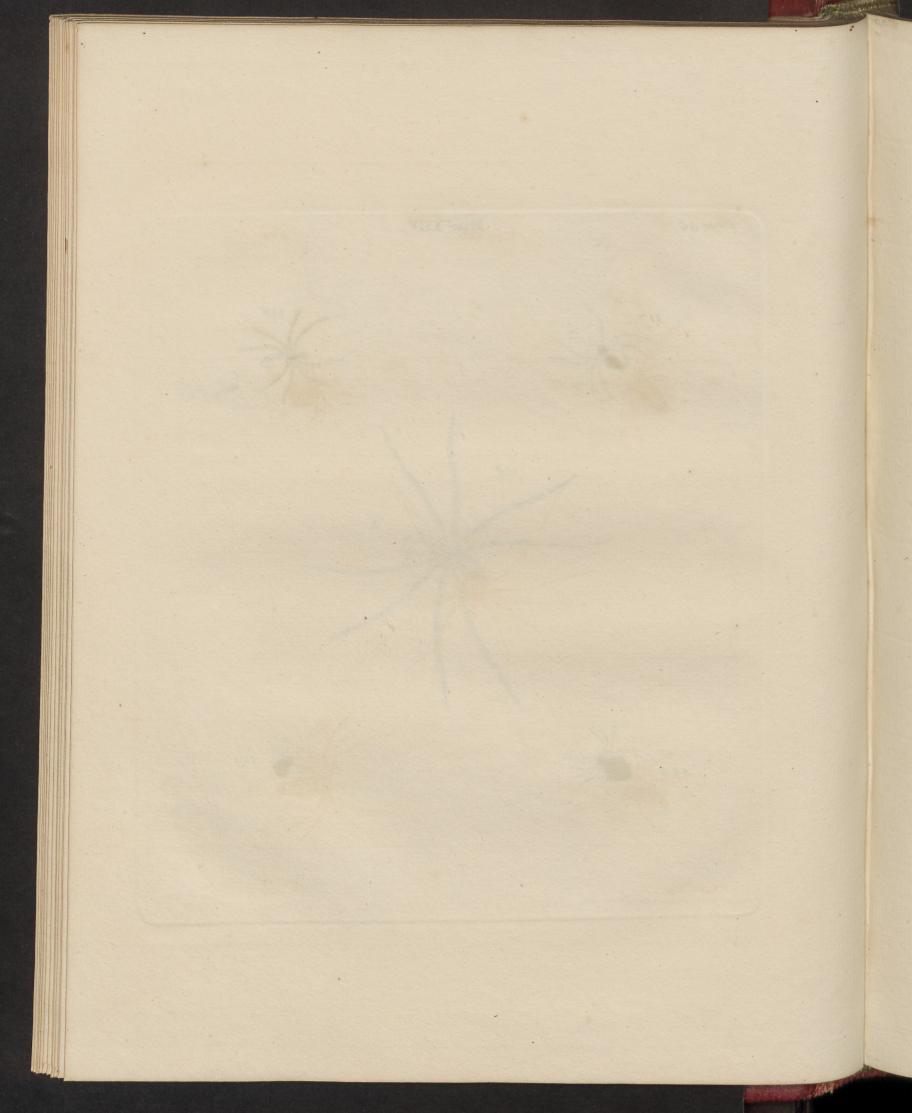




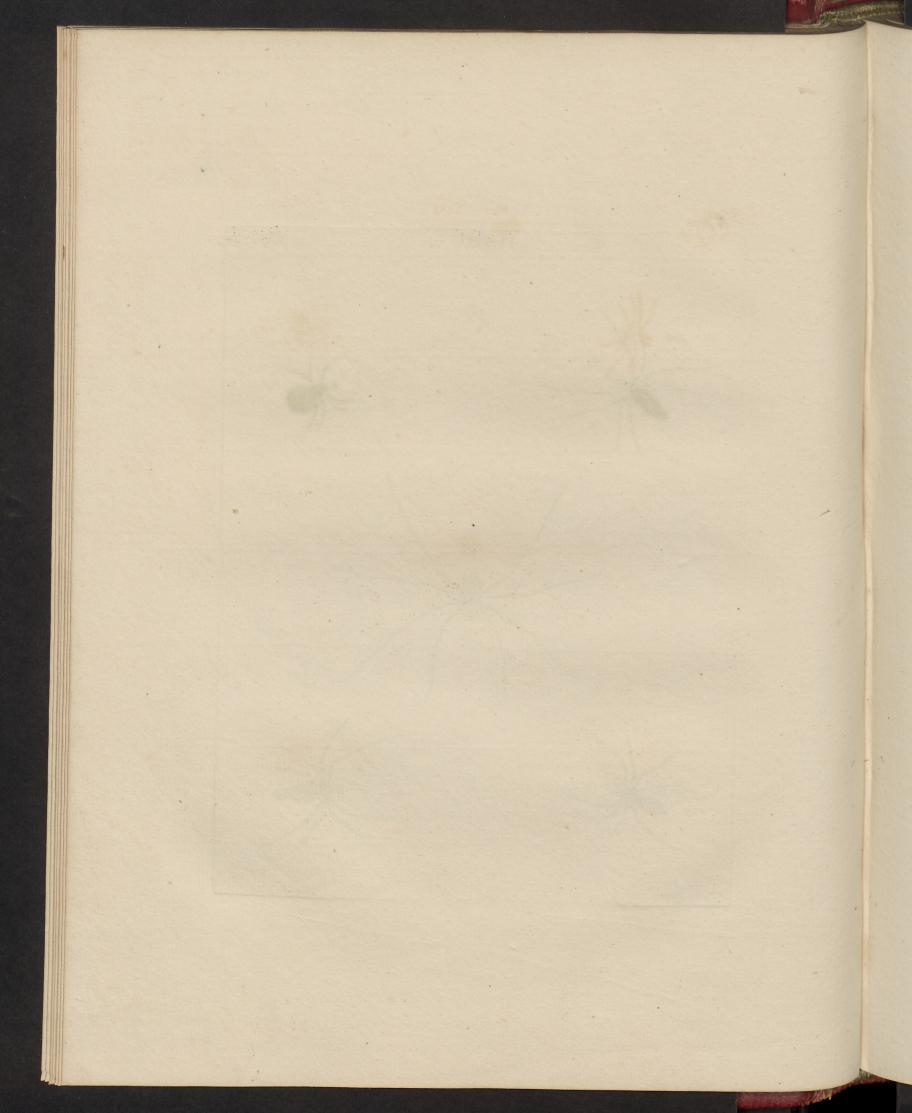
I. Carnvitham Sculp.





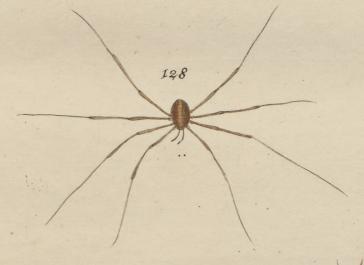








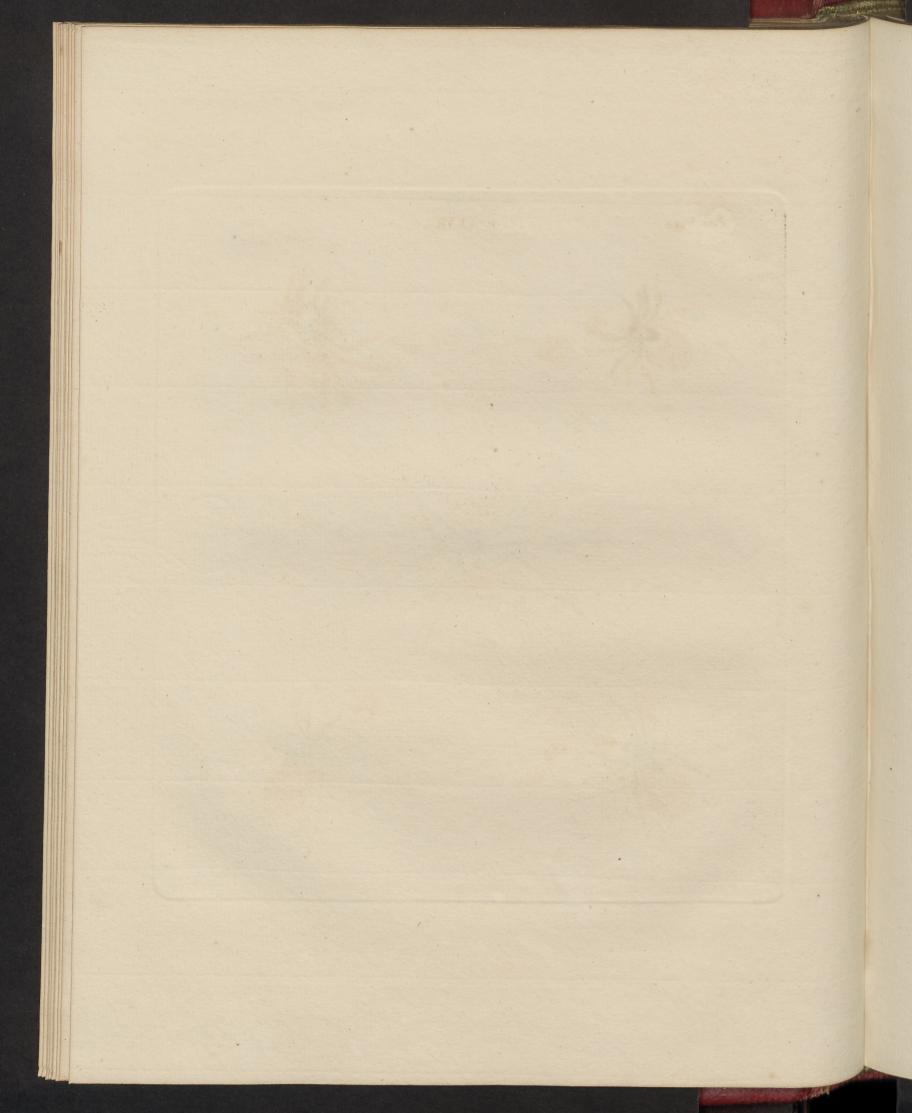


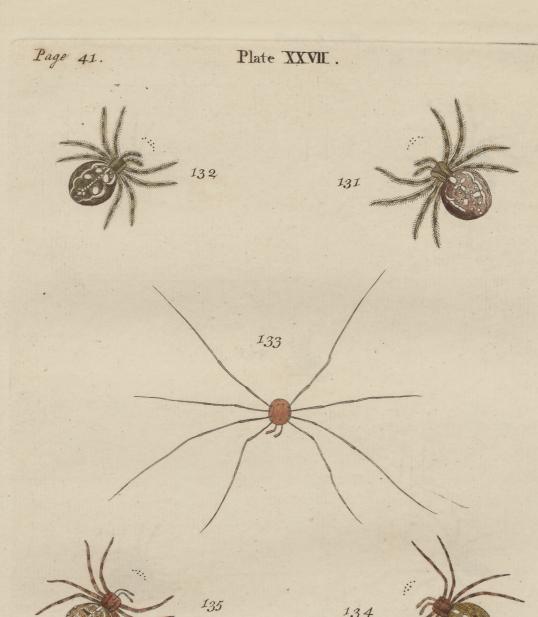


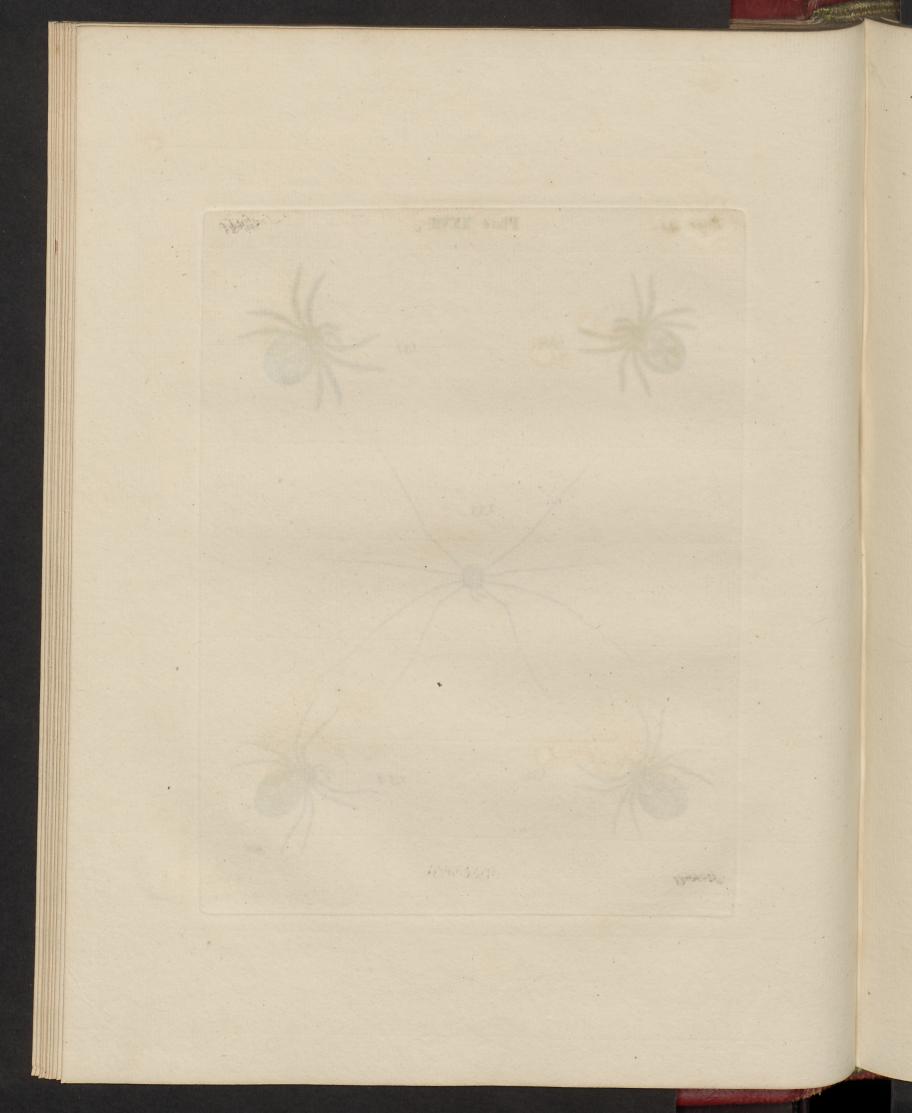




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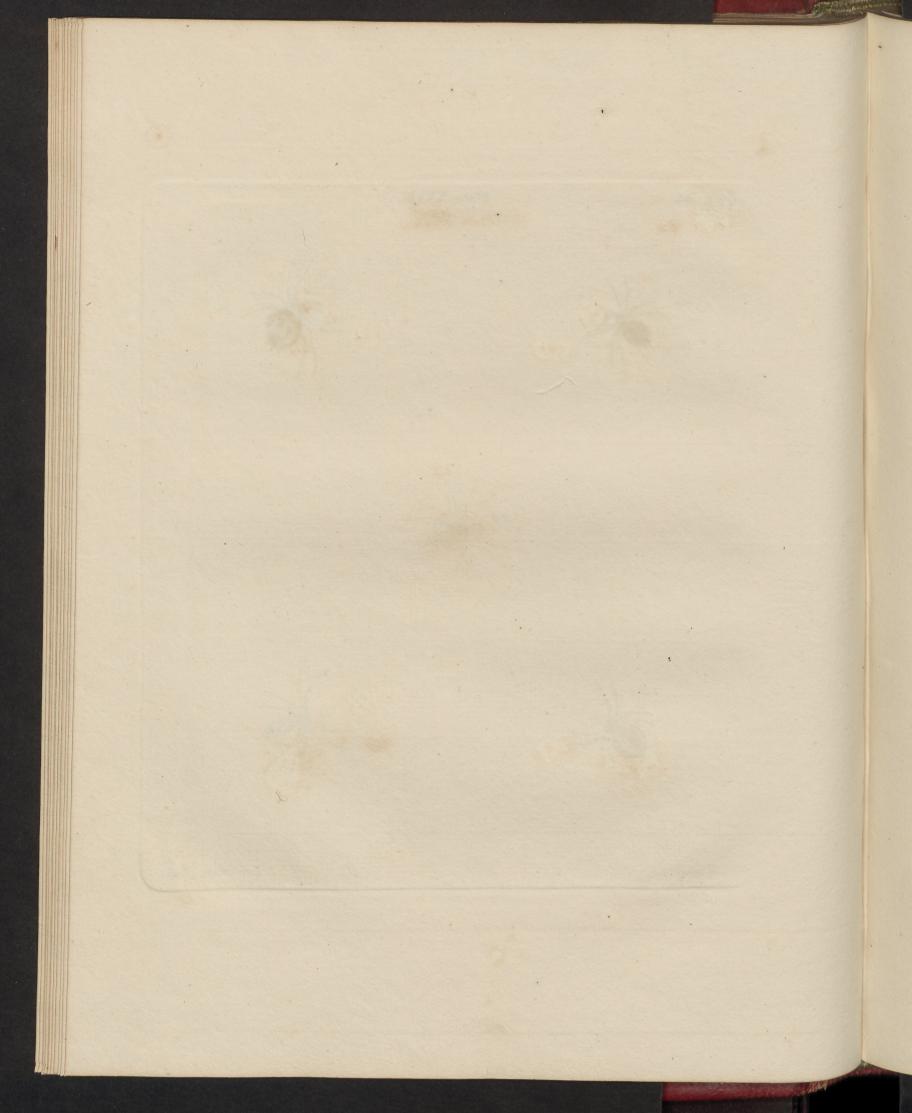


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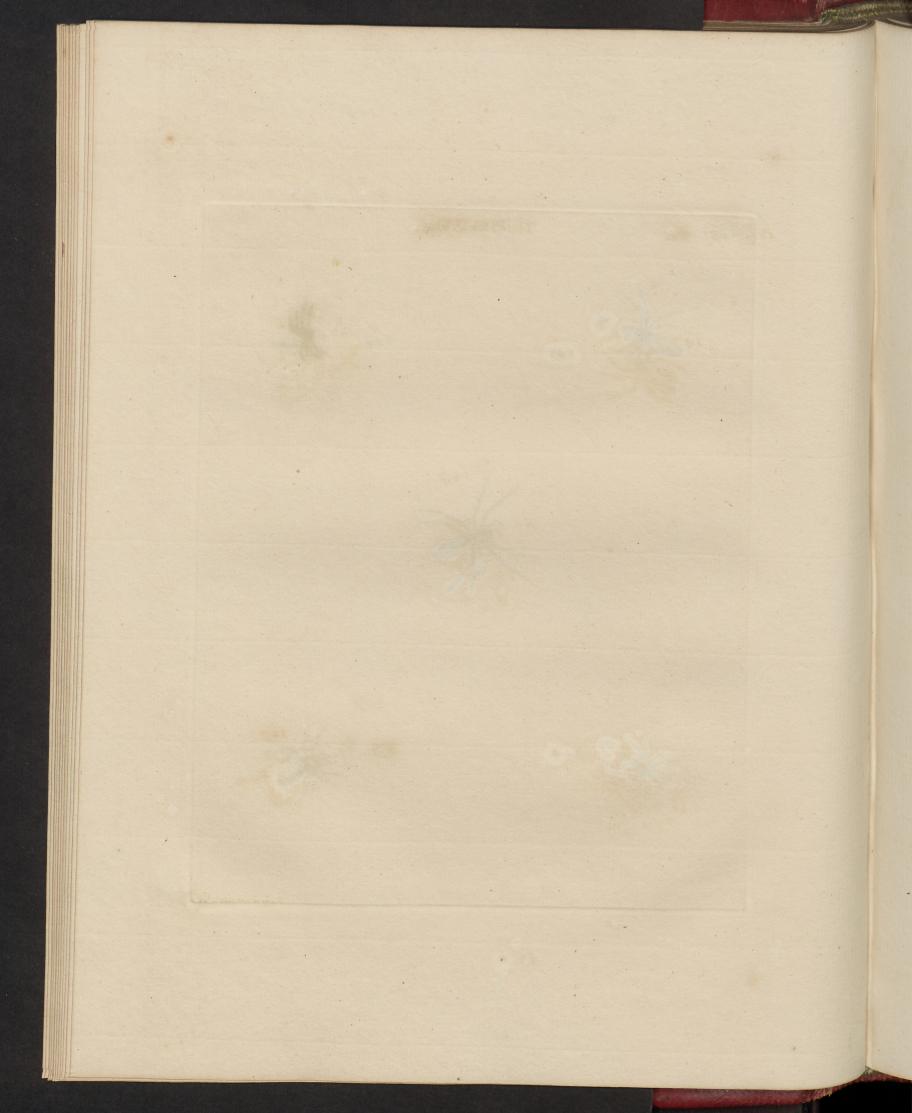












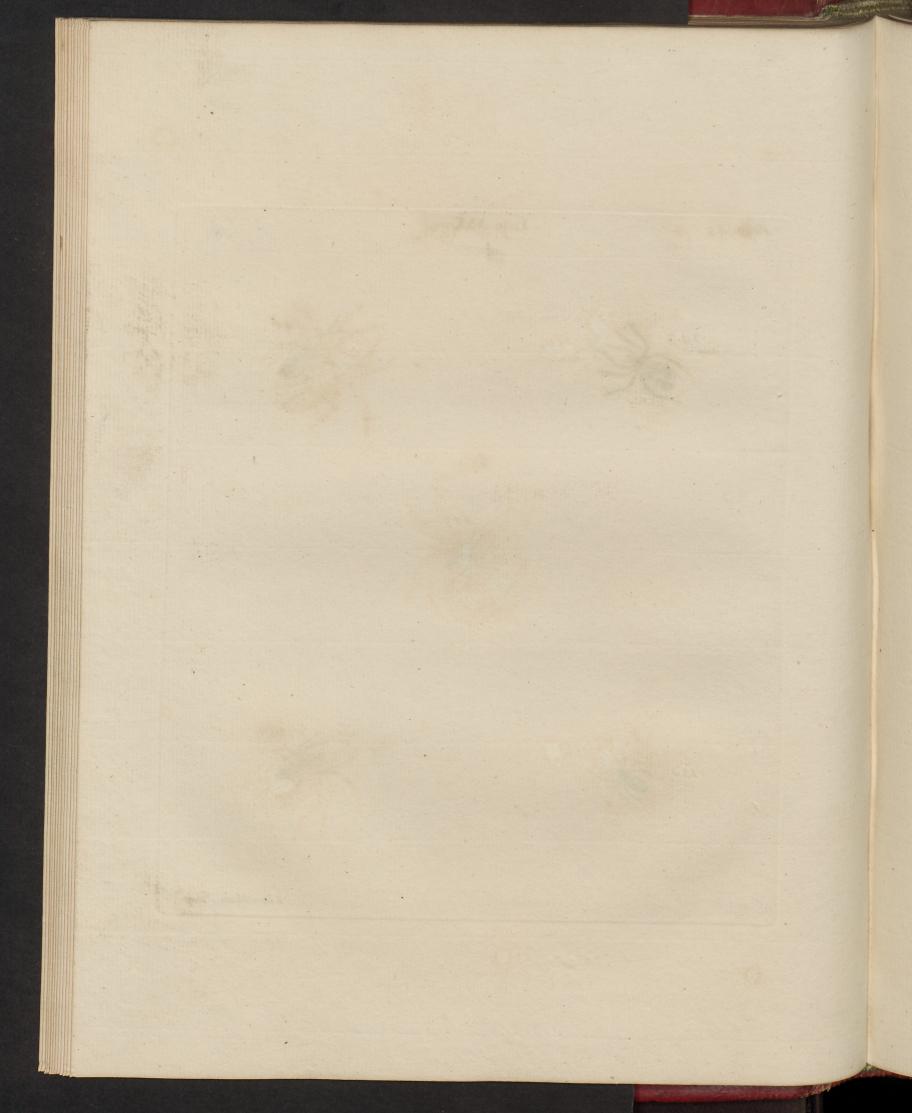






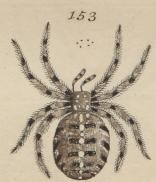






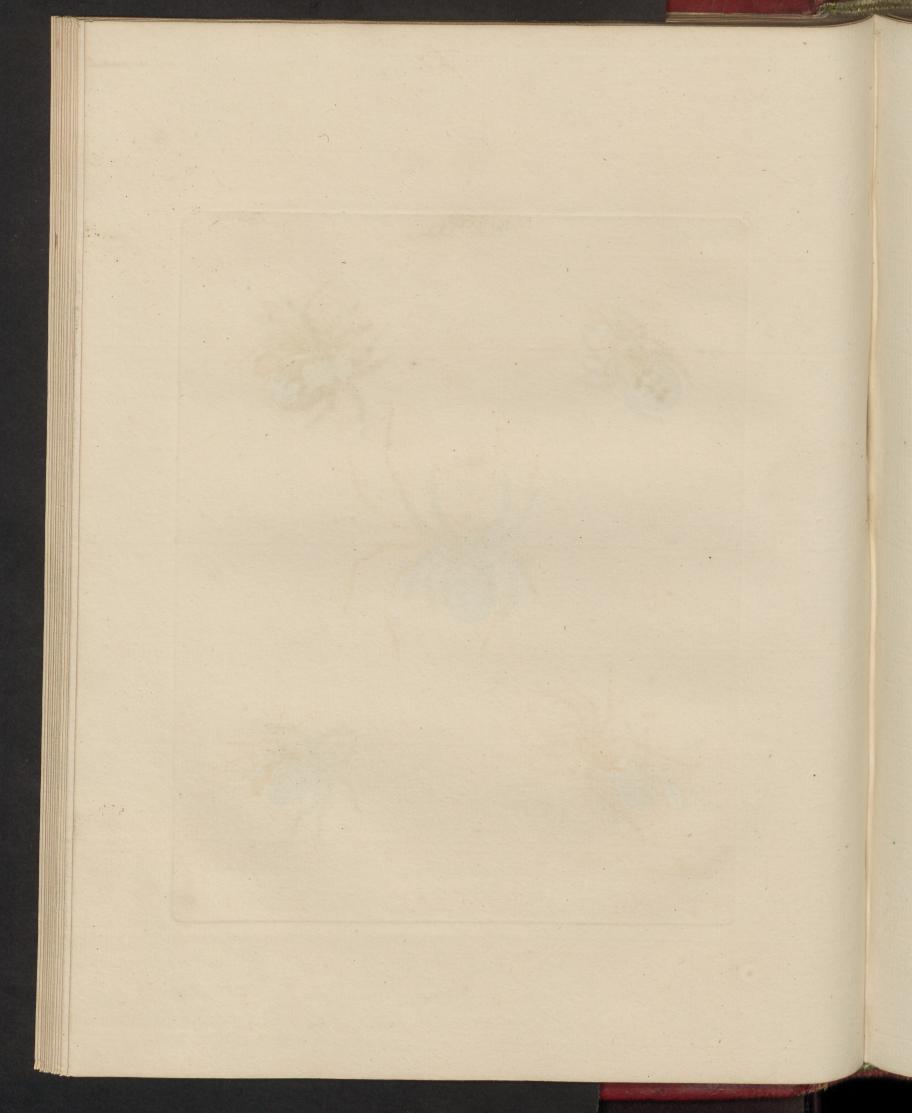






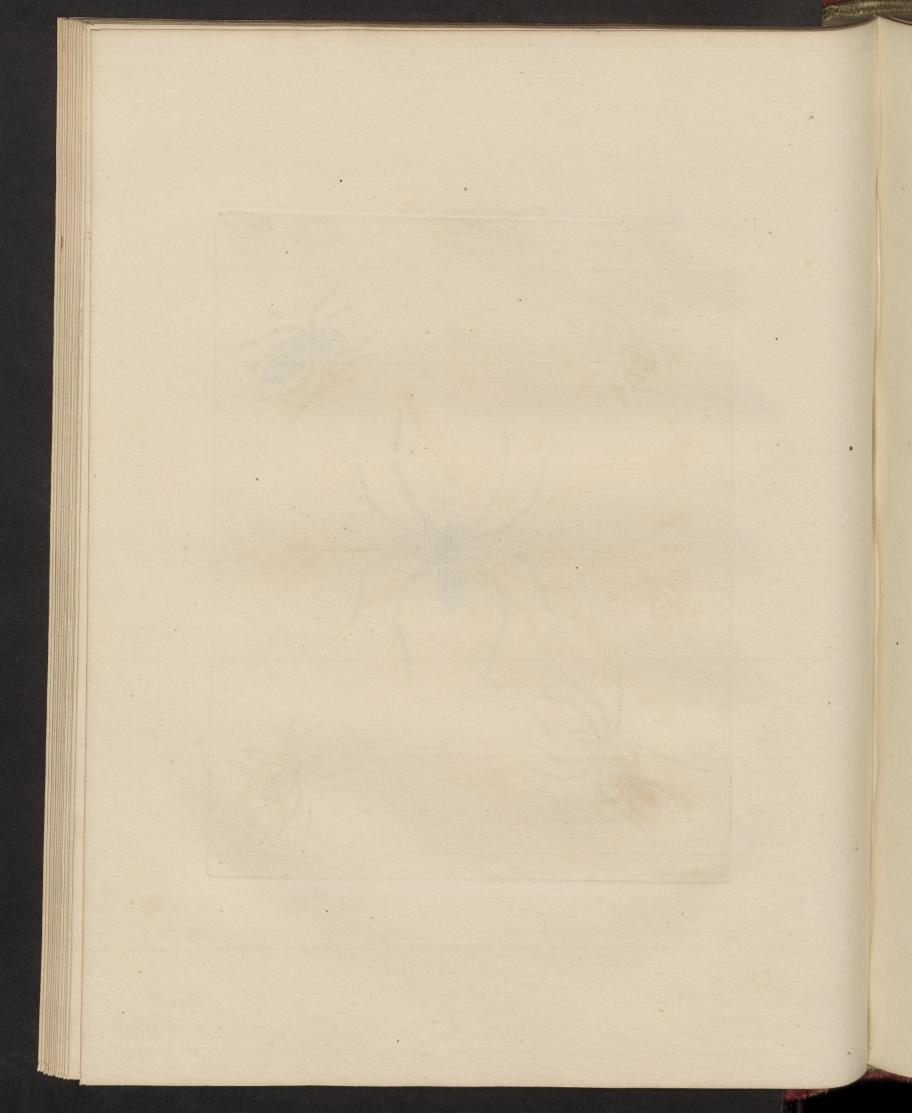










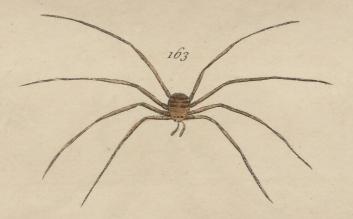


· Plate XXXIII

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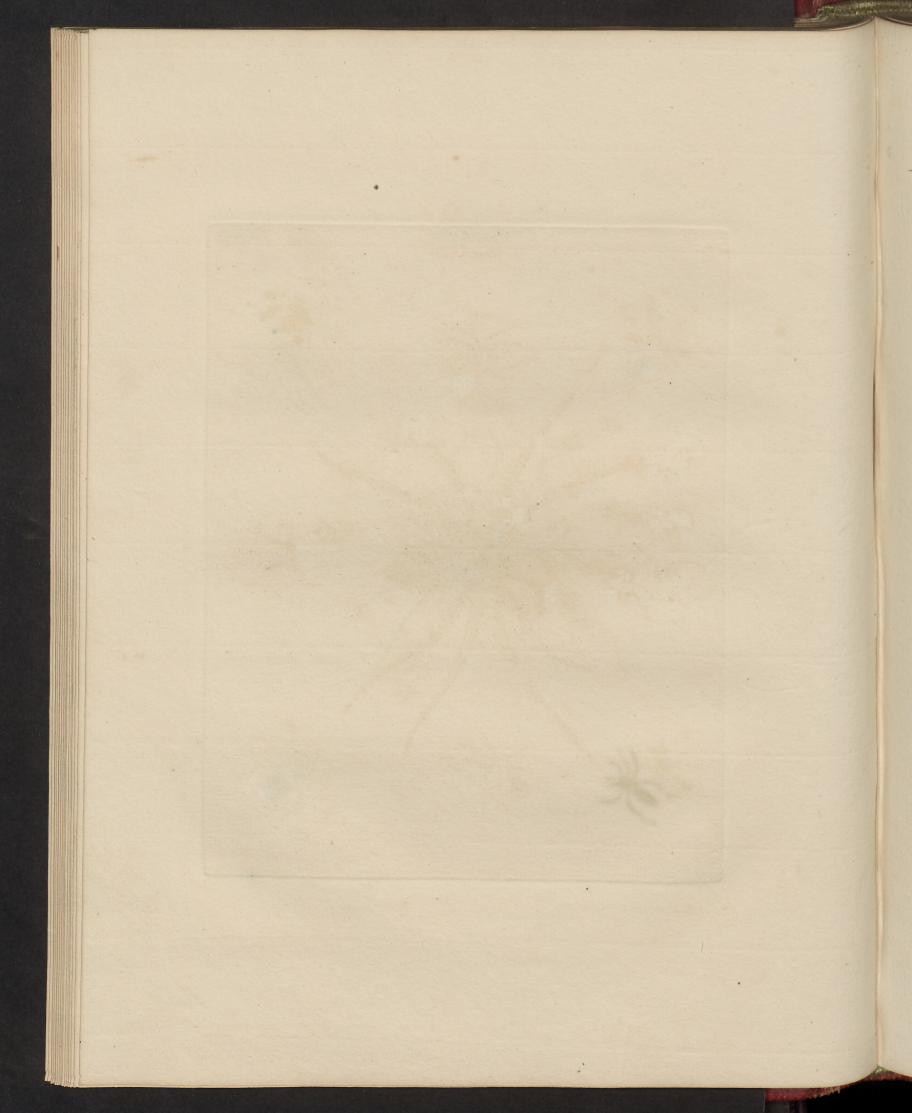








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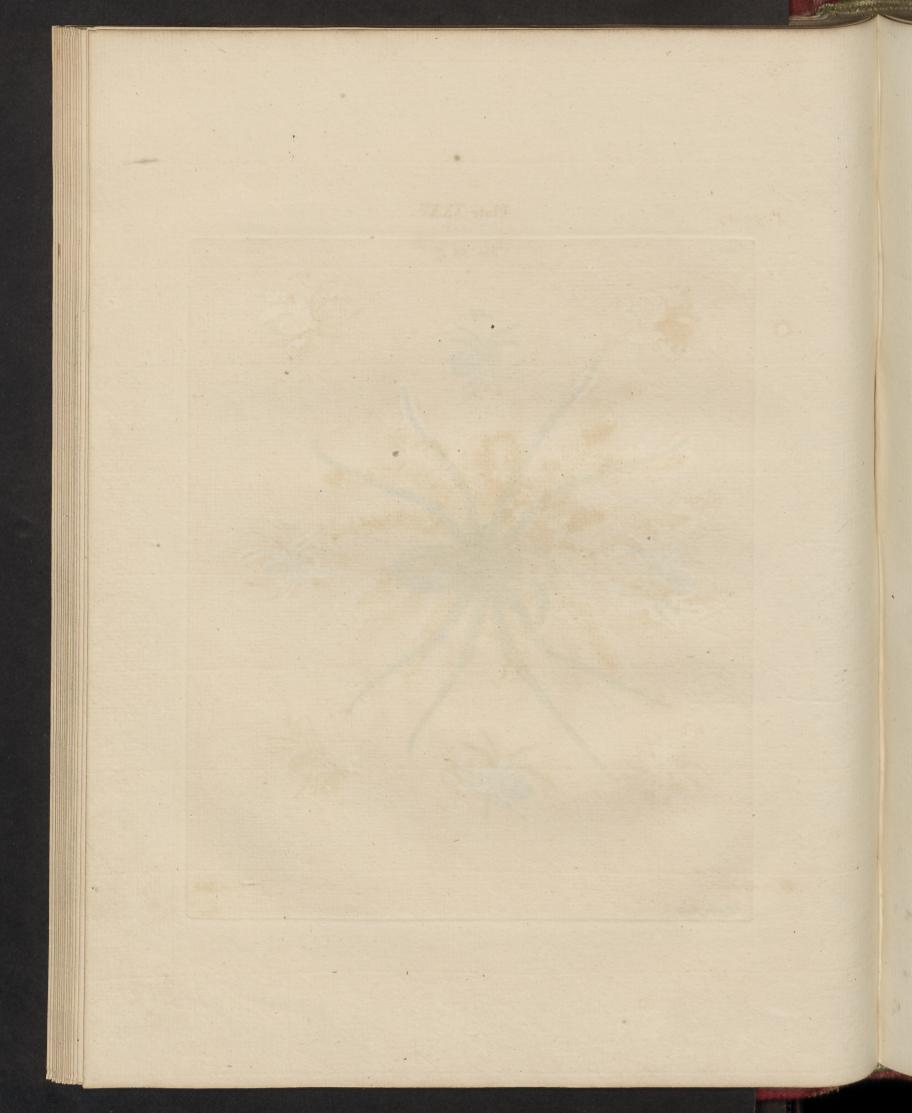


Plate XXXV.









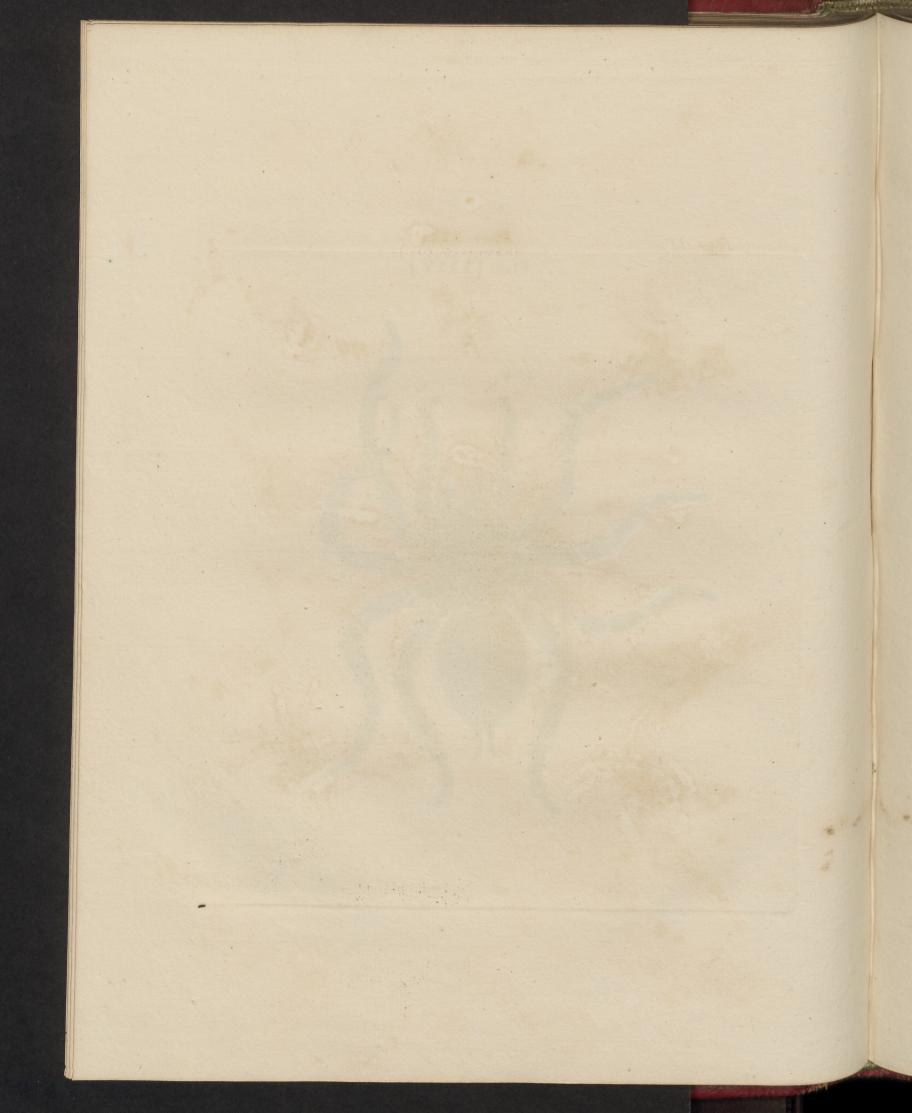


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Ja! Smith Soulp.

Plate (XXXV.)



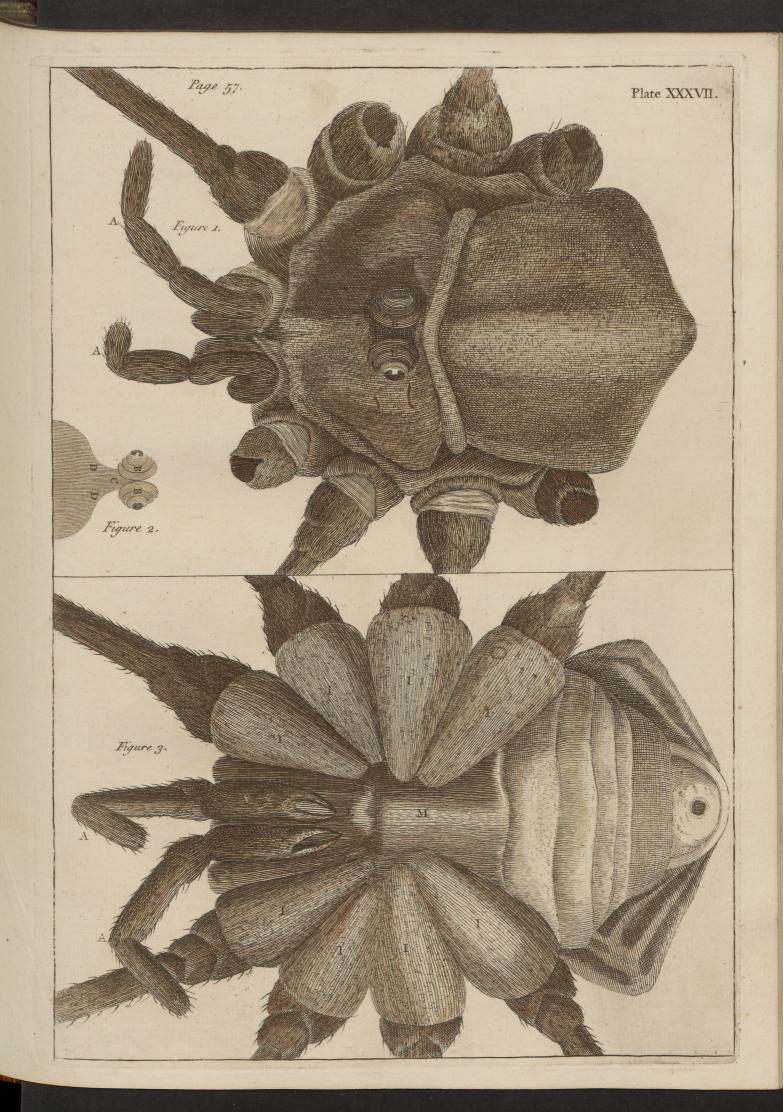


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Plate XXXVI.







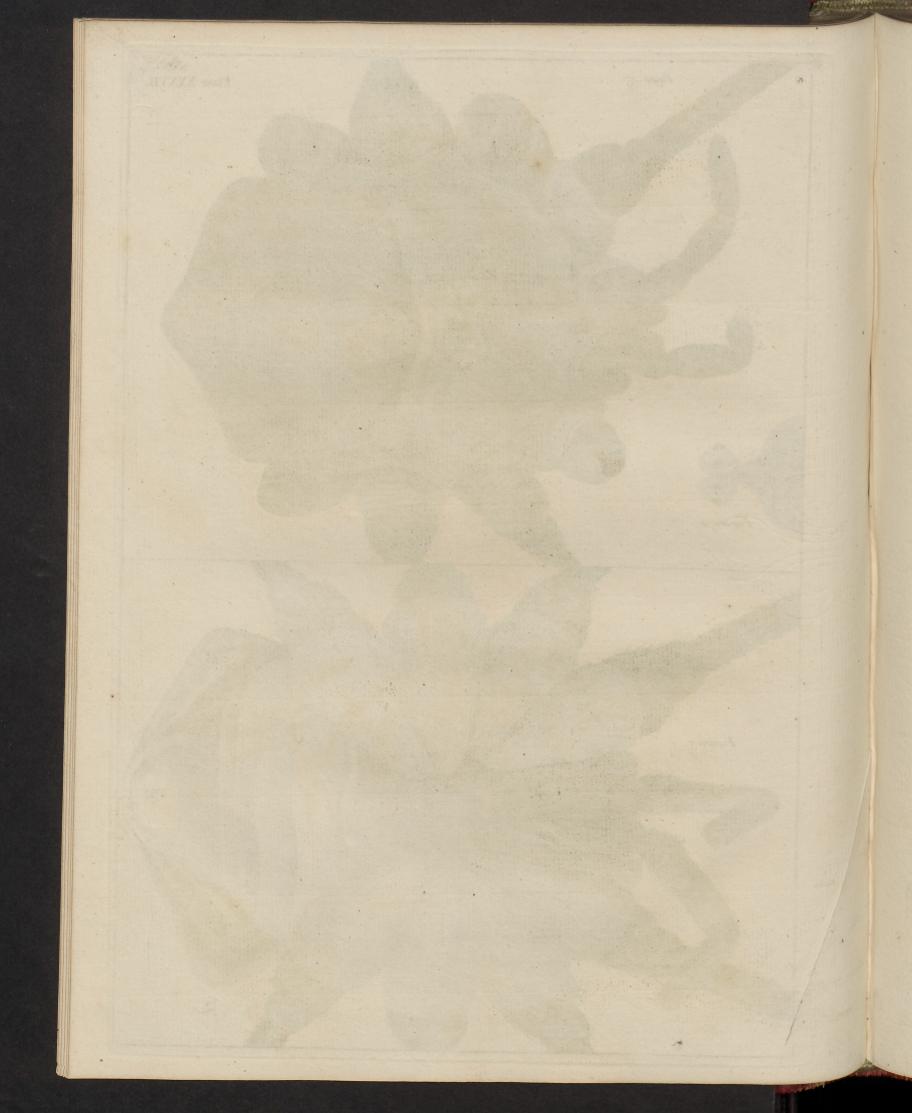


Plate XXXVIII.

The Tarantula from Baglivi





The Tarantula from the natural Spider in S. Hans Sloane's, Collection

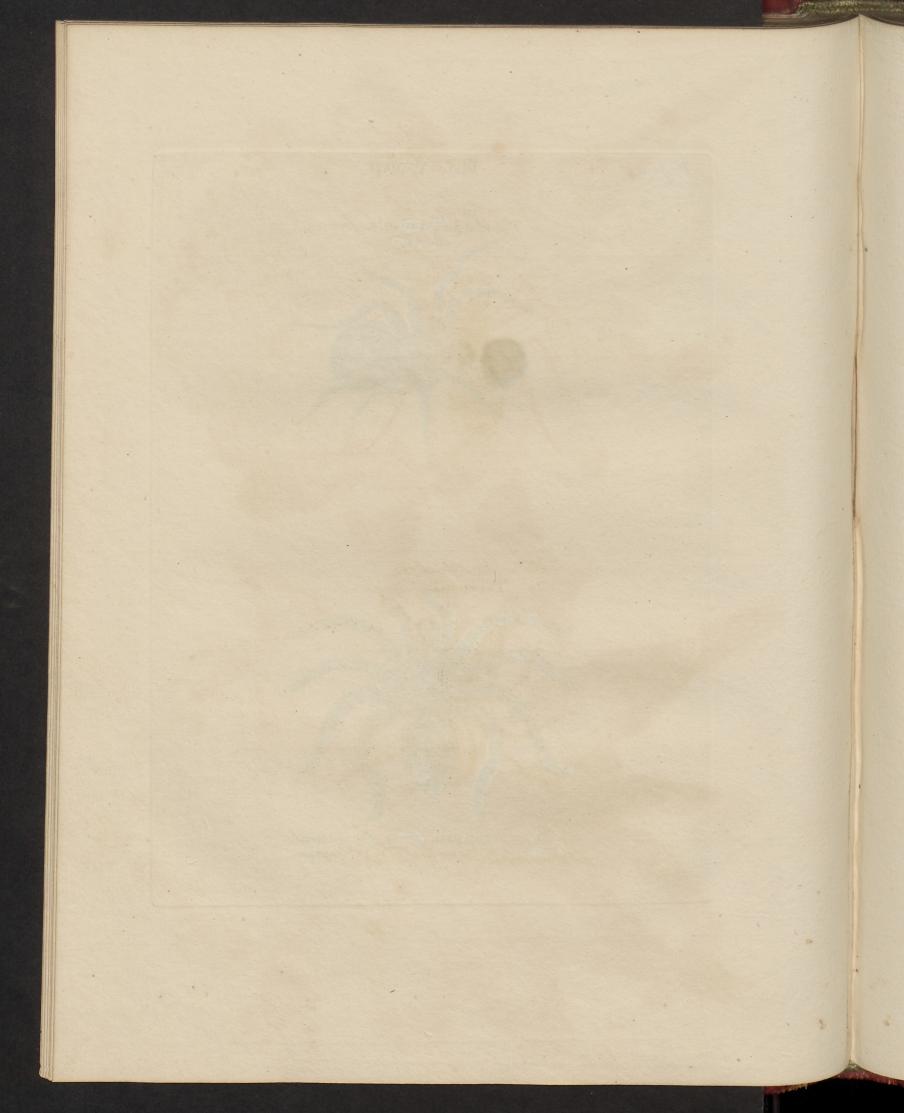


Plate XXXIX.

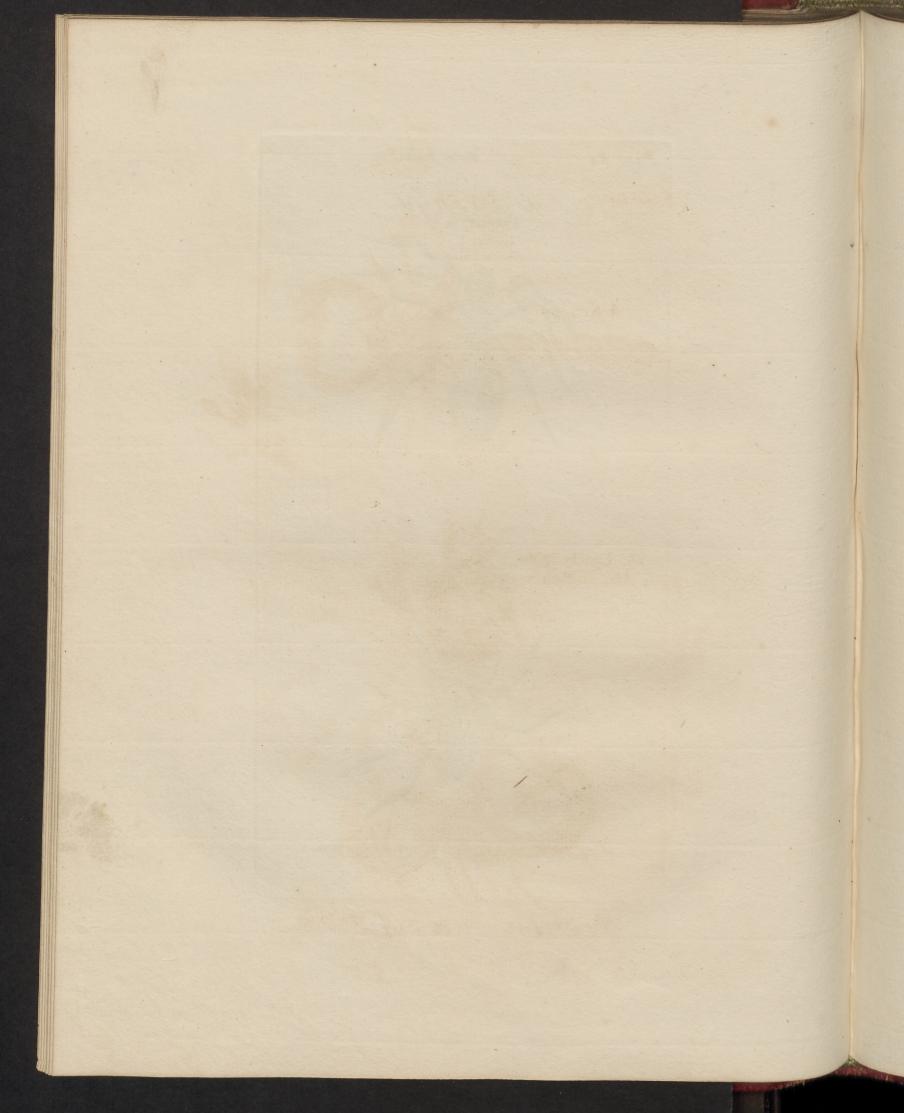
the upper Side of the Tarantula



the under Side of the Tarantula

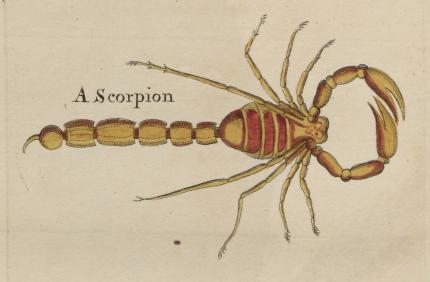


from Samuel Hafenreffer M.D: et P.P.



Page 67.

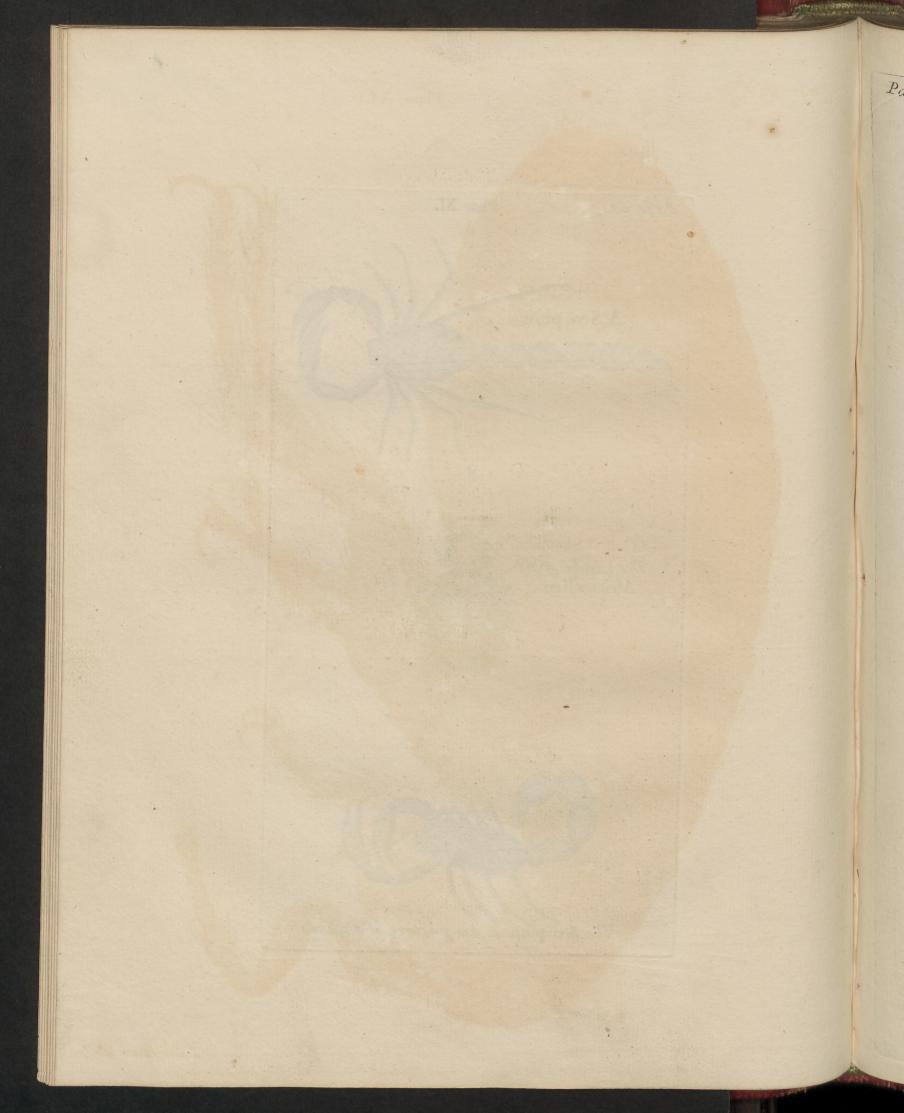
Plate XL.



The Loufe of the African Hen



The Scorpion in his posture of striking.

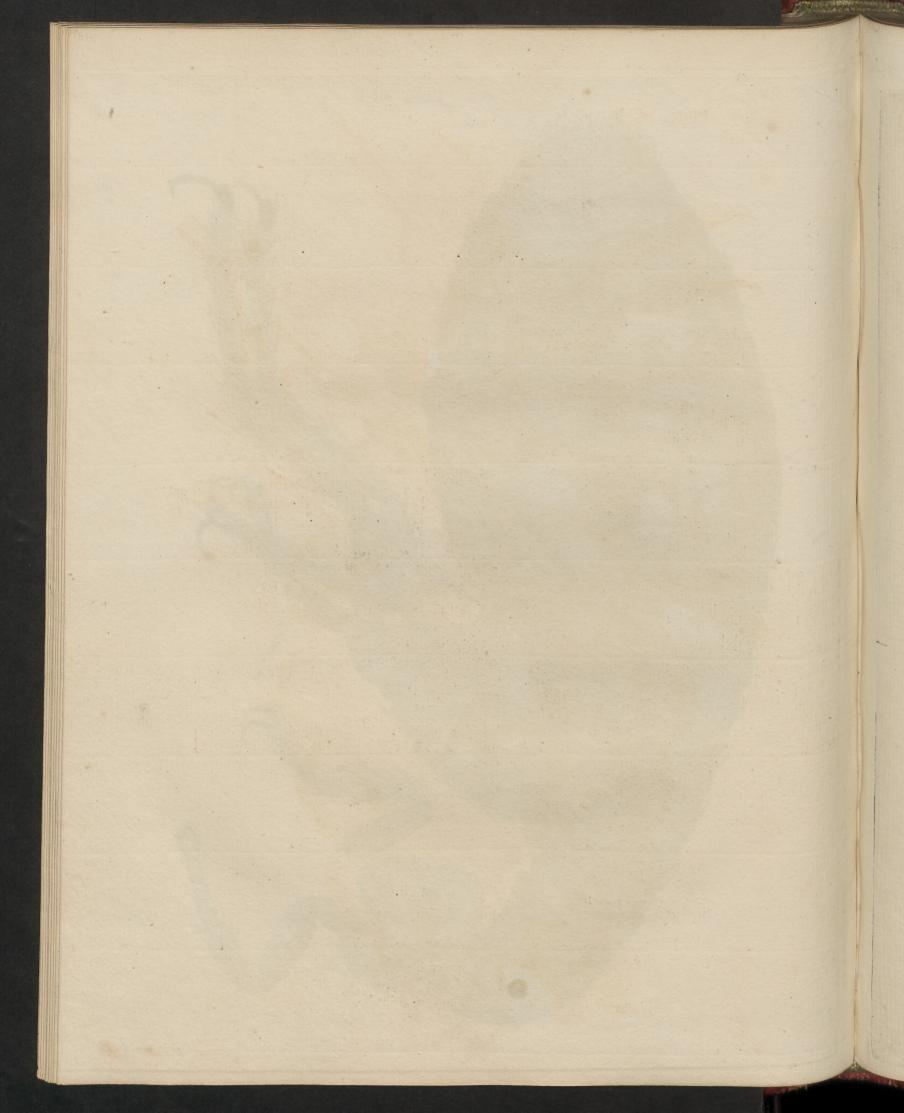


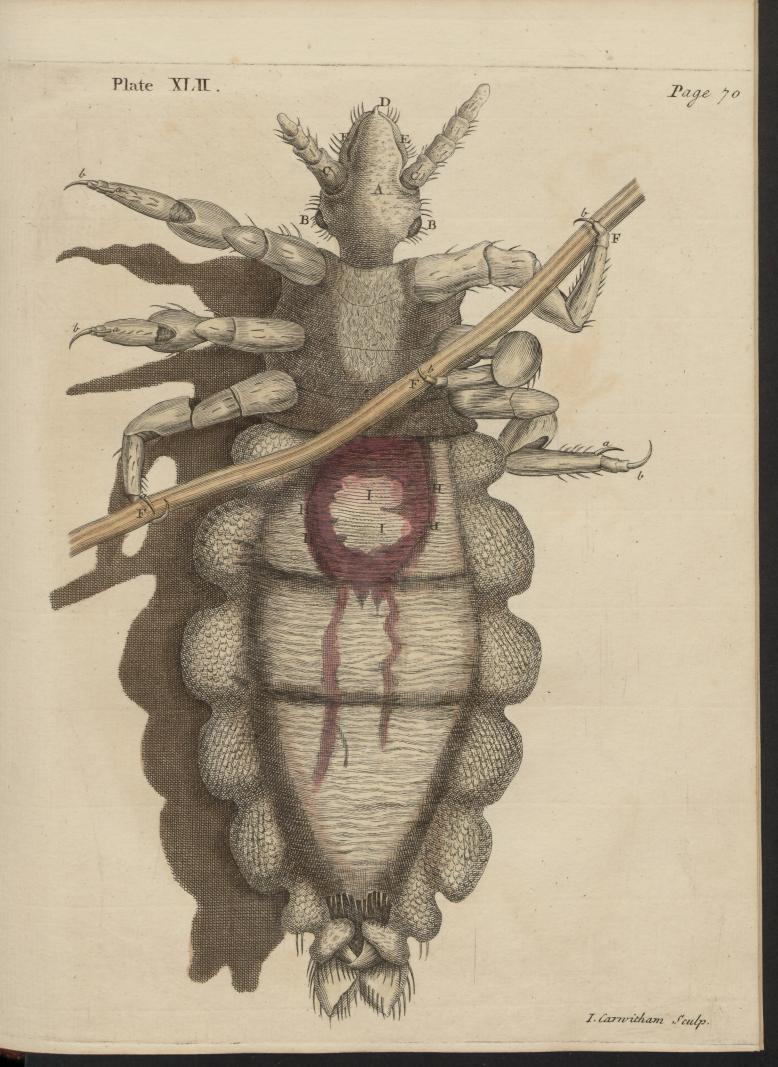
Page 69.

Plate XL1.



I. Carwitham Sculp.





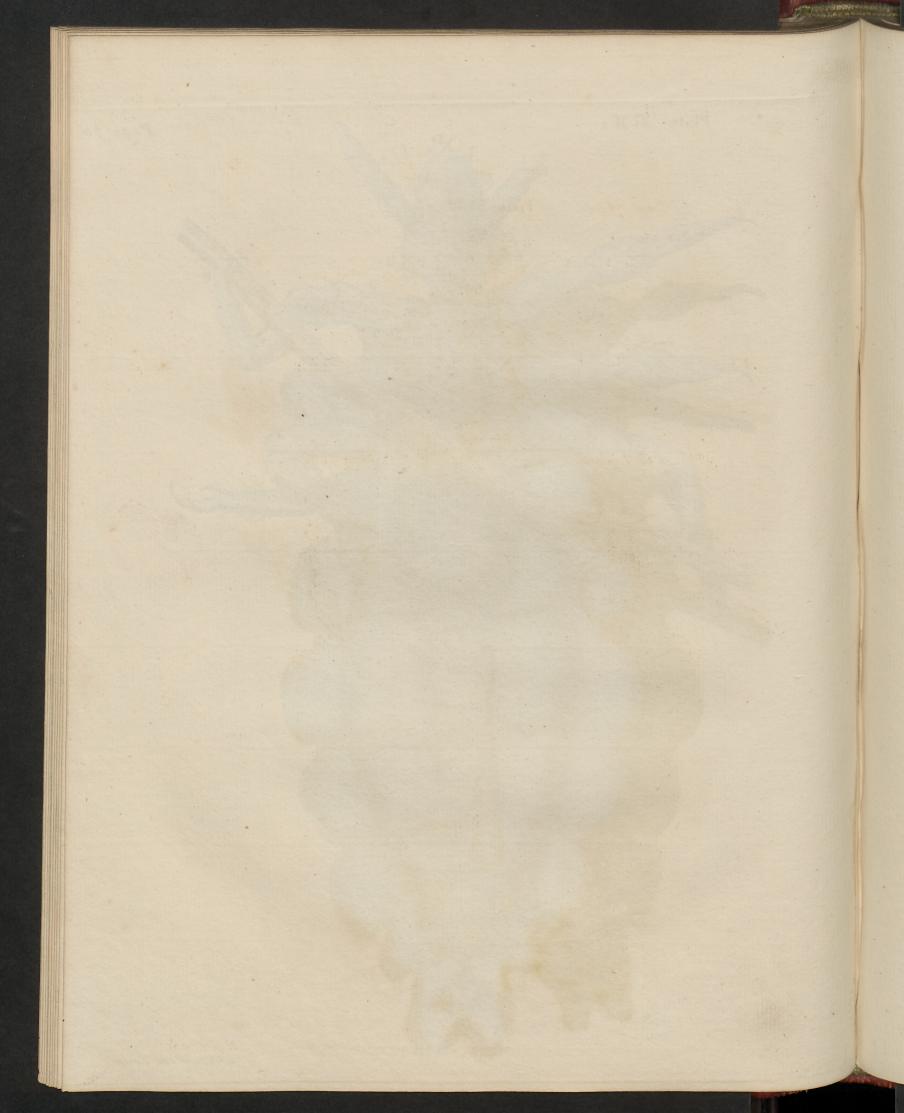
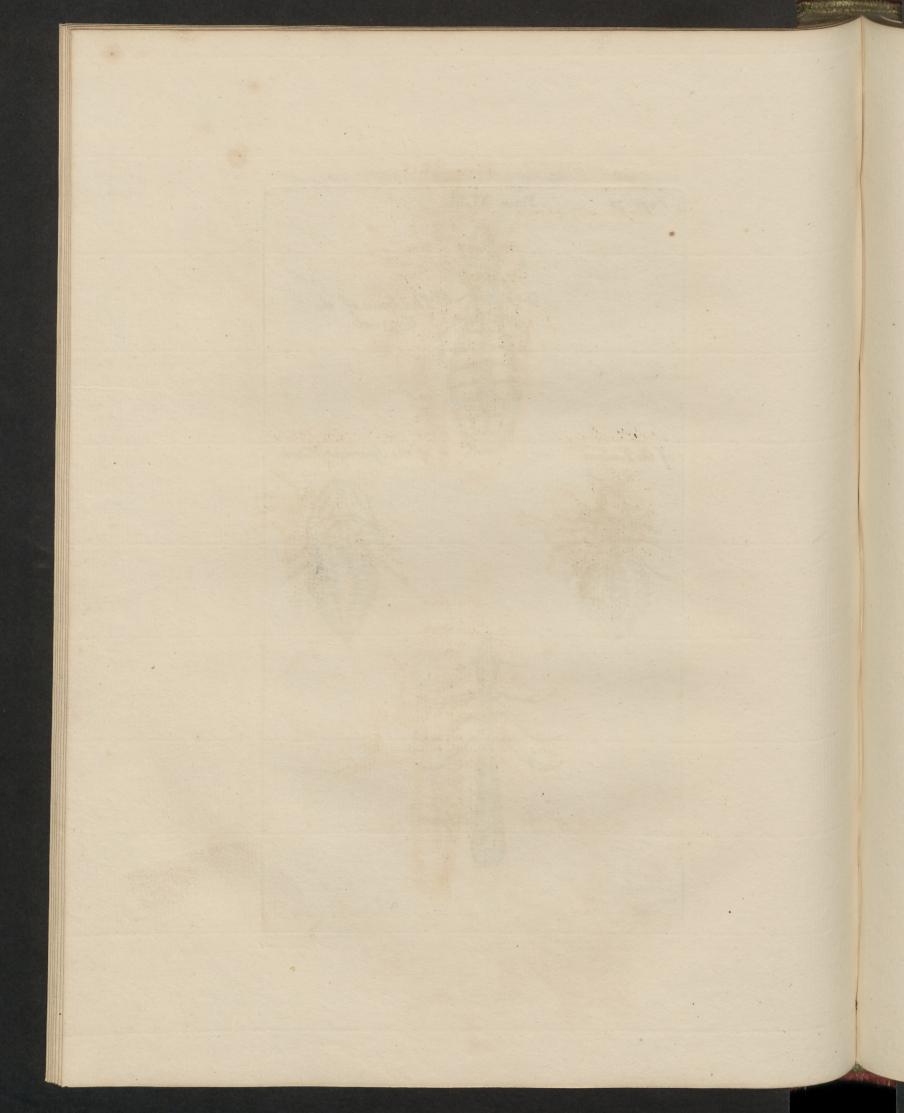
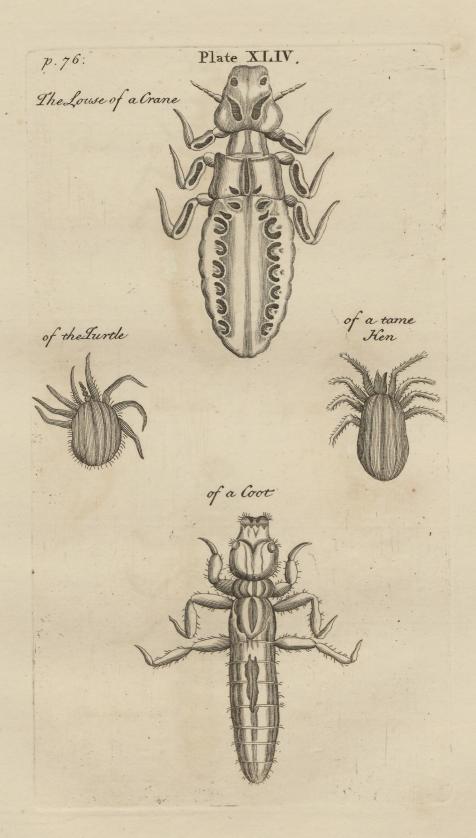
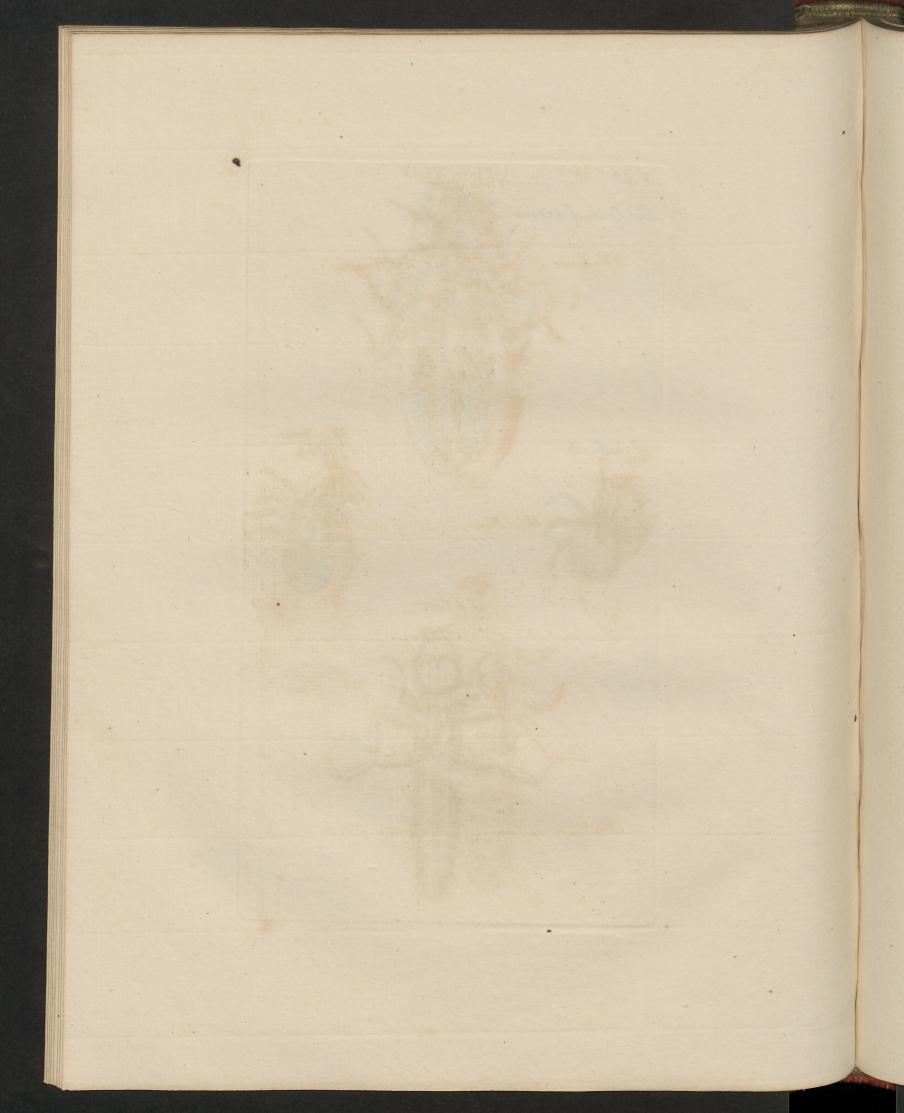
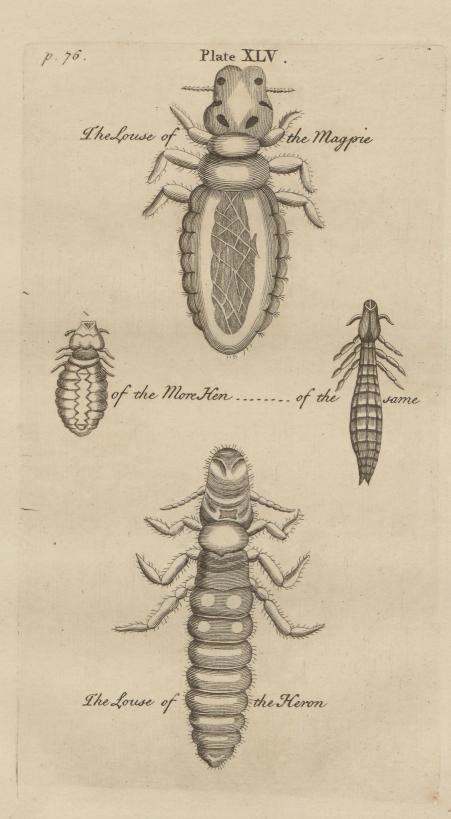


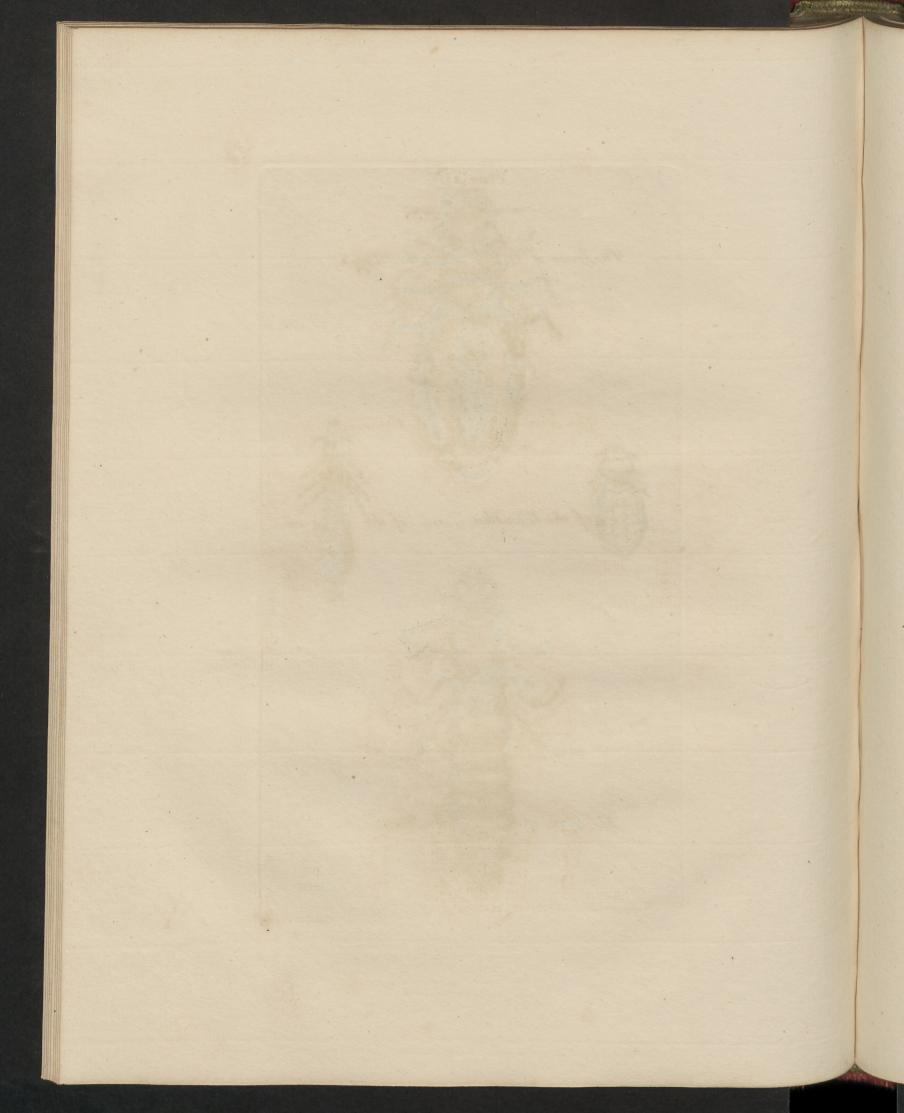
Plate XLM. Page 76 The Lowe of the Buzzard of the Faulcon of the Sparron Hank









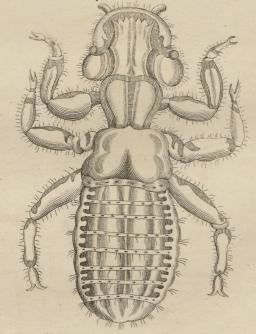


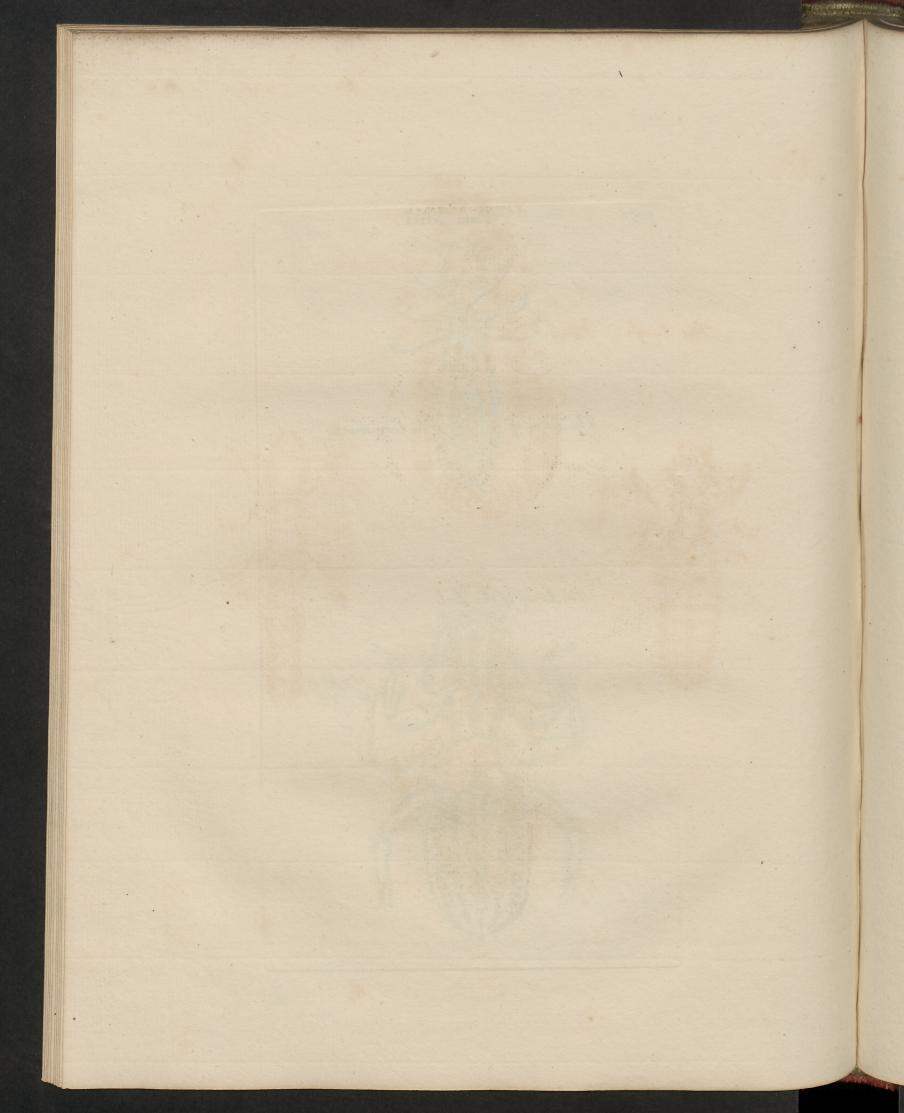
p.76.

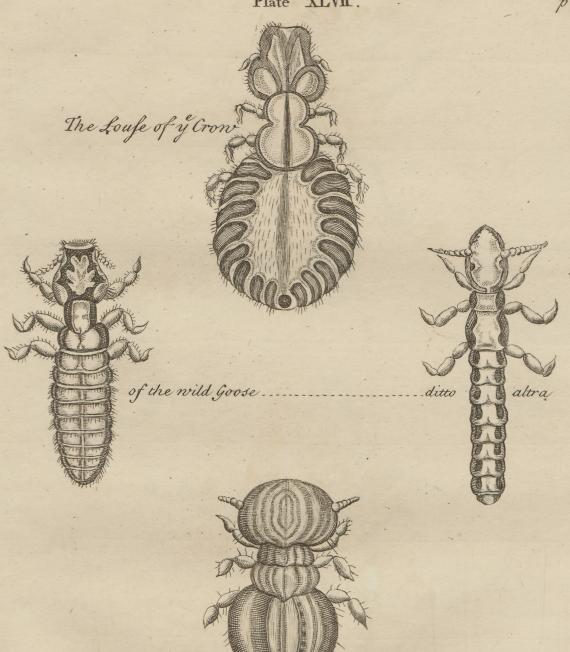
Plate XLVI.



The Louse of the Teal

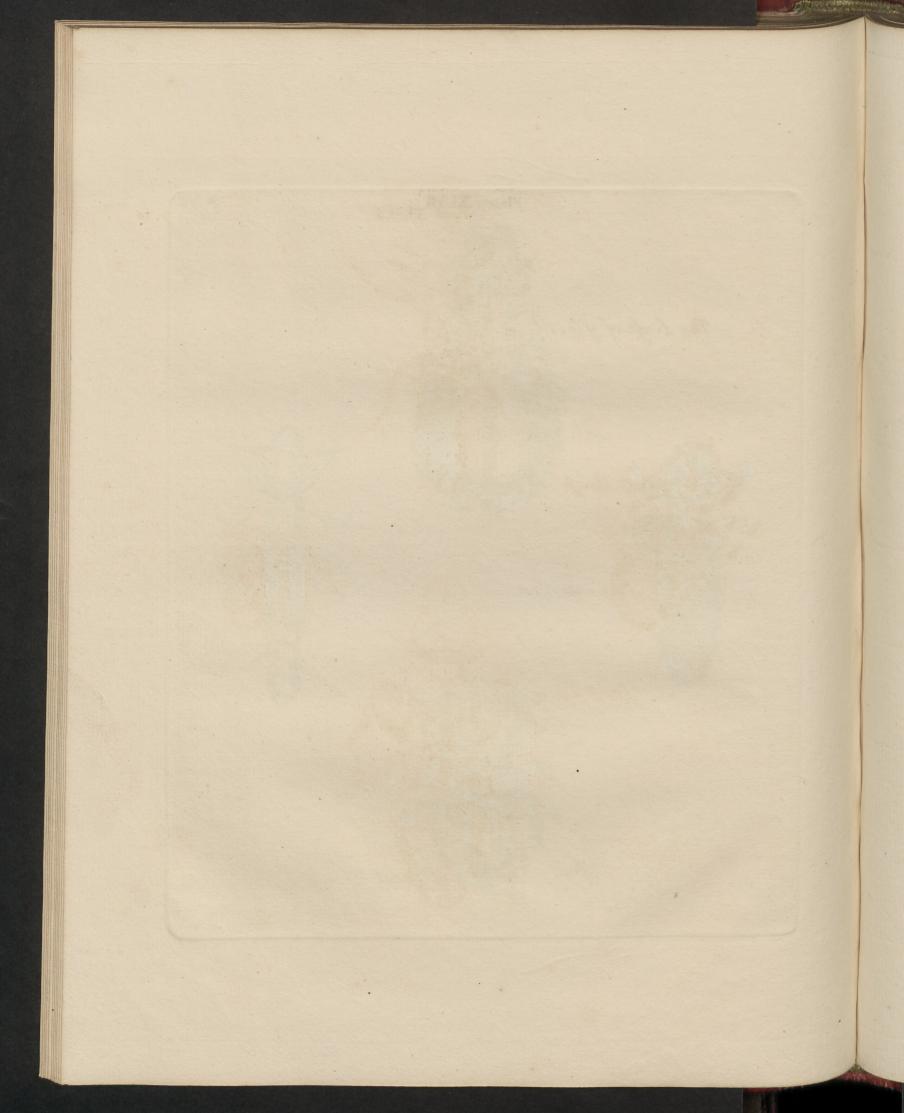


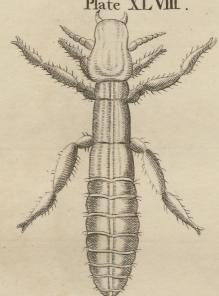




Peacok

of the





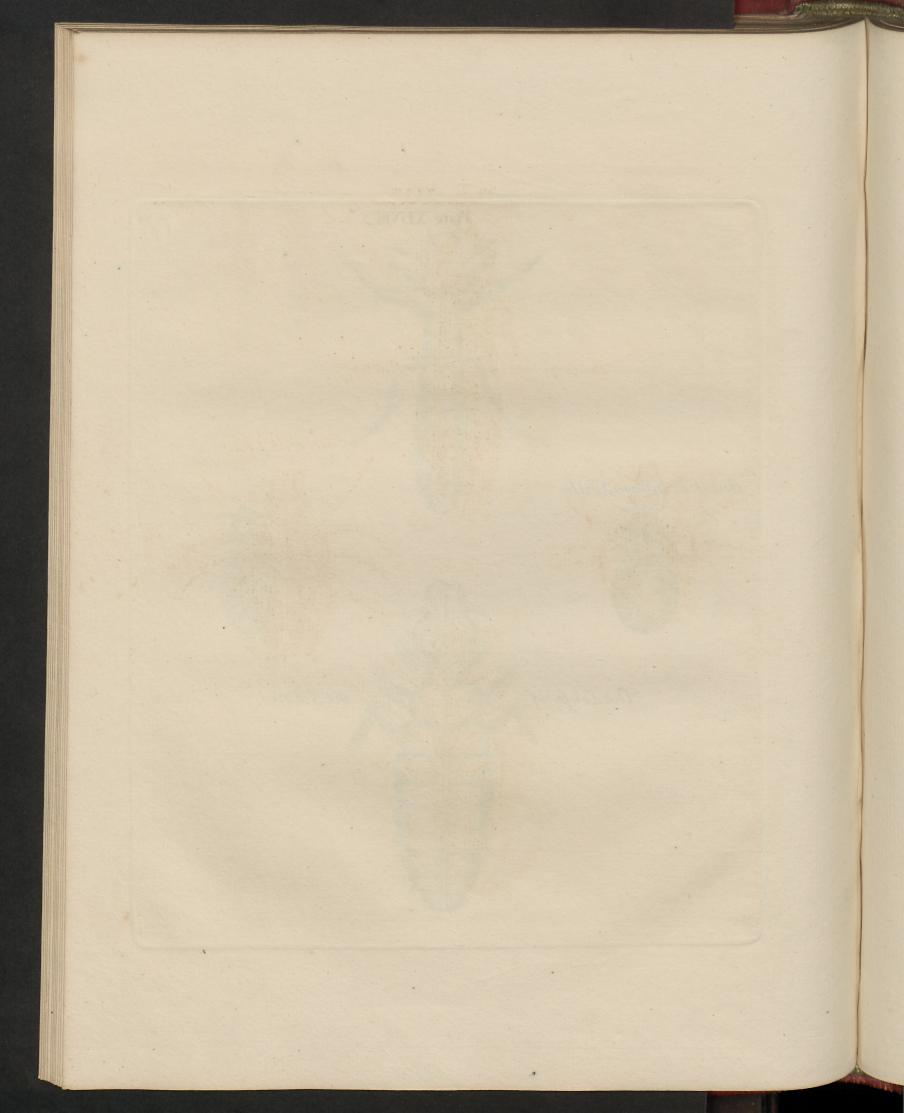
Another Swan Loufe

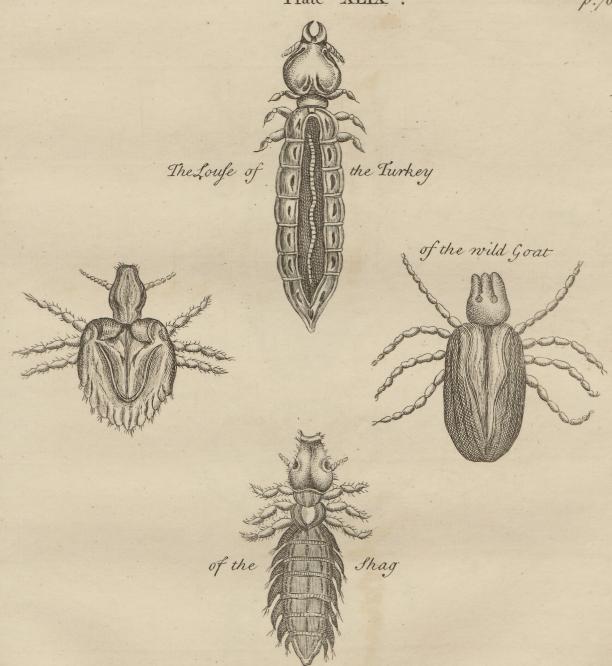


The Loufe of



the Iwan





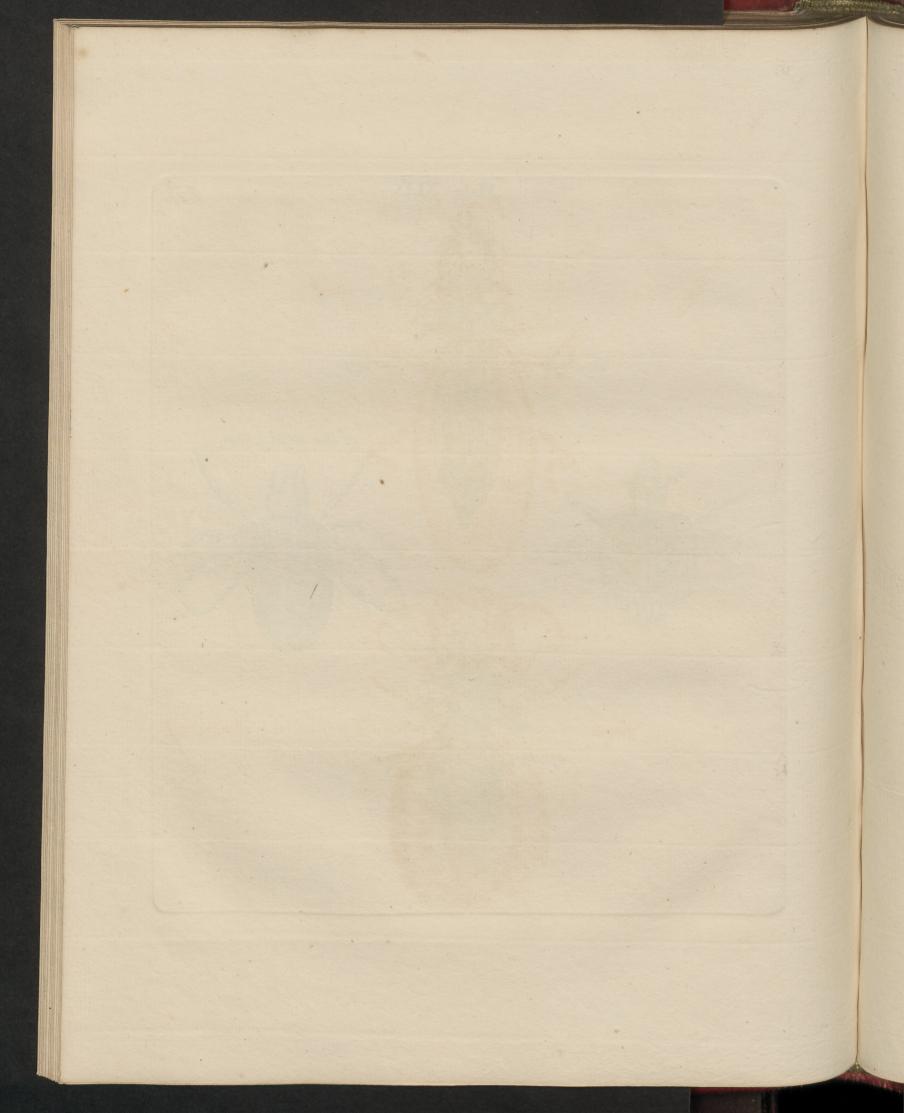
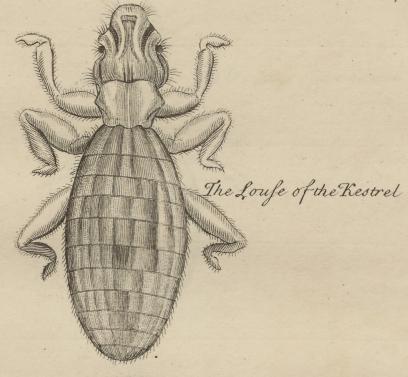
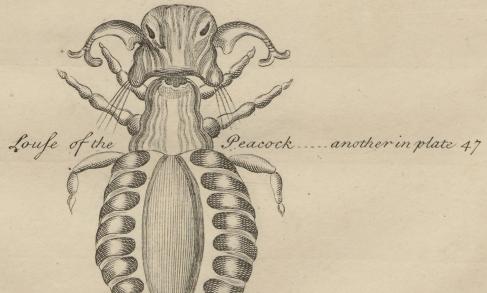
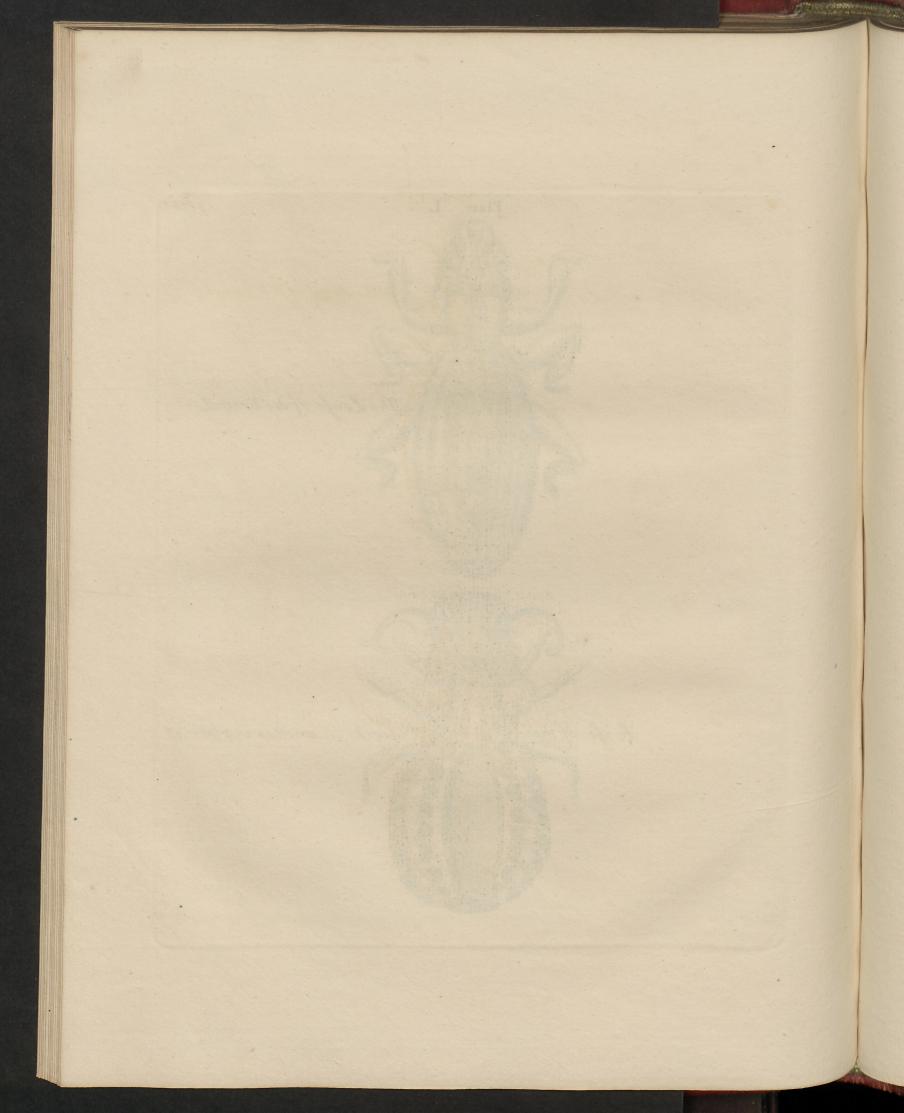


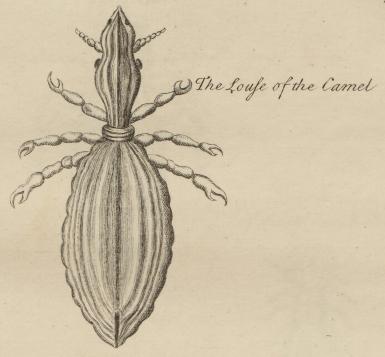
Plate L .

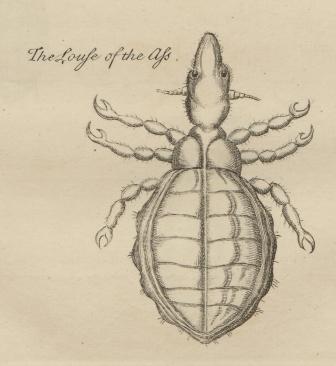
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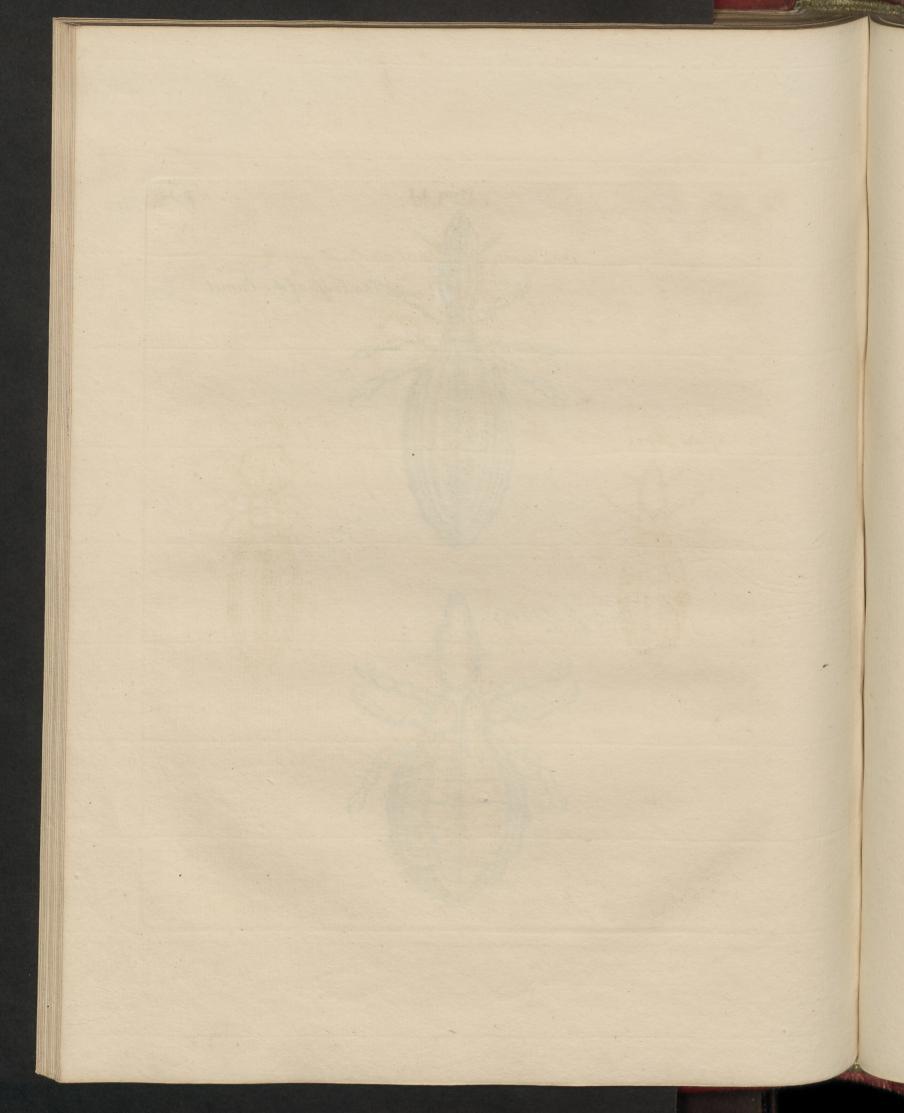












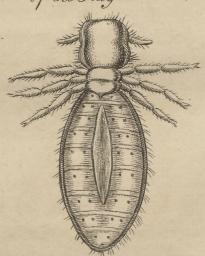


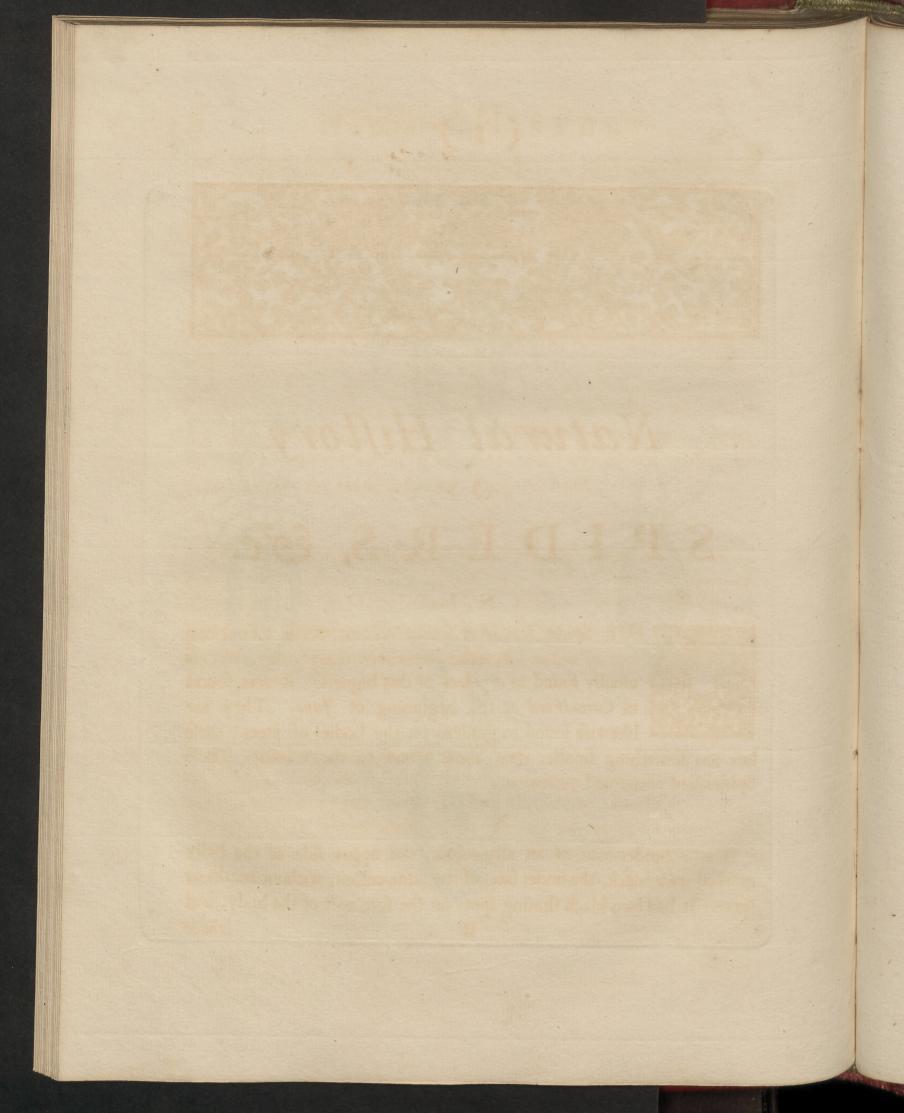


of the African Ram



of the Stag







#### A

# Natural History

OF

# SPIDERS, &c.

#### Nº. I.



HIS Spider was of a scarlet colour, much resembling that of velvet; its seelers were something longer than is usually found in Spiders of this bigness. It was found in Cain-Wood at the beginning of June. They are likewise found in gardens on the bodies of trees: these

last are something smaller than those sound in the woods. These Spiders are accounted venomous.

#### N°. II.

THIS Spider was of an ash colour, the upper side of the belly marked with black, the under side, of the same colour, without marks or spots. It had two black shining spots on the fore part of the body, and

B

three

three on each side, two between the seelers, in these spots stand their eyes, in number eight, placed in a semicircular manner, the two uppermost being the largest. I have observed the Spiders, which have their eyes standing in this manner, catch their prey, by jumping on it.

#### N°. III.

THESE Spiders are of a blackish colour, with a lightish streak on their back. They are sound in the spring time running on the ground, under the dead grass in the sields and hedges. In the beginning of June, they are sound with their egg-bag, which is flattish and of a darkish colour, fastned to the under part of their bellies, which they run very lightly away with. By the best observation with glasses, they are sound to have but sour eyes; which are placed as they are expressed over the head of the Spider in the Plate.

#### N°. IV.

THIS Spider is of a dark ash colour, finely spotted with black all over the belly, back, and legs; having a streak of white in the middle of the back, and upper side of the belly. Its legs are something lighter than the other parts, and the specks something smaller. It had fix eyes, standing as they are placed over the Spider in the Plate, the two soremost of which are the least.

## N°. V.

THE back of this Spider was of a lead colour, the upper side of the belly of a reddish or brownish cast, finely marked. The legs were marked with large spots of black and hair-colour. Its feelers are like shining globes, a little inclining to an oval figure, of a dark colour, almost black. It could not be distinctly observed how many eyes it had. It was taken, in the beginning of April, on a burdock.

N°. VI.

## it to the perients the night ivor, he fit ; let them take after it

THE body and legs of this Spider was of a hair-colour, with a small black mark across the upper end of the back: its belly of a blackish colour. It was taken in the fields, in the beginning of April. The eyes are so small, that it could not be perceived how many it had, or their manner of standing.

## VII.

THIS Spider was all over of a light hair-colour, with a black spot on the upper fide of its belly, the under fide of which was of an ash colour; it was taken in the fields, in the beginning of April, running amongst the leaves and dead grass. "internal remedies. Their well

## " is a most excellent styptick HIV looking at the nose, or any slight

THIS Spider was of a dark colour, the upper fide of the belly being finely marked with a row of circular spots from the back to the end of the tail with a scolloped line on each side; the back was dark on each fide, and light in the middle. It had two eyes standing as they are placed in the Plate, over the head of the Spider. Its feelers were long and slender, as are all those of the female Spiders, the male having globular bunches or knobs at the ends of their horns or feelers: the young ones are marked exactly like the old ones; only they look very pale which makes them appear as if they were naked, but may be easily known. This is one of the house Spiders, whose vertues are excellent in the cure of intermitting fevers, when the bark and other remedies have failed, as I have often experienced on several, both old and young; the use of which I will now publish for the benefit of the poor and country people, who are remote from the help of phylicians.

The Use. " B. As much of the clean web of the house Spider as " the weight of two scruples; Mithridate two drams; mix and give "it to the patients the night before the fit; let them take after it four ounces of treacle-water, and go to bed and cover themselves warm, endeavouring to sweat. They will have a most severe fit after the taking the first dose, but after the second dose it will leave them. By this method I have cured many people of stubborn and long continu'd tertian, quartan, and quotidian Fevers, particularly fome of the servants of the Honourable Colonel Schutz, when their taking the Bark for a long time failed: as also Dame Hughs of Totten-ham-Court Road of a tertian Ague of three years continuance, with many others. I have likewise cured several children, both male and female, by hanging a large Spider confined alive in a box about their neck, reaching to the pit of the stomach, without giving any internal remedies. Their web, with the addition of Frog-spawn, is a most excellent styptick for bleeding at the nose, or any slight wound of the body."

The Use. R. "The clean web of the house Spider, and dip it in the spawn of Frogs, beaten as you would the whites of eggs, several times letting it dry on pewter, or earthen plates, between each time of dipping it, and keep it in a box close stopt from air, and apply it when you have occasion. With this remedy I saved a gentleman of worth in Lincolns-Inn-Fields, who had bled at the nose several hours, when all the applications failed which were used

" by two eminent Surgeons."

I HAVE observed, fince I writ this, a small Ichneumon Fly to lay its eggs on the egg-bags of the house Spider, the worms of them penetrating the bag, eat up the eggs, leaving the skins; and then make themselves small brown cases, in which they change into Flies, which come out in the beginning of May.

#### N°. IX.

THIS Spider is of a blackish colour on the back, the upper side of its belly was of a yellowish dark ash-colour, mark'd with black; the

on the back, bordered on each

for downy fook: it had lone

the legs particolour'd of black and hair-colour; the feelers long and smooth. It had eight eyes standing as they are placed over the head of the Spider in the Plate. This is one of the semale house Spiders. It was taken in the beginning of April.

## c.X . Nand eight eyes flanding as they

it looks all over with a

This Spider was of a black colour where the eyes stood; the other part adjoining to the belly was of a redish chesnut colour, the upper side of the belly of a yellowish dark ash colour, the legs of this Spider are pretty long and of a redish colour, the seelers were globular and hairy, and on the outsides of them there was a bright knob of white, incircled with yellow, which made it appear as if a little stone had been set therein: it had eight eyes standing as they are expressed over the Spider in the Plate. This was a male Spider, and was taken in a house in the beginning of April.

#### N°. XI.

This small Spider is of a brownish colour with a yellow mark cross part of the belly next the back, the upper side of the belly being marked with a large triangular mark with a cross in it; the legs were spotted: it had long feelers, and sour eyes, which were perceptible, standing as they are expressed over the Spider in the Plate. It was taken in a garden in April.

#### N°. XII.

THIS Spider was black and white; the black marks on the upper fide of the belly cross it horizontally; it had eight eyes standing as they are expressed in the Plate. This is one of the Spiders which catches his prey by jumping on it, and can move backwards and forwards, or sideways at its pleasure with great agility. It was taken in a garden about the middle of April.

N°. XIII.

## the legs particolour'd of black and hair colour; the feelers long and

This Spider was of a dark hair-colour, with a small stroke of a lighter colour on the upper side of the belly, and streak of light colour on the back, bordered on each side with black, it looks all over with a soft downy look: it had long seelers, and eight eyes standing as they are expressed in the Plate. It was taken in a garden at Hackney, about the middle of April.

ANOTHER of the same kind was taken about the middle of May, with a large bag of eggs fastned to its tail, the outside of which was white, with a cast of blew. There has been found several degrees in bigness of these Spiders, and the colours the same; so that they do not alter or change their colours as they grow bigger. An endeavour was made to take the egg from it; but she was not willing to part with it, but strove to hold it by clapping her legs about it a great many times: and when taken away, would run to it, and catch hold of it, endeavouring to pull it to her again.

## gross part of the belly next the buck of upper fide of the belly being

This small Spider was black on the back; the upper side of the belly had a black line running through the middle of it, with a border of white on each side of it, crossed on each joint by a small black line; the seelers were very small. It had eight eyes standing in a semicircular form, as they are expressed in the Plate. It was taken in a dry bank near Islington, on the sourceenth of April.

### fide of the belly crofs it horizonVXy o'M had eight eyes standing as they

This longish Spider hath a stripe of orange-colour on the middle of its back, and down the middle of the upper side of the belly, edged with a border of black; the out-edges of which are composed of small black lines, which make a faint shade ending in white. Its

legs were of a chesnut-colour; the feelers had thick knobs at the ends, ending in points. It had four eyes, standing as they are expressed in the Plate. It was taken in Cain-Wood, on the fourteenth of April, running in the dead graft and leaves. Level XII bed il abno ent as Plate. They are found running about in great plenty, in the low wet

## grounds about the middle of .IVX. . "N

THIS Spider was of a light brownish hair-colour, with a faint stripe of yellow on its back, and upper fide of its belly; its feelers were long and flender. It had four eyes, standing, as is represented in the Plate by the dots over the head of the Spider. It was taken in Cain-Wood, on the fourteenth of April, running in the dead grass and dark colour; its feelers were pretty thick: it half as they as they are expressed in the Plate. Viewing the upper part of the belly of this

### Spider with a magnifying glafe. IIVX . "Kiry and finely spotted: It was

THIS longish Spider was of a light hair-colour, the darkest pare being on the upper fide of the belly, and coming off in a very light shadow on the sides. It had a light streak on the top of the back; the feelers had large knobbed and pointed ends. It had four eyes, standing as is expressed over the Spider in the Plate. It was taken about the middle of April in Cain-Wood, running on the ground under some dead leaves and grass. This is a male. The belly of this Spider was thorter than is

#### N°. XVIII.

THE back of this Spider is of a dark hair-colour with a light streak in the middle; the upper fide of the belly light hair-colour, the legs of a reddish brown, the feelers long and slender, and of the same colour of the legs. It was taken the fourteenth of April, runing on the ground in Cain-Wood.

pelled in the Plate.

had thick knobs at the ends,

#### N°. XIX.

THIS small Spider was all over black, the seelers were knobbed at the ends. It had six eyes, standing as they are expressed in the Plate. They are sound running about in great plenty, in the low wet grounds, about the middle of April.

#### N°. XX.

This Spider is almost white on the top of the back: the sides of the back were black, it had a light mark all along the upper part of the belly even with that on the back, the legs and sides of the belly of a dark colour; its feelers were pretty thick: it had six eyes placed as they are expressed in the Plate. Viewing the upper part of the belly of this Spider with a magnifying glass, it was hairy and finely spotted: It was found in Cain-Wood, running on the ground about the middle of April.

#### N°. XXI.

This Spider had a light mark along the top of the back, the sides of the back black, going off into a faint shade of white, the tail was of a dark colour. Its seleers were slender, the legs finely marked, partly black and partly of sad colour: it had six eyes standing as is expessed in the Plate. The belly of this Spider was shorter than is usually sound in Spiders of this bigness. It was taken in Cain-Wood, about the middle of April.

#### N°. XXII.

THIS Spider was of a hair-colour; the sides of it dark, marked with black; its belly rises pretty high on the upper side; its seelers were slender: it had six eyes standing as they are expressed in the Plate. It was taken in Cain-Wood, near Hampstead-Heath, about, the middle of April.

N°. XXIII.

#### N°. XXIII.

This Spider was of a dark colour, having a pretty broad streak of light hair-colour in the middle; and in the middle of that streak a small black line, the rest of the back being black; the upper part of the belly had a small hair-colour'd line, in shape of a longish square. It had six eyes standing as they are expressed in the Plate. Its seelers were long and slender: it was taken in Cain-Wood about the middle of April, in the dead leaves. One of these Spiders was taken at the beginning of June with its egg-bag under its belly, which was round and white.

#### N°. XXIV.

This small long legged Spider was so finely marked that it was impossible to describe it, either in words or colours; there being so fine a mixture of green, red, and black interchangeably put together in pretty shapes; the legs were also finely marked in the same manner; the eyes were so small as not to be discerned. It was taken on the body of a tree in Cain-Wood, about the middle of April.

#### N°. XXV.

THE back of this Spider is of a chesnut colour, and small, the belly large, the upper part of which is of a yellow, white, and orange colour, very agreeably mixed in pretty shapes, the legs orange colour with dark spots. The seelers were slender; it had six eyes standing as expressed in the Plate. It was taken on a tree in Cain-Wood, about the middle of April.

#### N°. XXVI.

This small Spider was of a copper colour, the belly pretty large for the bigness of the Spider. It was found in the middle of a web, in Cain-Wood, about the sixteenth of April. The eyes were so small as their number could not be perceived.

#### N°. XXVII.

THIS Spider was of a longish shape, and of a yellowish green colour; its feelers were slender. It was taken about the middle of April, in Cain-Wood.

#### N°. XXVIII.

This Spider was of a blueish white, with a broad streak of white on the middle of its back; bordered with black on each side, the upper side of the belly was finely marked with black, and spotted with small black spots on the legs. It had small globular knobs at the ends of its feelers.

#### N°. XXIX.

This Spider was of a hair-colour; it had a pretty large belly, the upper part of which, by the shadowing of the colours, appeared in a square form; the two foremost legs were the longest; the seelers small. It was taken about the middle of April, in Cain-Wood.

#### N°. XXX.

THIS Spider was of a light brown or chesnut colour on the back; the upper side of the belly white shadowed towards the tail, with a deep shade of yellow, and a row of darker spots of the same colour on each side of the belly; its seelers small; the two foremost legs were longer than the other. It was taken in Cain-Wood, about the middle of April.

#### N°. XXXI.

THIS is one of the most beautiful Spiders, if you look on it with a Microscope, as is possible to be seen; there is such a variety of marbling in pretty shapes of several colours, viz. black, chesnut, redish, and white mixt

mixt all over the back, the belly, legs and feelers. It appears to the naked eye to be a greyish speckled Spider being all over rough and hairy; the feelers have globular ends and are hairy. It had eight eyes placed as is expressed in the Plate, the two middlemost in the top being the largest. This Spider catches his prey by jumping on it, and is extremely nimble in its moving any way it pleases. It was taken in a garden at *Hackney*.

#### N°. XXXII.

THIS Spider was of a dark colour, there was a broad light streak of hair-colour in the middle of the back; the upper side of the belly was as if it was marbled or watered, and all over very hairy. The feelers had pointed knobs at the ends, of a shining black, and below that another knob, which made them look as if they had been turned by a Turner; it had six small eyes. This was a male Spider, and taken in the house at the latter end of April.

#### N°. XXXIII.

THIS Spider was of a black colour, with a small stripe of lighter colour in the middle of the back, the upper part of the belly was lighter; the seelers had pointed knobs at the ends; it had sour eyes standing as is expressed in the Plate. It was taken at the latter end of April, near Newington-Green.

#### N°. XXXIV.

THIS Spider was of a hair-colour, the back was short, the belly large, the upper side of which was prettily marked with light colour in the middle, and dark on the sides: these marks where so regularly placed, as made it appear as if jointed on the back, it had a small triangular spot in the middle, with a white line round it; and on the outside of that

C 2

line it was dark; the two foremost legs were the longest: Its feelers were long and slender; it had six eyes, the two foremost were very small, the two next pretty large: they were placed as are expressed in the Plate. It was taken amongst some nettles near Newington-Green, at the end of April.

#### N°. XXXV.

This small Spider is of a dark reddish or chesnut colour, its back dark, the upper side of its belly was prettily marked with white and light chesnut colour: It had globular bunches at the ends of the seelers, the legs were very long for the bigness of the Spider, the two foremost being the longest: It had sour eyes standing in a right line, in the forepart of his head. This Spider was taken at the latter end of April in Cain-Wood.

#### N° XXXVI.

THIS Spider was of a dark ash colour on the back, which was very small, the upper side of the belly was black and white, regularly marked, representing the shape of an Oak-Leaf, having a small shade of chesnut colour in it, the belly of this Spider was very large: its seelers small and long; it had eight eyes placed as they are expressed in the Plate. It was taken by the New-River, at the latter end of April.

#### N°. XXXVII.

THIS Spider was, on the upper part of its back, of a shining black, the lower part next the belly of a colour inclining to red, the belly black, regularly marked with a lighter colour much resembling a leaf; its legs were of a dark red or chesnut colour, spotted with black; the feelers were slender: Its back was so shining, and its eyes so small that they could not without great difficulty be discerned, they were eight in number

number placed as they are expressed in the Plate. The hind legs were not very long. It was taken in a Cellar, at the latter end of April.

#### N°. XXXVIII.

THIS Spider was all over of a hair-colour, with a light streak in the middle of the back; in which was a small black line, the upper part of its belly was regularly marked representing joints, the legs were sinely spotted with black; its seelers slender; It had eight eyes placed as they are expressed in the Plate. This Spider was taken in a Cellar, at the latter end of April. The thick web of this, and all the house Spiders may be made Use of, in the cure of all intermittent Fevers.

#### N°. XXXIX.

THE back of this Spider was of a dark copper colour, the whole belly perfectly black, the legs of a chesnut colour finely spotted with black; its seelers were slender: The eyes were so small and close together as not rightly to be discerned as to their number and form. It was taken in a moist place under a shed at the latter end of April.

#### N°. XL.

This Spider was all over of a brown colour: the two foremost legs were the shortest, the two next the longest of all; the other two or third pair being short, the hind legs long: This Spider was taken at Hackney, in the beginning of May. This Spider seems to be one of the long-legged kind.

#### N°. XLI.

This Spider is of a chesnut or redish colour on the back, with a shade of green, the legs of the same colour, the whole belly was of a very fine green, on the upper part on each side was a row of dark coloured

coloured spots, and at the end of the tail a spot or tip of scarlet colour; its feelers small and of a transparent green colour, it had six eyes placed as is expressed in the Plate, they were very plain to be seen, the body being almost transparent, and the eyes black. It was taken in a web on an Elm-Tree, eating a large black Fly, at the beginning of May, on Epping-Forest. There was one taken at the same time much smaller, but marked exactly like the great one.

#### N°. XLII.

THIS Spider was of the same colour, and marked exactly like the former, the seelers of the former being of a transparent green: This Spider's seelers are of a muddy green with globular knobs at the ends: It had six eyes standing as they are expressed in the Plate. It was taken on the Forest at the same place and time with the sormer. These two, I believe, to be male and semale.

#### N°. XLIII.

THE back of this Spider was of a redish slesh colour with a lightish spot of the same colour in the middle. In the upper side of its belly which was pretty large, was a large dark shade of the shape of a triangle, with a white line, reaching from the back to the tail end, which white line was cut through in several places by the dark shades; the seelers were slender; It had six eyes, placed as they are expressed in the Plate. It was taken in a garden of SIR Richard Child's on Epping-Forest. in the beginning of May.

#### N°. XLIV.

THE back of this Spider was chesnut colour, the belly almost black, with a cast of copper colour, on the upper side of which was a white mark joining to the back, the legs were of a light hair-colour very transparent, and finely spotted with black; the seelers had small globular knobs

knobs at their ends: The eyes were so small that their number and standing could not be perceived. This Spider was taken at the beginning of May, in a garden at Hackney.

#### N°. XLV.

This Spider is of a hair-colour, on the back are two small black lines, the upper side of the belly was of a flesh colour finely marked with a broad mark of black and white; which mark is interrupted or broken off, about the middle; the belly is shadowed and intermixed with a mixture of pale red. Its feelers are long and slender: It had eight eyes standing as they are expressed in the copper Plate. The young ones of these Spiders, which are no bigger than a rape seed, are marked exactly like the old ones; only something darker, and of a copperish colour; which shows they do not alter their marks in their several degrees of bigness. These Spiders were taken about the middle of May, by the New-River near Islington.

#### N°. XLVI.

This Spider is of a dark colour, the back lighter, with a dark line in the middle something like a nine-pin, but more pointed at each end; on the upper side of the belly was a long dark coloured mark, with a border of light colour round it, the whole being spotted with dark spots; the seelers were slender: It had sour eyes standing as they are expressed in the copper Plate. This was taken near Hornsey-Wood, about the middle of May.

#### N°. XLVII.

THIS Spider was long and slender, being all over of a hair-colour, and finely speckled with small specks of dark colour, the two foremost legs were very long, the two next something shorter, the other pair next them were the shortest of all; the seelers were slender: It had eight

eyes placed as is expressed in the Plate. These Spiders are very frequent in the Hedges about Hornsey-Wood. It was taken about the middle of May, at which time there were a great many small ones running about, they not differing at all from the old ones in shape or colour. These are called the Greybound Spider. They are so swift in running that they seem to sly.

#### N°. XLVIII.

THIS Spider on the back is of a dark muddy yellow, inclining to a blackish colour, the belly blackish, with a white hoary look; the legs were yellow; the feelers yellow and slender: It had eight eyes placed as is expressed in the Plate. It was taken about the middle of May, near Hornsey-Wood. One of these Spiders was taken near Hambleton in Buckingham-shire, wraped up in a leaf of the winter green, with a great many young ones with it; the legs and back of this Spider were not so yellow as the former but more inclining to a chesnut colour.

#### N°. XLIX.

THIS Spider's back is of a blackish colour, the upper part of its belly being finely marked with a redish, and blackish mixture, and on the upper part next the back was a white mark in the form of a Y. Its legs were of a pale colour finely spotted; the feelers had small globular bunches at the ends. The eyes of this Spider could not be distinguished.

#### Nº. L.

THIS Spider was small and flat, almost resembling a tick. It was of an ash colour, each side of the back having a little mixture of red; the seelers were slender, the eyes of it could not be seen.

N°. LI.

#### Nº. LI.

THE back of this Spider was of an ash-colour; all the other parts were of a redish colour; on the upper part of the belly was a row of white marks; from the back to the end of the tail, and between those white marks, it was finely marbled with a variety of shades of red, in the shape of a triangle scolloped on each side, and a row of black spots on the outside of the scolloped line; the legs were of a pale colour spotted with black; the seelers were slender and of an ash-colour: It had eight eyes placed as is expressed in the Plate. It was taken in a garden at Hackney, about the middle of May.

#### N°. LII.

THIS Spider seemed to be of a lead colour, and of an oval shape; its back was very light; the upper end or head white, with a line of pale orange colour along the middle of the back; the upper part of the belly was very dark, almost black, going down the sides in a lighter shade; the under side of the belly was of a sad colour: It had eight eyes placed as they are expressed in the Plate; Its seelers were long and slender. It was taken near Newington-Green, about the latter end of May.

#### N°. LIII.

This Spider was all over of a chesnut colour, with a streak of light colour on the back; its belly was of an oval shape, the upper part of which was the darkest; the whole Spider had a velvet look: It had eight eyes placed as they are expressed in the copper plate; the seelers were slender. It was taken at the beginning of June, in Cain-Wood, and put into a box over night, and by the morning it had laid eggs and wrapped them up in a round white ball, holding it under its belly.

D

Nº. LIV.

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#### Nº. LIV.

This Spider was of a stender shape and its legs long, considering its bigness; on the middle of its back was a whiteish line, on each side of that black, and below that a light hair-colour; the upper part of the belly was of a dark chesnut colour; that part next the tail almost black; the other end, next the back, inclining to a dark red; the sides of a whiteish colour, and below that black; the legs were of a chesnut colour. Its feelers were knobbed and pointed at the ends, and on the inner side of those knobs there was a large black shining spot looking like pollished jett. It had eight eyes placed as in the Plate, and was taken in Cain-Wood, in the beginning of June.

## Turs Spider feemed to be of a lead colour, and of

THIS Spider was of an orange colour; it had on its back a streak of light, and next to that on each side it had a dark shadow, and on the outside of that shadow was a light line of the same colour of the first; the upper side of the belly had on each side a line or streak of dark colour ending in a point at the tail; the seelers were slender: It had eight eyes placed as they are expressed in the Plate. It was taken in Cain-Wood, in the beignning of June.

#### N°. LVI.

THIS Spider was of a most beautiful green colour, all over its body, legs and feelers, which last were slender: It had eight eyes, placed as is expressed in the copper Plate. It was taken running on the ground in Cain-Wood, at the beginning of June; it was very nimble and quick-sighted.

unapped them up in a round white ball, holding is under its belly.

## No. LVII.

This Spider was of a dark colour, and shaped almost like a tick; the middle of its back was of a light hair-colour, round which was a pretty large mark of black; the upper side of the belly was of a dark hair-colour, finely marked with a light hair-colour; on the outside of its belly was a fine shade of red; it legs finely speckled; its feelers slender: It had eight eyes placed as they are expressed in the copper Plate. It was taken in a web in Cain-Wood, at the beginning of June.

#### N°. LVIII.

THIS Spider was of a yellowish colour, and shaped like a tick; it had a black line on each side its back, the middle of it being of a pale yellow; the under side of the belly was of the same colour, with small streaks of a darker colour. This was taken in Cain-Wood, at the beginning of June, where a very small one was taken at the same time, exactly marked like the great one.

#### N°. LIX.

THIS Spider was of a whiteish sky-colour, with a black mark on each side the back, and upper part of the belly; the under side of a blue-ish white; the legs were blueish, and finely speckled with black. Its feelers were small: The number and standing of the eyes could not be distinguished, they were so small and close together. It was taken in Cain-Wood, at the beginning of June.

#### N°. LX.

THIS Spider was of a dark hair-colour, having a lighter stripe of the same colour, in the middle of the back; the upper side of the belly was spotted with black; the whole underside was of a dark hair-colour without

without spots; the legs were of a light-hair colour, looking transparent with a few black specks here and there on them. Its feelers were slender. It had eight eyes placed as in the Plate. This Spider was taken from an Ichneumon Fly, in Cain-Wood, in the beginning of June.

#### N°. LXI.

This Spider was of a hair-colour; its back very dark; the belly light in the middle and clouded on the fides with a dark colour; the whole under fide of the same of a dark colour; its legs blackish; the feelers slender. It had eight eyes standing in a semicircular form, as is expressed in the copper Plate. This is one of the Spiders which catches his prey by jumping on it. It was taken in Cain-Wood, in the beginning of June.

#### N°. LXII.

This Spider is all black, excepting four white specks on the upper side of the belly; the seelers were of a whiteish, or very pale yellow; the legs were of a dark yellow. It had eight eyes standing in a semicircular form, as they are expressed in the copper Plate. This is another of the jumping Spiders, and was taken at the same time and place as N°. LXI.

#### N°. LXIII.

THE back of this Spider is dark in the middle with a whiteish line round it; its back is much broader and bigger than its belly; the upper side of the belly is of a light chesnut colour, with a darker colour round it; the whole underside is blackish; its legs speckled; the seelers slender. It had eight eyes placed in a semicircular form, as they are expressed in the Plate. It was taken in Cain-Wood, at the beginning of June, and is one of the jumping Spiders.

.VIXIV. "IN black, the whole underfide was of a drik hair-colour

snob, on which were placed

#### N°. LXIV.

THIS Spider's back and belly was of a curious shining black, with some few spots and marks of white, on the top and sides of its belly; the legs were of a redish chesnut colour; its seelers black and slender; the belly was large for the bigness of the Spider. It was so bright and shining that its eyes could not be discerned. It was taken in Caine Wood, in the beginning of June.

#### N°. LXV.

THE back, legs, and feelers of this Spider were of a hair-colour; the upper fide of its belly finely marked with chesnut, orange and white; on the under fide there was a broad black mark, reaching from the head to the tail. It had six eyes placed as they are expressed in the Plate. It was taken in Cain-Wood, at the beginning of June.

#### Nº. LXVI.

THE back of this Spider was large and black, with two red marks, on the lower part next the belly, which was small and pointed at the tail end, and finely marked with white; the legs were between a black and chesnut colour; the seelers of a light hair-colour with globular pointed knobs at the ends; on the innermost side of which was a shining black spot. It had six eyes placed as is expressed in the Plate. It was taken in Cain-Wood, at the beginning of June.

#### N°. LXVII.

THIS long legged Spider was of a yellowish hair-colour, the back, belly, and head making one intire lump, having no division between the back and belly, as in other Spiders; the feelers were slender; towards the

the head, on the upper fide, was a rifing knob, on which were placed two pretty large eyes. This was taken in Cain-Wood, at the beginning of June.

# No. LXVIII.

THE back of this Spider hath a small line of orange colour in the middle, and on each side of that a broad stripe of black; and on the outside of the back a light hair-colour; the upper side of the belly was black, with marks of hair-colour down the middle, in the shape of hearts; the sides of the belly whitish; next to that black, which come off into a faint shade of ash colour; the whole underside was of the same colour; the legs and seelers both of a hair-colour. It had eight eyes placed as inthe copper Plate, the uppermost of which, that stood in a row, were the smallest. It was taken running on the ground by a hedge side, near Woolwich in Kent, about the middle of June.

#### N°. LXIX.

THE back of this Spider was black, with three white marks or specks on it, the upper part of the belly, black, with a semicircular line white, of on the upper part next the back, and two stripes of white on each side, pointing upwards towards the middle of the belly; the legs were hair-colour, spotted with a darker colour; the seelers stender. It had eight eyes placed as they are expressed in the copper Plate. It was taken in a garden at Hackney, in the beginning of June.

#### N°. LXX.

This Spider was all over of a brown colour; its back and belly were near of a bigness; the belly had an indented stripe of a lighter colour rising in the middle, making its belly appear gibbous; its legs were something long and finely spotted; its seelers were slender. This Spider

Spider was taken with a small flatish ball of eggs, of a blueish colour, which it held under its belly. It was found near Woolwich in Kent, about the middle of June.

### the legs of a dark colour; as well also he feelers, which were knobbed

The back of this Spider was of a dark red colour; the belly, which was pretty large for the bigness of the Spider, was marked with black, white, and orange coloured marks. It had a ball of eggs when it was taken, which was round, and of a pale blue colour. It was found about the middle of June, near Charlton in Kent.

### of a thining black, as if politicax valuified; and on the upper fide

This Spider had, on the middle of the back, a large dark fpot edged with a light colour, and on the outside of that black; the upper side of the belly was prettily marked, with black and hair-colour; the legs were of a dark colour; its feelers had globular ends. This was taken near Charlton in Kent. The eyes were so small that their number and standing could not be distinguished.

### No. LXXIII. and and arbiga and

THE back of this Spider was of a red colour; the upper side of the belly was black, with a whiteish yellow mark along the middle, like a small sprig of the yew tree; the end of its tail was forked; its seelers were slender. It had eight eyes placed at they are described in the Plate. It was taken in a warren near Woolwich in Kent, about the middle of June, in a very thick web on the ground, making a large hole for its ingress and egress, where it lays concealed till the prey is entangled, and then coming forth it lays hold on it, and killing it carries it into its hole. Some of these Spiders are taken in July, much larger; but nothing differing in shape or colours.

N°. LXXIV.

### Spider was taken with a final VIXXI .. N of eggs, of a blueith colour,

THE back of this Spider is of a reddish colour, the upper side of its belly black, striped with white like a sprig of yew; its tail sorked; the legs of a dark colour; as were also the seelers, which were knobbed and pointed at the ends: It had eight eyes standing as they are expressed in the copper Plate. It was taken in a thick web about the middle of June: I take this to be the male to N°. LXXIII.

## taken, which was round, an VXXI for blue colour. It was found

THE back and belly, of this Spider both upper and under-side, were of a shining black, as if polished, or varnished; and on the upper side of its belly it had two rows of dents, or hollow specks set in a regular order; the legs and seelers were of a very dark red; the eyes could not be seen by reason of its shining-blackness; the tail was forked. It was taken about the middle of June, creeping on the ground, near Charlton in Kent.

### No. LXXVI. for blue could not ilvxxI.

This Spider's back and legs were of a dark redish hair-colour; the whole belly of a dark lead colour, rough and hairy, the tail forked and of a flesh colour; its feelers slender. It had eight eyes placed as they are expressed in the Plate. It was taken near Woolwich in Kent, about the middle of June.

#### N°. LXXVII.

THIS Spider was all over of a hair-colour, finely marked and mottled with black; its legs long and smooth; its feelers long and slender. It had eight eyes placed as they are expressed, by the dots over the Spider,

in the Plate. It was taken about the middle of June, upon a dry bank on Putney-Heath, where it spun a very thick web, and had made two holes which led into a large hole in the bank, in which it lay very still, expecting its prey which, as soon as it is entangl'd, it would run out and catch up, and run into the hole with it.

#### N°. LXXVIII.

eyes placed as they

THE back of this Spider was of a flesh colour mix'd with a cast of green; the legs and seelers of a chesnut colour, with a greenish cast; the upper side of the belly was of a bright yellowish green in the middle, and a blueish green on the outsides. It had a beautiful red spot at the end of its tail: It had six eyes placed as is expressed by the dots over the Spider in the Plate. It was sound in a thin web on the bushes on Putney-Heath, about the middle of June.

#### not have some No. LXXIX.

This Spider was all over of a light yellowish green; on the upper side of the belly there were two rows of small black spots; its feelers were slender; the legs long for the bigness of the Spider. It had six eyes placed as they are expressed in the Plate. After it was taken it shed its skin, but differed nothing from what it was before. This was taken about the middle of June on Putney-Heath.

#### No. LXXX. which and to shed

THIS Spider was all over of a buff colour, with a dark chefnut coloured mark on each fide the back and belly, and two spots of the same colour near the tail. The feelers were long and slender. It had eight eyes placed as is expressed in the Plate. It was taken on a surzsbush on Putney-Heath on the twenty first of June.

F

N°. LXXXI.

#### No. LXXXI. Is sow all could be a

THIS Spider was white both on the upper and under side of its legs and seelers; it had a dark shade on each side its back. It had a small shade of red on the head; on the upper side of the belly were two rows of dents or dimples, and two specks of red near the back, and two larger on the side of the belly. It had eight eyes placed as they are expressed in the Plate. It was taken on the twenty eighth of June, in Bishop's-Wood near Hamstead-Heath. Two of these Spiders were taken in a Wood near Henley upon Thames, about the middle of June; the red spots on one of these being much larger than the spots on this Spider.

#### od vd leberge i as la N°. LXXXII.

THE back of this Spider was of a redish cast; the sides of a dark colour; the upper side of its belly was of a dirty yellow, with a long square mark in the middle; ending in a large dark spot next the tail, which was forked; the underside of the belly was of the same colour, having two large spots thereon, as if gilded with sine gold. It had eight eyes, as they are expressed in the Plate. It was found spun up in the tops of green sorrel, and with it a bag of eggs of a pale red colour, near Lusham in Kent, at the beginning of July.

### was taken about the middle.HIXXXI o. ? I strep-thath.

THE back of this Spider was of a flesh colour, finely marked with black; the upper side of the belly is black, as prettily marked with white, and on the white fine specks of black, as were also the sides of the belly. Its legs were spotted with a dark colour; its feelers long and slender. It had eight eyes placed as is expressed in the Plare. It was taken in a very broad web, which was spread on the ground with a large hole for its retreat, on the eighth of June, near Dulwich in Kent.

N°. LXXXIV.

# spotted with black and white the less were long, and finely spotted; the seelers slender. It had eight eyes standing as they are expressed

This Spider was all over of a hair-colour; the sides of its back of a darker colour; the legs and sides of its belly paler, and speckled with the same dark colour. Its seelers were slender. It had eight eyes placed as they are expressed in the copper Plate. It was found in a web spun up in a Hasel-Leaf, with a ball of eggs of a yellow colour wrapped round with a white web, in a Wood beyond Peckham, in the beginning of June.

### N'. LXXXV.

THIS Spider was all over of a hair-colour; the middle of its back light, and the fides dark, almost black; on the upper fide of the belly was a light coloured mark in the shape of a feather, and in it a longish black square. Its feelers slender. It had six eyes placed as in the Plate; the sides of the belly were of a chesnut colour. It was taken at the beginning of July near Dulwich.

#### N°. LXXXVI.

This Spider was of a light ash colour, with a white line in the middle of its back, and a whitish mark in the middle of the upperside of its belly; the sides of the belly white; its legs hairy; the seelers long and slender. It had eight eyes placed as they are expressed in the Plate. It was taken in the beginning of July, and with it a ball of eggs, which it held fast with its legs; which ball, when broken, was found full of young Spiders all black.

#### N°. LXXXVII.

THIS Spider was of a light hair-colour, streaked and speckled with black; on the upperside of the belly there were two rows of marks

E 2 spotted

spotted with black and white; the legs were long, and finely spotted; the seelers slender. It had eight eyes standing as they are expressed over the head of the Spider in the Plate. At the end of its tail there were little short things like seathers standing up, which it opened and shut like a fan at its pleasure. It was taken in the middle of July, in a Chamber-Window, at the Greybound Inn at Maiden-Head.

# up in a Hofel-Leef, with a livxxxx1.°N

This is one of the long legged Spiders, of a dark hair-colour; its body was small and something flatter than is usual in these sorts of Spiders; its legs and seelers were long. It had but two eyes standing as they are expressed in the copper Plate. It was taken near Peckham, in the beginning of July.

### No. LXXXIX.

This Spider's back was of a darkish ash colour, with a cast of red; the upper side of the belly was of a redsh hair-colour, with a large clouded triangle; in the middle of which there were white marks, regularly placed from the back to the end of the tail. The legs of this Spider were hairy and finely spotted, and intermixed with some bristles; the seelers slender and hairy; as was also the whole Spider. It had eight eyes standing as they are expressed in the copper Plate.

#### N°. XC.

THE back and legs of this Spider were of a dark green, the belly of a fine grass green; on the upperside of which there was a pretty large mark of dark green, and round the mark of dark green, a yellowish green. Its seelers were slender. It had eight eyes standing as they are expressed in the Plate. It was taken upon an Oak-Tree in Cain-Wood, at the latter end of July.

N°. XCI.

#### N°. XCI.

THE back and legs of this Spider looked transparent, like clear horn, excepting the spots, which were red and black, which made them look like Torotife-shell, the upper side of the belly was yellow, except a very large mark on that part next the tail, and about that two very small black specks. It had eight eyes, standing as they are placed in the copper Plate; the feelers were slender. It was taken in a Leaf closed together, near to a web which it had made. I took one of these on an Oak, in Cain-Wood, at the beginning of September.

of a light-green with a dark linax the peer fide of it: This Spider was flender; the feelers pretty long. It had eight eyes flanding as they THE back and legs of this Spider were of a hair-colour; the feelers, were slender and of the same colour; on the upper side of the belly was a large indented mark of white incompassed with a deep scarlet colour; the fides of the belly yellow. It had fix eyes placed as in the copper Plate. It was found in Cain Wood, at the end of July, inclosed in an Oak-Leaf, with a web in which was a ball of eggs of a pale blueish colour. begs sported store cheix middle to the body.

### and stender and of a light hair IIIOXr. This Spider was taken in Coin-

THE middle of the back of this Spider was dark, with a light colour round it; the upper fide of the belly dark, with a light coloured mark, in the form of a cross; and below that, next the tail, there were small streaks or lines of a light colour quite cross the lower part of the belly; the under fide of the belly light and finely speckled with dark colour: Its feelers slender. It had eight eyes standing as they are expressed over the Spider in the Plate. It was taken in Cain-Wood, at the latter end or fully. in which time it minde a ball of eggs very round a . yluf fo

N°. XCIV.

#### Nº. XCIV.

THE back, belly, legs, and feelers of this Spider were of a dark chefnut colour, except some sine light coloured spots on the upper side of the belly; the two lowermost of which were the biggest. It was taken in Cain-Wood, solded up in a Leaf, and with it a ball of eggs, at the latter end of July.

### doled together, near to a weVOX of had made. I took one of

THE back and legs of this Spider were of a dark green; the belly of a light-green with a dark line on the upper fide of it: This Spider was slender; the seelers pretty long. It had eight eyes standing as they are placed in the copper Plate. It was taken in Cain-Wood, at the latter end of July.

### No. XCVL and add to salid and a moles

This long legged Spider was, on the upperfide of its body, black; the fides of a hair-colour; the belly on its under fide yellowish; the legs spotted from their middle to the body. The seelers were long and slender and of a light hair-colour. This Spider was taken in Cain-Wood, at the latter end of July.

#### N°. XCVII.

THIS Spider's back and legs were of a hair-colour, the belly whitish, speckled and veined with black so curiously that it is impossible to describe it; the seelers were long and slender. It had six eyes standing as they are placed in the Plate. It was taken in the middle of a web at the latter end of July, in Cain-Wood, it was kept in a box two or three days, in which time it made a ball of eggs very round and white.

N°. XCVIII.

## -blod flagger to has end of Mo. XCVIII.

THE back and legs of this Spider were of a dark colour; the upper fide of the belly white, and in the middle a dark mark, something like a spleenwort leaf. The feelers had shining globular knobs at the ends. It had six eyes standing as they were placed over the head of the Spider in the Plate: Two of its eyes were placed so near together that they seemed but one. This was taken in Cain-Wood, in the middle of its web, at the latter end of June.

#### N°. XCIX.

THE back and legs of this Spider were of a dark hair-colour; the upperfide of its belly white, finely marked with red and hair-colour, and in the middle a row of white marks, of a longish square fashion, but so small as scarcely to be expressed with a pencil. Its feelers were long and slender. It had six eyes placed as they are expressed in the drawing in the copper Plate. It was taken in Cain-Wood, at the latter end of July.

#### of brown an. Or. Ne colour, the legs

This Spider was all black, with some white marks on the upper side of its belly; it had globular bunches at the ends of its seelers. It was found amongst some nettles in the Fields near Hammer-smith, at the latter end of July.

### Nº CI.

THIS Spider was all black, both back, belly, legs, and feelers, except some very small white marks on the upperside of its belly; the feelers were slender; the eyes were so small as not to be distinguished.

It was taken in a Field, near Rotherhith, about the end of August folded up in the Leaf of a nettle with a ball of eggs of a blueish colour. This is the semale to N°. C.

#### N°. CII.

THE back of this Spider was black in the middle, and of a dark red or chesnut colour on the sides: The upper side of the belly was of a light ash colour with a black mark round the edge, and in the middle it had six black specks; the two uppermost next the back were the smallest, the under side of the belly was of a light ash colour, with a streak of black in the middle; the legs were spotted; the seelers slender. Its eyes could not be perceived, by reason of the shining of the upper part of its back, next the head. It was taken in a Garden, at Hackney, about the latter end of August.

### lioned a daw pellord No. CIII.

THE back of this Spider was of a dark yellow, with a shade of chesnut colour in the middle; the belly was of a long oval shape, the upperside of which was of a light yellow and white, sinely marked with dark shades of brown and orange colour; the legs were of a dark colour, but finely spotted; its seelers were slender. It had six eyes placed as in the copper Plate, over the head of the Spider. It was taken under the coping of a Wall at Hackney, at the latter end of September.

#### N°. CIV.

THE back of this Spider was of a flesh colour, with a shade of dark ared in the middle; the upper side of the belly was of a redish colour, with triangular marks of white. Its legs were of the same colour of the middle

middle of the back; its feelers lighter, with globular bunches at the ends, ending in a point. It had four eyes standing as they are expressed in the Plate.

#### Nº. CV.

This large long legged Spider was of a hair-colour, and very hairy all over the back, belly, legs, and feelers; its back is the darkest part; on the upper side of the belly were two rows of black and light spots, placed interchangeably one after the other. The feelers have two knobs on each; the last ending in a point. It had eight eyes standing as they are expressed in the copper Plate. It was taken under the coping of a Garden-Wall, at Newington, about the middle of September.

#### N°. CVI.

THIS Spider was of a yellowish hair-colour; in the middle of its back was a streak of black, in the middle of which was a square; the belly, which was very slender towards the tail, on its upper side was marked cross-wise with a dark colour and lines of black; the legs were of a yellowish hair-colour, and full of black bristles, the foremost of which were very long for the bigness of the Spider; the feelers had globular knobs at their ends. It had six eyes placed as they are expressed in the Plate, and was taken by the New-River near Islington, about the middle of September.

# molos malo N°. CVII.

THE middle of the back of this Spider was black; the sides red; the belly was of an ash colour, the upper part of which was prettily marked with a blackish colour, and the sides of the belly finely speckled

F

with the same. Its legs were sported; the seelers slender. It had six eyes standing as they are expressed in the copper Plate. It was taken under the coping of a Garden-Wall, at Newington, about the middle of September.

#### N°. CVIII.

THE back of this Spider was of a darkish red, or chesnut colour, striped with black, the middle being the lightest; the upper and under side of the belly were of a hair-colour finely marked and speckled with a darker colour; the legs and seelers were of a dark chesnut colour; the seelers hairy. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Garden the twenty seventh of August.

#### N°. CIX.

THE back of this Spider is yellowish, and the sides of it black; the upper side of the belly was of a hair-colour, which being viewed by a magnifying glass, it was so finely clowded with small specks as not to be described; the legs were spotted; the seelers slender. It had six eyes standing as they are expressed in the copper Plate. It was taken under the coping of a wall, at Newington, about the middle of September.

#### N°. CX.

THE back of this Spider was blackish in the middle, and redish on the sides; the belly was of a dark chesnut colour, in the middle of which was a row of white spots; the seelers were slender, the legs spotted. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Garden at Hackney, about the middle of September.

N°. CXI.

#### Nº. CXI.

THE back of this Spider was of a dark redish ash colour, with small lines of black; the belly of a dark redish chesnut colour, with feveral clouds of a darker colour, fet in a regular order, on the middle, and fides, and between them several spots of light ash colour. It had also a row of long and round spots, white in the middle, reaching from the back to the tail. Its legs were of a hair-clour, spotted and hairy; the feelers were long and hairy. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Garden at Hoxton, about the middle of August, and kept in a box, and fed with flyes till the twenty seventh of September, in which time it neither altered in colour or bigness on our est the longest the eno new real flomers and the

floorer; the third pair the though of They were of a dark colour, and longer than is usually found in Spiders of this bigness. The feelers THE back of this Spider is of a lightish lead colour, with marks and spots of black; its legs and feelers were of a light hair-colour. This is one of the long legged kind, having no division of back and belly, as in other Spiders. The legs were something shorter, and the body larger than is commonly seen in this fort of Spiders. It was taken under the coping of a Wall behind Shore-Ditch-Church, at the end of September. on a broad border of white on endoughed a fo

### der fide dark afti specked with Jilixo : Negs were of

THE back of this Spider was of a dark hair-colour, the middle fomething lighter; the belly of a yellowish hair-colour, finely spotted, and marked with a dark colour; the legs of a dark colour; as were also the feelers; the body, legs, and feelers were all over befet with fine hairs. It had eight eyes standing as they are placed in the copper Plate. No. CXIV.

#### N°. CXIV.

THE back of this Spider was very dark; the upper side of the belly was of a dark serruginous colour, spotted with black with a large dark scolloped mark, in which were twelve small white spots. The legs were of the same colour, and spotted with black; the seelers dark and slender. It had six eyes standing as they are placed over the head of the Spider in the copper Plate.

#### N°. CXV.

THE back and belly of this Spider were of a deep flesh colour; the upper side of the belly was crossed with several lines of a dark colour; the foremost legs were the longest; the two next pair something shorter; the third pair the shortest of all. They were of a dark colour, and longer than is usually sound in Spiders of this bigness. The seelers had globular pointed ends. It had eight eyes standing in two streight rows, as they are expressed in the copper Plate.

#### N°. CXVI.

THE back of this Spider was of a very dark colour in the middle, and a light ash colour on the sides; the upper part of the belly was of a scarlet colour, with a broad border of white on each side; the under side dark ash specked with black; the legs were of a light ash colour, with a very remarkable protuberance on the outermost joint of the two foremost: The seelers were slender. It had six eyes standing as they are placed over the Spider in the copper Plate.

#### aw soled revo lin ere No. CXVII.

THE back and legs of this Spider were of a mixture of green and hair-colour; the upper fide of the belly was white; the fides and under

part of it light green spotted in the manner of stripes with black; the seelers slender, and of a faint green colour. It had six eyes standing as they are placed over the head of the Spider, in the copper Plate.

### Tpors of the fame colour on the lover fine of the belly; its feelers were

This Spider was of a pale redish hair-colour; its back formed in a circular manner, from the middle of which the head rises forward in a bunch; the upper side of the belly was marked with lines and stripes of a dark hair-colour; the legs and seelers were hairy, the latter having pointed knobs at the ends; its tail was forked. It had eight eyes standing as they are placed, over the head of the Spider, in the copper Plate. I took one of these Spiders larger and something darker, under the coping of Hide-Park Wall, on the twenty sourch of August.

### .XIX. Not eves francing as they are

THIS Spider was all over of a pale green colour, excepting a black mark on each fide the back, and two marks of the same colour on the middle of the upper side of the belly. It had something of the resemblance of the tick kind; it had globular knobs at the ends of its feelers. It was taken in a Garden at Hackney, on the twentieth of April.

### .XXX) le Mer; the under fide of its body

THE back of this Spider was of a dark muddy green colour; the upper fide of its belly of a dark green, with feveral black marks; the outer corners of the belly next the back were knobbed, like some of the wood bugs. Its legs were green and spotted with black; the seelers slender. It had eight eyes standing as they are expressed in the copper Plate. It was taken in a Wood near Lusham in Kent, the twenty third of May.

### part of it light green spotted ixxo myner of stripes with black; the

THIS Spider was of a light yellowish green all over the body, legs, and feelers, with a faint shade on each side its back, and a few spots of the same colour on the upper side of the belly; its feelers were sslender. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Wood near Lusham in Kent.

the sould raiw be hear and No. CXXII. sold ragge out a doned a me sould be a sold be a sold of the back of this Spider was of a pale orange colour; the upper side of the belly was marked very curiously with a light green, and hair-colour; the white part, looking like filver, made it appear very beautiful; the two fore legs were the longest; the next pair something Shorter; the third pair the shortest; the feelers were slender, and its body of a fingular shape. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Hedge beyond Peckham, son the twenty third of May. we bas abad she able does no drame

### the middle of the upper fidenixxo . It had fomething of the

only knobs at the ends of its THIS long legged Spider was of a dark hair-colour on the upper fide, having a streak of light colour in the middle of its back; the legs of a dark colour; its feelers slender; the under side of its body was of a yellowish white. It was taken under the coping of a Wall at the latter end of August.

### outer comers of the belly a.VIXXD .. N were knobbed, like fome of

THE back of this Spider was of a dark red colour; the belly black, finely speckled with white; the legs blackish; the two foremost being the longest; the next pair something shorter; the third pair the shortest of all; the body of a peculiar shape; the seelers slender. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Hedge beyond Peckham on the twenty third of May.

#### N°. CXXV.

THE back of this Spider was of a hair-colour, with a mark of a dark shade in the middle; the upper side of the belly was yellow, in the lower part of which was a dark mark with two small spots over it, and next the back a shade of the same colour; the legs were spotted; the seelers had globular bunches at the ends of a dark colour. It had eight eyes standing as they are placed in the copper Plate. It was taken in a Hedge near Hornsey, on the twenty sourth of August.

#### THE back of this Spider. IVXXD a. Wk colour; the upper fide of

THE back of this Spider was of a dark ash colour; the upper side of the belly was white; the sides black, and a large black mark on the lower part next the tail; the white on the belly was so finely speckled with fine black specks as scarcely to be discerned without a glass, the legs were short and spotted with dark spots; its seelers were slender. It had eight eyes placed as in the copper Plate. It was taken in a Hedge, near Newington Green, about the latter end of August.

#### of black in the middle; thivxxx . We of the belly, which was

THE back of this Spider was of a transparent green colour; the upper side of the belly was of a yellowish white, having towards the tail a black streak, incompassed with black spots; the legs long, considering the bigness of the Spider, and transparent, excepting at the joints, which made them look like spots; its feelers were slender. It had eight

Nº. CXXXL

eyes standing as they are placed in the copper Plate. This Spider was found wrapt up in a Nettle-Leaf, and with it a ball of eggs of a blue colour, on the sixth of September near Camberwell.

#### N°. CXXVIII.

THIS long legged Spider was of a dark hair-colour on the upper fide, having a streak of light colour in the middle of its back; the legs of a dark colour; its feelers slender; the under side was of a yellowish white. It was taken under the coping of a Wall, at the latter end of August.

### Award to dound your No. CXXIX.

THE back of this Spider was of a dark colour; the upper fide of the belly is so finely mark'd with orange colour, yellow and dark hair-colour, that no painting can truely express it; the legs were dark and spotted; its feelers slender. It had six eyes placed as they are expressed in the copper Plate. These Spiders are found common near Putney amongst the Nettles, in which they had spread their webs; in which, webs were taken both slyes and butterslyes.

### o do so to the latter end of

THIS Spider was of a yellowish red colour, with two broad stripes of black in the middle; the upper part of the belly, which was slender, was of a yellowish colour, with a large white spot next the back, marked with dark hair-colour and redish spots; its legs were of a dark red colour; the seelers were globular at the ends. It had six eyes standing as they are placed in the copper Plate. It was taken amongst the Nettles near Putney-Common, and seems to be the male to CXXIX. It was found the eleventh of September.

N°. CXXXI.

#### N. CXXXI.

The back of this Spider was of a dark hair-colour, and blackish in the middle; the belly was very large, the upper side was of a yellowish hair-colour, inclining to a sless colour, finely marked with white marks edged with a dark hair-colour; the legs were spotted with black; the seelers were slender and also spotted. It had eight eyes placed as they are expressed in the copper Plate. It was taken in a Furz-Bush, on Putney-Heath, the eleventh of September. It had made itself a thick web about the bigness of the top of one's thumb, in which it lay, below which it had spread a thin web standing edge-ways for catching its prey.

#### N°. CXXXII.

THIS Spider was of a greenish muddy colour all over the back, belly, legs, and feelers; the upper side of the belly was finely marked and spotted with white in a very regular manner; the legs were spotted and hairy; as were also the feelers, which were slender. It had eight eyes standing as they are placed over the Spider in the copper Plate. It was taken, on *Putney-Heath*, on the eleventh of September.

#### N°. CXXXIII.

This Spider is one of the long legged kind. Its body was of an orange colour; in the upper part of the body was a black spot, in which stood the two eyes; in the lower part of the body next the tail were two black spots; the seelers were slender; the legs long, and of a black-ish colour. It was taken, in Cain-Wood, in the beginning of August.

#### N°. CXXXIV.

This Spider was all over of an orange colour on the back, belly, legs and feelers; on the upper fide of the belly were a row of white marks from the back to the tail; on each fide of them was an indented speck, which in the hollow parts looked like two black spots. The legs were spotted at the ends; the feelers long and slender. It had eight eyes standing as they are expressed in the copper Plate. It was taken at Maidstone in Kent, about the middle of August. The same kind of Spider was found in Cain-Wood.

#### N°. CXXXV.

THE back of this Spider was of a dark orange colour, as were also the belly, legs and feelers; the upper side of its belly was so finely mark'd with hair-colour and speckled with white as scarsely to be imitated in painting; Its legs were spotted; the feelers slender. It had eight eyes placed as in the copper Plate. It was taken in Cain-Wood, on the twentieth of September.

#### N°. CXXXVI.

THE back of this Spider was of a dark ash-colour; the upper side of its belly yellow, finely marked with green, and spotted with flesh colour; the legs were transparent and spotted with black; those parts of the legs next the body between the spots were red. Its feelers were slender, transparent and spotted. It had eight eyes placed as is expressed in the copper Plate. It was taken in a Hedge, near Hornsey-Wood, on the twentieth of September.

#### N°. CXXXVII.

THE back and legs of this Spider were clear and almost transparent, of a pale mixture of green and red; the upper side of the belly was green,

green, finely marked and speckled with a redish colour; the feelers were slender. It had six eyes placed as in the copper Plate. It was taken, in Cain-Wood, the twentieth of September.

#### N°. CXXXVIII.

THIS Spider was all over of an ash-colour finely speckled with black. It was of a very flat shape, and extrorardinay nimble; its feelers were slender. It was taken, in Cain-Wood, on the twentieth of September.

#### 'N. CXXXIX.

This Spider was all over of a hair-colour both back, belly, legs, and feelers; on the middle of its back were two black marks, and on the upper fide of its belly there were four black spots: Its feelers were knobbed and pointed at the ends. It was taken on the sixth of May near Lusham in Kent.

#### N°. CXL.

THIS Spider was all over its body, legs and feelers, of a dark copperish colour; the legs spotted with black; the feelers long and slender. It had eight eyes standing as they are placed in the copper Plate. This Spider was taken near *Peckham*, on the sixth of *August*.

#### N'. CXLI.

This Spider was of a hair-colour with two black streaks in the middle of its back; the upper side of its belly was finely streaked with white; its seelers were knobbed and pointed at the ends with black. It was taken near Lusham, at the same place and time with N. CXXXIX. They had each of them eight eyes, standing as they are placed over the Spider in the copper Plate.

G 2

N. CXLII.

### green, finely marked and fillX2 ." a redifficolour; the feelers

THE back, legs and feelers of this Spider were of a bright green colour; the upper fide of the belly was of a dark redish colour with a yellow border round it; the whole under fide of a yellowish colour: Its feelers were slender. It had eight eyes standing as they are placed in the copper Plate. This Spider was taken in Cain-Wood on the eleventh of September.

#### Nº. CXLIII.

THE middle of the back of this Spider was of a dark red, inclining to a blackish colour with a stripe of yellow on each side; the upper side of the belly was of a velvet black, and in the middle were two rows of small white specks; on each side the belly it was white; its legs, seelers, and whole under side were of a dark chesnut colour; the seelers were slender. It had eight eyes, placed as in the copper Plate. It was taken on the eighteenth of April.

#### N'. CXLIV.

THIS Spider was all over the back, upper fide of the belly, legs and feelers, finely mottled with black and light ash-colour; it had on the fore part of the head near the eyes, a redish mark; the under side of this Spider was of an ash-colour with a cast of green; its feelers were slender. It had eight eyes standing as they are placed in the copper Plate. It was taken at Woolwich in Kent. There were two of the same kind of Spiders, which were very small, taken at the same time and place.

### N°. CXLV.

THIS Spider was of a dark hair-colour, on the upper and under fide; on the upper fide of the belly was a large white mark and another

other on the middle of the back; the legs and feelers were also of a dark hair-colour. It had eight eyes standing as they are placed in the copper Plate. It was taken running on the ground, in *Greenwich-Park*, on the thirty first of *March*.

#### N°. CXLVI.

THE back and belly of this Spider were black, mixed with a redish purple cast, and finely marked and spotted with white; the legs and seelers were of a hair-colour, spotted with the same dark colour of the body: Its seelers were slender. It had six eyes standing as they are placed in the copper Plate. It was taken in Bishops-Wood, at the latterend of August.

#### N°. CXLVII.

This Spider's back was of a dark hair-colour; the upper fide of the belly of a beautiful green, finely marked with yellow; the legs were of a pale green, spotted with a dark hair-colour; as were also the feelers, which were slender. It had six eyes standing as they are placed over the spider in the copper Plate. It was taken on a Hazel-Tree, at the beginning of September.

#### N°. CXLVIII.

THE back and legs of this Spider were of a redish colour; in the upper side of the belly was a long black mark, and round it white, and round the white a broad black scolloped streak; the sides below that were white; the seelers had pointed knobs at the ends. It had six eyes standing as they are placed in the copper Plate. It was taken in Cain-Wood on the fourth of September.

N°. CXLIX.

#### Nº. CXLIX.

This Spider's back is of an orange colour with a spot of dark colour in the middle: The upper side of the belly towards the back was of an orange colour, and the other half towards the tail of a dark redish brown; the upper half spotted with yellow; the legs were yellow spotted with a dark hair-colour; the seelers slender and spotted. It had six eyes standing as they are placed in the copper Plate. It was sound on the thirtieth of August, amongst some Fern on Hampstead-Heath.

#### N°. CL.

THE back and belly of this Spider were of a redish colour; on the middle of the back was a large dark mark; the upper side of the belly is marked across with shades of black, and in the middle a row of pale yellow spots, reaching from the back to the end of the tail; and on each side a row of dusky yellow spots; the legs and seelers were redish and spotted. It had six eyes standing as they are placed in the copper Plate. It was found near East-Barnet.

#### N° CLI.

THE back of this Spider was of a yellowish hair-colour, with a stripe of dark brown in the middle, and a dark shade of the same colour on each side; the upper side of the belly was of the same colours, curiously and regularly mark'd with lines and spots of white; the legs were yellowish and very hairy, and spotted with dark brown: The seelers were also spotted. It had six eyes standing as they are expressed in the copper Plate. It was found in a Garden at Tottenham-Court on the twenty seventh of July.

#### N°. CLII.

THE back of this Spider was of a dark colour with a shade in the middle and on the sides; the upper side of the belly is of a blueish colour, in the middle sinely marked and spotted with white, with shades of black between the marks; the sides of the belly of a light yellowish hair-colour, the legs of the same colour very hairy and spotted; the seelers spotted. It had six eyes standing as thy are placed in the copper Plate. It was found in a Garden at Aston, about the middle of July.

#### N°. CLIII,

The back, belly, legs and feelers of this Spider were of a light hair-colour, and finely marked with black, and speckled and spotted with white, on the back and upper side of the belly; the legs were hairy and spotted with white and dark hair-colour; the feelers were slender and only spotted with dark colour. It had six eyes standing as they are placed over the head of the spider in the Plate. It was taken in a Garden at Lambeth in Surrey, on the twenty seventh of August.

#### N'. CLIV.

THE back of this Spider was of a dark brown, with stripes of a darker shade in the middle; the upper side of the belly was of a redssh or purple cast, with stripes of dark brown across it, and over all prettily marked and speckled with white; the legs were of a dusky deep yellow, very hairy and spotted with black; the seelers were slender and spotted. It had six eyes standing as they are placed in the copper Plate. It was sound in a Garden in the beginning of September.

N°. CLV.

#### Nº. CLV.

THE back, belly, legs and feelers of this Spider were of an orange tawny, the upper part of the belly having a broad stripe of a brown colour from the back to the tail spotted with white; the legs were hairy and spotted with a dark colour; the feelers were spotted. It had six eyes standing as they are placed in the copper Plate. It was found, at the latter end of August, in Bishops-Wood.

#### N°. CLVI.

THE back, belly, legs and feelers of this Spider were of a dark yellowish hair-colour, without spots or marks, only the middle of the back excepted, which had two lines ending in a point next the belly; its feelers were slender. It had eight eyes standing as they are placed in the copper Plate. It was taken in the lower part of an unfinished building at May-Fair near Hide-Park corner, at the beginning of June.

#### N°. CLVII.

THE back of this Spider was of a light yellowish brown with two or three shadows across it; the upper side of the belly white, with a large mark of light brown, reaching from the middle to the lower end of the belly; the legs were party-coloured; the first and last joints of a hair-colour; the middle joints of a bright red, and spotted with a dark hair-colour at the ends of each joint: its feelers were slender. It had eight eyes standing as they are placed in the copper Plate. It was taken in Bishops-Wood, at the beginning of September.

### MY. CLVIII.

This Spider was all over of a dark brown colour on the back, belly, legs and feelers, being all over befet with fine hair; its legs were long, and the feelers slender. It was taken in a Stable of the Right Honourable the Lord Trevers, at his seat at Peckham, about the middle of August, This is one of the semale house Spiders, and of use when any of your poultrey or birds of the insectiverous kind are cramped, or otherwise benumbed with cold; for if you then give them a small Spider or two of the house kind, which they will willingly eat, it will help them.

#### N°. CLIX.

THE back and belly of this Spider were of a very dark brown, having on the back a circular mark of light hair-colour, with a cast of dark red on the lower part; the upper side of the belly next the back had a small stripe of light colour, and on the outside of that dark brown bordred with red, and on the outside of the red light hair-colour ending in a fork next the tail: Its legs were of a light hair-colour spotted with dark brown; the seelers were slender and spotted. It had six eyes standing as they are placed in the copper Plate. It was taken in a cellar of an old house, at the latter end of August.

#### N°. CLX.

THE back and belly of this Spider were of a dark hair-colour; the back had a circular mark of dark brown, divided in the middle by a line of the same colour; the upper side of the belly had three rows of dark marks reaching from the back to the tail, which was forked;

the legs and feelers were yellow, hairy and spotted. It had six eyes standing as they are placed in the copper Plate. It was taken in an out-house, in the beginning of June.

#### N°. CLXI.

THE back, legs and feelers of this Spider were of a dark hair colour; the upper fide of the belly of a role colour with two large marks of black, in the uppermost of which were two small lines of white, and under them two hollow specks or dimples of the same colour, in the lower black mark was a cross of white: Its feelers had globular bunches at their ends. It had eight eyes standing as they are placed in the copper Plate. It was taken by the side of a pond, in Sir Robert Abdey's Park, about the beginning of June.

#### N°. CLXII.

This Spider was all over the back, belly, legs, and feelers, of a dark hair-colour; the upper fide of the belly being marked with spots of dusky yellow; its feelers were slender. It was found in a web, which it had spun in a furz-bush. It had sour eyes standing as they are placed in the copper Plate. It was found at the latter end of August.

### N°. CLXIII.

THE back, belly, legs and feelers of this long legged Spider were of a dark hair-colour; the upper half of the body next the head yell-owish, with several dark spots like eyes, but I could perceive but two. On the lower part of the body next the tail were sour marks across on each side; its feelers were slender. It was found amongst some old timber, which laid on the ground, about the middle of September.

N°. CLXIV.

#### N°. CLXIV.

THE back of this Spider was of a dark hair-colour; the upper side of the belly something lighter, marked with several regular marks and spots of pale yellow; the legs were of a dusky yellow, spotted with dark hair-colour: Its seelers were slender. It was taken in Bishops-Wood, at the latter end of September.

#### N°. CLXV.

THIS Spider was all over of a beautiful green colour; on the upper side of its belly were lines of darker green reaching from the back to the end of the tail: Its seelers were slender. It had eight eyes standing as they are placed in the copper Plate. It was sound running on the ground in Bishops-Wood, at the latter end of June.

#### N°. CLXVI.

THE back of this Spider was of a yellowish hair-colour, in the middle of which was a small dark line; the legs were of the same colour, spotted and hairy; the upper side of the belly was of a redish colour, marked with yellow, and dark hair-colour; the seelers were slender and spotted. It had six eyes standing as they are placed in the copper Plate. It was taken on Finchly-Common, at the the beginning of September.

#### N°. CLXVII.

THE back of this Spider was of a pale green, with two marks of dark hair-colour; the upper fide of the belly hair-colour, with a broad stripe of light green, reaching from the back to the end of the tail; the legs were of a dark hair colour; as were also the feelers, which

H 2

were slender. It had eight eyes standing at they are placed in the copper Plate. It was found running on the ground, in *Enfield-Chace*, on the fourth of *August*.

#### N°. CLXVIII.

of the belly fomething

The back of this Spider was of a hair-colour, marked with a spot and broad line of yellow; the upper side of the belly had a mark in the shape of a cross of yellow colour, with a small line of dark red in the upper part; on the outside of the cross it was black with a broad circle of yellow round it spotted with red; on the out side the circle it was of a hair-colour; the legs were of a light hair-colour spotted with black, having bristles of the same colour on the joints; the seelers were slender. It had six eyes standing as they are placed in the copper Plate. It was taken in a web, in Bishops-Wood, at the beginning of September.

#### N°. CLXIX.

THE back, belly, legs and feelers of this large Spider were of a yellowish hair-colour; on the back was a large dark mark; the upper side of the belly had eight black spots on it, and two black tips at the end of the tail; the first joints next the body were hairy and beset with black bristles; as were also the feelers; the next joints short and roundish, and joined at each end by two strong black nerves; the two next joints were joined by a single nerve each. It had eight eyes standing as they are placed in the copper Plate.

#### N'. CLXX.

THE back of this Spider was of a redish colour, with small stripes of dark colour; the upper side of the belly red, with marks of white and

and dark red; the legs were of a deep dusky yellow, spotted with dark hair-colour; the feelers slender and spotted. It had fix eyes standing as they are placed over the Spider in the copper Plate. It was found in Bishops-Wood, at the beginning of September.

#### N°. CLXXI.

This Spider was all over the back, belly, legs, and feelers of a light brown colour; its legs were hairy and longer than is usually found in Spiders of this bigness; the feelers had globular bunches at the ends. It had six eyes standing as they are placed in the copper Plate. It was found on the ground at the beginning of September.

#### N°. CLXXII.

This Spider was all over of a dark redish colour on the back, belly, legs and seelers; it had a small white mark on the middle of the back, and on the upper side of the belly next the back was a large mark of white, and within that a square mark of black, and two rows of white spots, ending in a point at the tail, and some white marks on each side the belly; the legs were hairy; the seelers slender. It had six eyes standing as they are placed in the copper Plate. It was taken in a Wood, about the latter end of August.

#### N°. CLXXIII.

THIS large Spider was of a brown colour all over its back, belly, legs, and parts whereon the forceps were placed; the forceps were curiously polished, and sharp at the ends; the back had several marks of a dark colour on it: the tail was forked; the legs were incircled round each joint with a small line of pale yellow. The whole Spider was beset with a downy hair of a deep yellowish colour. This Spider

was brought from the Cape of good Hope. These foreign large Spiders have ten legs besides the forceps, all our english Spiders having but eight. They are said to spin a web so strong between the branches of the trees as is able to intangle the humming-birds which they kill and devour. See Marian of the Surinam Insects, Plate, 18. I take N°. CLXXIV to be the male Spider of N°. CLXXIII.

#### N°. CLXXIV.

THE back of this Spider was of a dark colour and light in the middle; the upper fide of its belly dark, with marks of yellow and white; the legs of a light hair-colour, spotted with a dark colour; the feelers slender. It had six eyes standing as they are placed in the copper Plate. It was taken on Hampstead-Heath, in the latter end of September.

#### N° CLXXV.

THE back and upper fide of the belly of this Spider were of a dark colour, inclining to a black, with a row of large marks made up of small white specks, and on each side a scolloped line of white; the legs were of a light hair-colour spotted with a dark colour; the seelers were slender. It had eight eyes standing as they are placed in the copper Plate. It was taken on Hampstead-Heath, on the twenty-seventh of September.

#### N°. CLXXVI.

THIS Spider's belly and head were of a light brown colour: it had on its back and upper fide of its belly a flat, square, crustaceous substance

substance of yellow colour with a border of light brown. They lay whiteish eggs in yellow silken baggs of a globular form. Camel MSS aranear. Philippensium.

#### N°. CLXXVII.

THIS Spider's, back, belly, legs and feelers were of a dusky brown and very hairy: Its feelers were slender. This Spider was drawn from one of the designs of Father George Joseph Camel, a very curious observer of nature.

#### N°. CLXXVIII.

THE back, belly, legs and feelers of this large Spider were of a yellowish brown, with marks of a darker shade of the same colour; its fore legs were longer than any of the others; its feelers were oddly sloped like the claws of a lobster, with which it would lay hold of any thing it had a mind to.

#### N°. CLXXIX.

THE back and belly of this Spider were of a curious mixture of filver, yellow and hair-colour, very agreeably mixed. Its legs were long and black; the feelers slender. This Spider was brought from the Philippian Islands.

#### N°. CLXXX.

This odd shaped Spider was of a fine green colour, intermixed with gold; the bite of which is so venomous, if not remedy'd presently by fire, or a decoction of dana, it kills both man and beast. They delight in the Sambach Arabum or Syringa and dwell in their twisted leaves; See Camel MSS. who calls it Araneus mortiferus smaragdino aureus Banayan.

N°. CLXXXI.

### Substance of yellow colour with bottle, of light brown. They lay

This Spider was found amongst some books; it was of a brown colour. It had eight legs as other Spiders, but in the place of feelers it had two long things like the claws of a lobster, and would use them as a crab or lobster doth to pinch or lay hold of any thing. It would also run backwards or forwards as crabs do, and as well backwards as forwards. It seems rather to be one of the tick or bugg kind than that of a Spider.

THE eyes of Spiders (in some two, in some four, in some six, and in some eight) are placed in the forefront of their head, (which is round and without any neck) all diaphanous and transparent, like a locket of diamonds, &c: Neither do I wonder why providence should be so anomalous in this animal, more than in any other we know of; for first since they, wanting a neck, cannot move their head, it is requisite that defect should be supplied by the multiplicity of eyes. Secondly since they are to live by catching so nimble a prey as a fly is, they ought to see her every way, and to take her, per saltum (as they do) without any motion of the head to discover her; which motion would have scared away so timorous an insect. Power's Microsc. observ. pag. 11.

ewilled leaves; See Camel MISS, who calls is Armeas mortiferus fina-

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# Microscopical Observations

ONTHE

## Carter Spider, and Jumping Spider; By the late Dr. HOOKE, F. R. S.

HE carter, shepherd Spider, or long-legg'd Spider, has, for two particularities, very few fimilar creatures that I have met with; the first which is discoverable only by the microscope, and is in the first, and second figures of Plate XXXVII. plainly describ'd, is the curious contrivance of his eyes, of which (differing from most other Spiders) he has only two, and those plac'd upon the top of a small pillar or hillock, rising out of the middle of the top of its back, or rather the crown of its head; for they were fix'd on the very top of this pillar (which is about the heighth of one of the transverse diameters of the eye, and look'd on in another posture, appear'd much of the shape B C D) the two eyes, B B, were placed back to back, with the transparent parts, or the pupils, looking towards either fide, but somewhat more forward than backwards. C was the column or neck on which they stood, and D the crown of the head out of which the neck sprung.

THESE eyes, to appearance, seem'd to be of the very same structure with that of larger binocular creatures, seeming to have a very smooth and very protuberant cornea, and in the midst of it to have a very black puple, incompassed about with a kind of grey iris, as ap-

pears by the Plate: whether it were able to move these eyes to and fro, I have not observed, but 'tis not very likely he should, the pillar or neck C, seeming to be cover'd and stiffen'd with a crusty shell; but nature, in all probability, has supply'd that defect, by making the cornea so very protuberant, and setting it so clear above the shadowing or obstructing of its prospect by the body, that 'tis likely each eye may perceive, though not see distinctly, almost a hemisphere, whence having so small and round a body plac'd upon such long legs, it is quickly able so to wind, and turn it, as to see any thing distinct. This creature, as do all other Spiders I have yet examin'd, very much differs from most other insects in the figure of its eyes; for I cannot, with my best microscope, discover its eyes to be any ways knobb'd or pearl'd like those of other insects.

THE second peculiarity which is obvious to the eye, is also very remarkable, and that is the prodigious length of its legs, in proportion to its small round body, each leg of this I drew, being above sixteen times the length of its whole body, and there are some which have them yet longer, and others that seem of the same kind, that have them a great deal shorter; the eight legs are each of them jointed, just like those of a crab, but every of the parts are spun out prodigiously longer in proportion; each of these legs are terminated in a small case or shell, shap'd almost like that of a muscle-shell, as is evident in the third figure of the same Plate (that represents the appearance of the under part, or belly, of the creature) by the shape of the protuberant conical body IIII, &c. These are, as 'twere, plac'd or fasten'd on to the protuberant body of the insect, which is to be suppos'd very high at M, making a kind of blunt cone, whereof M is to be suppos'd the apex, about which greater cone of the body, the smaller cones of the legs are plac'd,

plac'd, each of them almost reaching to the top in so admirable a manner, as does not a little manifest the wisdom of nature in the contrivance; for these long leavers (as I may so call them) of the legs, having not the advantage of a long end on the other fide of the hypomochlion, or centers, on which part of the legs move, must necessarily require a vast strength to move them, and keep the body balanc'd and suspended, insomuch, that if we should suppose a man's body suspended by such a contrivance, an hundred and fifty times the strength of a man would not keep the body from falling on the breaft. To supply therefore each of these legs with its proper strength, nature has allow'd to each a large cheft or cell, in which is included a very large and strong muscle; and thereby this little animal is not only able to suspend its body upon less than these eight, but to move it very swiftly over the tops of grass and leaves.

NOR are these eight legs so prodigiously long, but the ninth, and tenth, which are the claws, KK, are as short, and serve instead of a proboscis, for those seem'd very little longer than his mouth; each of them had three parts, but very short, the joints K K, which reprefented the third, being longer than both the other. This creature feems (which I have feveral times with pleasure observ'd) to throw its body upon the prey, instead of its hands, not unlike a jumping Spider, which leaps like a cat at a mouse. The whole fabrick was a very pretty one, and could I have diffected it, I doubt not but I should have found as many fingularities within it as without; perhaps, for the most part, not unlike the parts of a crab, which this little creature does, in many things, very much resemble, the curiosity of whose contrivance, I have in another place examin'd. I omit the description of the horns, A A, of the mouth, L L, which seem'd like that of a crab; the speckledness

fpeckledness of his shell, which proceeded from a kind of feathers or hairs, and the hairiness of his legs, his large thorax and little belly, and the like, they being manifested by the Plate; and shall only take notice that the three parts of the body, namely, the head, and breast, and belly are in this creature strangely confus'd, so that 'tis difficult to determin which is which, as they are also in a crab; and indeed, this seems to be nothing else, but an air-crab, being made more light and nimble, proportionable to the medium wherein it resides; and as air seems to have but one thousandth part of the body of water, so does this Spider seem not to be a thousandth part of the bulk of a crab.

THE jumping Spider is a small grey Spider, prettily bespeck'd with black spots all over the body, which the microscope discovers to be a kind of feathers like those on butterflies wings, or the body of the white moth. Its gait is very nimble by fits, sometimes running, and fometimes leaping, like a grashopper almost, then standing still, and fetting itself on its hinder legs, it will very nimbly turn its body and look round itself every way: It had fix very conspicuous eyes, two looking directly forwards, plac'd just before; two other on either side of those, looking forward and side-ways; and two other about the middle of the top of its back or head, which look backwards and fidewards; tho these seem'd to be biggest. The surface of them all was very black, spherical, purely polish'd, reflecting a very clear and distinct image of all the ambient objects, such as a window, a man's hand, a white paper, or the like. Some other properties of this Spider, observ'd by the most accomplish'd Mr. Evelyn, in his travels in Italy, are most emphatically set forth in the history hereunto annexed, which he was pleas'd, upon my desire, to send me in writing.

"OF all forts of insects, there is none has afforded me more divertisement than the venatores, which are a sort of lupi, that have their dens in the rugged walls, and crevices of our houses; a small brown and delicately spoted kind of Spiders, whose hinder legs are longer than the rest.

"SUCH I did frequently observe at Rome, which espying a fly at "three or four yards distance, upon the balcony (where I stood) " would not make directly to her, but crawl under the rail, till being " arriv'd to the antipodes, it would steal up, seldom missing its aim; " but if it chanced to want any thing of being perfectly opposite " would, at first peep, immediately slide down again, till taking " better notice, it would come the next time exactly upon the fly's " back: but, if this happen'd not to be within a competent leap, then " would this infect move so softly, as the very shadow of the gno-"mon seem'd not to be more imperceptible, unless the fly mov'd: " and then would the Spider move also in the same proportion, keep-" ing that just time with her motion, as if the same soul had animated 66 both those little bodies; and whether it were forwards, backwards, " or to either fide, without at all turning her body, like a well managed horse: but if the capricious fly took wing and pitch'd upon " another place behind our huntress, then would the Spider whirle its " body so nimbly about, as nothing could be imagin'd more swift; " by which means, she always kept the head towards her prey, " though to appearance, as immovable, as if it had been a nail driven " into the wood, till by that indifcernible progress (being arriv'd with-" in the sphere of her reach) she made a fatal leap (swift as lightning) " upon the fly, catching him in the pole, where she never quitted " hold

"I have beheld them instructing their young ones, how to hunt, which they would sometimes discipline for not well observing; but when any of the old ones did (as sometimes) miss a leap, they would run out of the field, and hide themselves in their crannies, as asham'd, and haply not to be seen abroad for sour or five hours after: for so long have I watched the nature of this strange insect; the contemplation of whose so wonderful sagacity and address has amaz'd me; nor do I find in any chase whatsoever, more cunning and stratagem observ'd. I have sound some of these spiders in my garden, when the weather (towards the spring) is very hot, but they are nothing so eager of hunting as they are in Italy".

ALL kinds of Spiders seem to be creatures of prey, and to seed on other small insects, but their ways of catching them are very differing: the shepherd Spider by running on his prey; the jumping Spider by leaping on it, other sorts weave nets, or cobwebs, whereby they ensnare them, nature having both sitted them with materials and tools, and taught them how to work and weave their nets, and lie perdue, and to watch diligently to run on a fly as soon as ever entangled.

THEIR thread or web feems to be spun out of some viscous kind of excrement, lying in their belly, which, though soft when drawn out, is presently, by reason of its smalness, hardned and dried by the ambient air. Examining several of which with my microscope, I found them to appear much like white horse-hair, or some such transparent horny substance, and to be of very differing magnitudes; some appearing as big as a pig's bristle, others equal to a horse-hair; others no bigger than a man's hair; others yet smaller, and siner. I observed further,

further, that the radiating chords of the web were much bigger, and smoother than those that were woven round, which seem'd smaller, and all over knotted or pearl'd, with small transparent globules, not unlike small crystal beads, or seed pearls, thin strung on a clew of silk; which, whether they were so spun by the Spider, or by the adventitious moisture of a sog (which I have observed to cover all these silaments with such crystalline beads) I will not dispute.

THESE threads were some of them so small, that I could very plainly, with the microscope, discover the same consecutions of colour as in a prism, and they seem'd to proceed from the same cause with those colours which I have already describ'd in thin plated bodies.

MUCH resembling a cobweb, or a confus'd lock of these cylinders, is a certain white substance which, after a fog, may be observ'd to fly up and down the air; catching several of those, and examining them with my microscope, I found them to be much of the same form, looking most like to a slake of worsted produc'd to be spun, though by what means they should be generated, or produc'd, is not easily imagined: they were of the same weight, or very little heavier than the air; and 'tis not unlikely, but that those great white clouds, that appear all the summer time, may be of the same substance.



### Of the TARANTULA; by the Learned

Dr. MEAD.

that is of that species that has eight eyes, and spins webs; it has eight legs, four on each side, and in each leg three joints; from the mouth proceed two darts, in shape just like to a hooked forceps, or crab's claws; these are solid, and very sharp, so that they can easily pierce the skin; and between those and the fore legs there are two little horns, which, I suppose, do answer to those bodies call'd from their use in slies the seelers; because as they do, so this creature is observed to move 'em very briskly when it approaches to its prey.

THIS, as other Spiders do, propagates its species by laying eggs, which are very numerous; so that there are found sometimes in the female, when dissected, a hundred or more; and these are hatched partly by the heat of the mother, partly by that of the sun, in about twenty or thirty days time.

In the summer months, especially when the heats are greatest, as in the dog-days, the *Tarantula* creeping among the corn in the fields, bites the mowers and passengers. In the winter it lurks in holes, and is scarcely seen; and if it does bite then, it is not venomous, neither does it induce any ill symptoms.

But in the hot weather, altho' the pain of its bite is at first no greater than what is caused by the sting of a bee, yet the part quickly after is discoloured with a livid, black, or yellowish circle, and raised

to an inflam'd swelling; the patient within a few hours is seized with a violent fickness, difficulty of breathing, universal faintness, and sometimes trembling with a weakness of the head; being asked what the ail is, makes no reply, or with a querulous voice, and melancholy look, points to his breaft, as if the heart was most affected.

DURING this mournful scene, all the usual alexipharmic and cordial medicines are of no service; for, notwithstanding their repeated use, the patient growing by degrees more melancholy, stupid, and strangely timorous, in a short time expires; unless musick be called to his assistance, which alone, without the help of medicine, performs the cure.

FOR, at the first sound of the musical instrument, altho' the sick lie, as it were, in an apoplectick fit, they begin by degrees to move their hands and feet, till at last they get up, and fall to dancing with wonderful vigour, at first for three or four hours; then they are put to bed, refreshed from their sweating, for a short time, and repeat the exercise with the same vehemence, perceiving no weariness or weakness from it, but professing they grow stronger and nimbler the more they

AT this sport they usually spend twelve hours a day, and it continues three or four-days; by which time they are generally freed from all their symptoms, which do nevertheless attack 'em again about the same time the next year; and if they do not take care to prevent this relapse by musick, they fall into a jaundice, want of appetite, universal weakness and such like diseases; which are every year increased, if dancing be neglected, till at last they prove incurable.

As musick is the common cure, so they who are bitten are pleas'd, some with one sort of it, some with another; one is rais'd with a pipe, another with a timbrel; one with a harp, another with a fiddle; so that the musicians make sometimes several essays before they can accommodate their art to the venom; but this is constant and certain, notwithstanding this variety, that they all require the quickest and briskest tunes, and are never moved by a slow, dull harmony.

WHILE the Tarantati, or affected, are dancing, they lose in a manner the use of all their senses; like so many drunkards, do many ridiculous and soolish tricks; talk and act obscenely and rudely, take great pleasure in playing with vine leaves, with naked swords, and red cloths, and the like; and on the other hand can't bear the sight of any thing black; so that if any by-stander happen to appear in that colour, he must immediately withdraw, or otherwise they relapse into their symptoms with as much violence as ever.

It may afford some light towards understanding the nature of this poison, to observe that Apulia is the hottest part of all Italy, lying eastward, and having all the summer long but very little rain to temper the heats, so that the inhabitants, as one of that country observes, do breath an air, as it were, out of a fiery surnace; hence their temperament is dry, and adust, as appears by their being generally lean, passionate, impatient, ready to action, quick-witted, very subject to instantantory distempers, phrensies, melancholy, and the like; upon which account there are more mad people in this, than in all the other parts of Italy. As to the return of the symptoms the next year, that is owing to the same excessive heat in those months, acting again upon the small remains of the venomous ferment. Those that are desirous

to know more concerning the nature, of this strange insect, the effects of its venom, and the causes of those surprising symptoms attending it, I refer to Dr. Mead's mechanical account of poisons, from whence (with the author's leave) I have extracted this account of the Tarantula.

#### LESSES STORES ST

## Of the Scorpion, By the same learned Author.

F stinging animals the Scorpion is the chief, whose virus in different countries is more or less dangerous, according as 'tis exalted by various degrees of heat; thus in Africa, particularly, its effects are so dreadful, that as Leo tells us, the town Pescara, there, is in a manner lest desolate by the inhabitants in the summer, by reason of the great abundance of these creatures, certain death sollowing their sting.

Some of this deadly kind, exhibited in Plate XL, Seignior Redi, had fent him from Tunis; and it being November, irritated them to sting pigeons, pullets, &c. without any bad effect at all of their poison, but upon the approaching spring, one of them which had been kept all the winter, nay, eight months, without any food, and the wound of whose sting before was harmless, stung to death two pigeons successively; but a third and sourth wounded in like manner, suffer'd no hurt. Yet having let the Scorpion rest all night, he killed another pigeon the mext morning.

K 2

AT the point of the sting he very often could discern a small drop of white liquor, which when the wound was made, entered into the sless.

As this liquid venom is either not separated from the blood into the cavity of the sting, during the cold of winter, or at least the Scorpion wants strength at that time to throw it out with force and energy; so, even in the hot months, after it is exhausted by two or three attacks, the sting, is no longer hurtful, till the expense of this juice is recruited by time.

"Tis very remarkable concerning this infect, what an ingenious gentleman, who lived several years in Barbary, told me he had many times tried; that if it be surrounded with a circle of burning coals, it does, upon the sense of the heat, turn itself violently every way to make an escape; but finding it impossible, and the pain from the fire increasing, it strikes itself twice or thrice with the sting on the back, and immediately dies of the wounds.

As the viperine venom is the quintessence, and most active part of those animal juices with which the Viper is nourished, so is also that of the Scorpion; for this insect lives chiefly upon locusts, &c. And the same person from Barbary inform'd me, that seeing oftentimes locusts sticking up in the ground, as if they were set there, by looking, he found that some part of them was always eat away, and that those places were the holes of Scorpions, who had dragg'd their prey thither, and sed on it as they had occasion.

In like manner as the anungia viperina cures the bite of the Viper, fo also the oleum Scorpionum, or oil in which Scorpions have been infused, is a present remedy for the sting of this creature.

Observ-

# Observations on the Flea, and Louse:

By the late ingenious Dr. HOOKE, F. R. S.

HE strength and beauty of the first of these, creatures, the stea, had it no other relation at all to man, would deserve a description.

For its strength, the microscope is able to make no greater discoveries of it than the naked eye, but only the curious contrivance of its legs and joints, for the exerting that strength, is very plainly manifested, such as no other creature, I have yet observed, has any thing like it; for the joints of it are so adapted, that he can, as 'twere, fold them short one within another, and suddenly stretch, or spring them out to their whole length, that is, of the sore-legs, the part A of Plate, XLI. lies within B, and B within C parallel to, or side by side each other; but the parts of the two next, lie quite contrary, that is, D without E, and E without F, but parallel also; but the parts of the hinder legs G, H and I, bend one within another, like the parts of a double jointed rule, or like the foot, leg, and thigh of a man; these fix legs he clitches up all together, and when he leaps, springs them all out, and thereby exerts his whole strength at once.

But, as for the beauty of it, the microscope manifests it to be all over adorn'd with a curiously polish'd suit of sable armour, neatly jointed, and beset with multitudes of sharp pins, shap'd almost like porcupine's quills, or bright conical steel-bodkins; the head is on either side beautify'd with a quick and round black eye K, behind each of which also appears a small cavity, L, in which he seems to move to

and fro a certain thin film befet with many small transparent hairs, which probably may be his ears; in the forepart of his head, between the two fore-legs, he has two small long jointed feelers, or rather smellers, M M, which have four joints, and are hairy, like those of several other creatures; between these, it has a small proboscis, or probe, N N O, that seems to consist of a tube N N, and a tongue or sucker O, which I have perceiv'd him to slip in and out. Besides these, it has two chaps or biters P P, which are somewhat like those of an ant, but I could not perceive them tooth'd; these were shap'd very like the blades of a pair of round top'd Sciffers, and were opened and shut just after the same manner; with these instruments does this little busie creature bite and pierce the skin, and fuck out the blood of animals, leaving the skin inflamed with a small round red spot. These parts are very difficult to be discovered, because, for the most part, they lye covered between the fore-legs. There are many other particulars, which, beingmore obvious, and affording no great matter of information, I shall pass by, and refer the reader to the Figure.

#### Of the Louse.

HIS is a creature so officious, that 'twill be known to every one at one time or other, so busie, and so impudent, that it will be intruding itself in every one's company, and so proud and aspiring withal, that it sears not to trample on the best, and affects nothing so much as a crown; feeds and lives very high, and that makes it so saucy, as to pull any one by the ears that comes in his way, and will never be quiet till it has drawn blood: it is troubled at nothing so much as at a man that scratches his head, as knowing that man is plot-

have

ting and contriving some mischief against it, and that makes it often. times sculk into some meaner and lower place, and run behind a man's back, though it go very much against the hair; which ill conditions of it having made it better known than trusted, would exempt me from making any further description of it, did not my faithful Mercury, my microscope, bring me other information of it. For it has discovered to me, by means of a very bright light cast on it, that it is a creature of a very odd shape; it has a head shap'd like that expressed in Plate XLII, marked with A, which feems almost conical, but is a little flatted on the upper and under fides, at the biggest part of which, on either fide behind the head (as it were, being the place where other creatures ears stand) are placed its two black shining goggle eyes B B, looking backwards, and fenced round with feveral small cilia or hairs that incompals it so that it seems this creature has no very good forefight: It does not feem to have any eye-lids, and therefore perhaps its eyes were fo placed, that it might the better cleanse them with its forelegs; and perhaps this may be the reason, why they so much avoid and run from the light behind them; for being made to live in the shady and dark recesses of the hair, and thence probably their eyes having a great aperture, the open and clear light, especially that of the sun, must needs very much offend them; to secure these eyes from receiving any injury from the hairs through which it passes, it has two horns that grow, before it, in the place where one would have thought the eyes should be; each of these C C hath four joints, which are fringed, as 'twere, with small bristles, from which to the tip of its snout D, the head feems very round and tapering, ending in a very sharp note D which seems to have a small hole, and to be the passage through which he sucks the blood. Now whereas if it be plac'd on its back, with its belly upwards, as it is in the Plate, it seems in several positions to

have a resemblance of chaps, or jaws, as is represented in the Plate by E E, yet in other postures those dark strokes disappear; and having kept several of them in a box for two or three days, so that for all that time they had nothing to feed on, I found, upon letting one creep on my hand, that it immediately fell to sucking, and did neither seem to thrust its nose very deep into the skin, or open any kind of mouth, but I could plainly perceive a fmall current of blood, which came directly from its snout, and past into its belly, and about A there seem'd a contrivance, somewhat resembling a pump, pair of bellows, or heart, for by a very swift systole and diastole the blood seem'd drawn from the nose, and forced into the body. It did not seem at all, though I viewed it a good while as it was sucking, to thrust more of its nose into the skin than the very snout D, nor did it cause the least discernible pain, and yet the blood feem'd to run through its head very quick and freely, so that it seems there is no part of the skin but the blood is dispers'd into, nay, even into the cuticula; for had it thrust its whole nose in from D to C C, it would not have amounted to the supposed thickness of that tegument, the length of the nose being not more than a three hundredth part of an inch. It has fix legs, covered with a very transparent shell, and jointed exactly like a crab's, or lobster's; each leg is divided into fix parts by these joints, and those have here and there several small hairs; and at the end of each leg it has two claws, very properly adapted for its peculiar use, being thereby inabled to walk very securely both on the skin and hair: and indeed this contrivance of the feet is very curious, and could not be made more commodiously and compendiously, for performing both these requisite motions; of walking and climbing up the hair of a man's head, than it is; for by having the lesser claw (a) set so much short of the bigger (b) nedw. soweids as it is in the Plates is feents in reveral point

when it walks on the skin the shorter touches not, and then the feet are the same with those of a mite, and several other small insects, but by means of the small joints of the longer claw it can bend it round, and so with both claws take hold of a hair, in the manner represented in the Plate, the long transparent cylinder F F F, being a man's hair held by it.

The thorax seem'd cas'd with another kind of substance than the belly, namely, with a thin transparent horny substance, which upon the fasting of the creature did not grow flaccid; through this I could plainly see the blood, suck'd from my hand, to be variously distributed, and mov'd to and fro; and about G there seem'd a pretty big white substance, which seem'd to be moved within its thorax; besides, there appear'd very many small milk-white vessels, which cross over the breast between the legs, out of which, on either side, were many small branchings; these seem'd to be the veins and arteries, for that which is analogus to blood in all insects is milk-white.

The belly is covered with a transparent substance likewise, but more resembling a skin than a shell, for 'tis grain'd all over the belly just like the skin in the palms of a man's hand, and when the belly is empty, grows very flaccid and wrinkled; at the upper end of this is placed the stomach HH, and perhaps also the white spot II may be the liver or pancreas which by the peristaltick motion of the guts, is a little mov'd to and fro, not with a systole and diastole, but rather with a thronging or justling motion. Viewing one of these creatures, after it had fasted two days, all the hinder part was lank and slaccid, and the white spot II hardly mov'd, most of the white branchings disappear'd

disappear'd, and most also of the redness or sucked blood in the guts, the peristaltick motion of which was scarce discernible; but upon the fuffering it to suck, it presently fill'd the skin of the belly, and of the fix scolop'd embosments on either fide, as full as it could be stuft; the stomach and guts were as full as they could hold; the peristaltick motion of the guts grew quick, and the justling motion of I I accordingly; multitudes of milk-white vessels seem'd quickly filled, and turgid, which were perhaps the veins and arteries, and the creature was so greedy, that though it could not contain more, yet it continued fucking as fast as ever, and as fast emptying it self behind: the digestion of this creature must needs be very quick, for though I perceived the blood thicker and blacker when suck'd, yet, when in the guts, it was of a very lovely ruby colour, and that part of it, which was digested into the veins, seem'd white; whence it appears, that a further digestion of blood may make it milk, at least of a resembling colour: What else is observable in the Figure of this creature, may be seen in the Plate.

As these vermin are natural to the bodies of the human species, so likewise, most birds of different kinds, some sorts of fish, and many kinds of quadrupeds have their particular sorts of sleas, and lice, proper and peculiar to themselves, and manifestly differing from each other. Seignior Redi, having delineated some of these; I think it will not be foreign to the Subject, to relate the discoveries (he tell us) he made, by the advantage of a great many experiments.

In the hawk (fays he) I've observed three distinct sorts of sleas, and as many in the turkey-hen; in the wild-duck sour: in the swan, wild-goose, kestrel and plover, two: Yet it must be allowed that there is

a fort of birds that have either the same sort of fleas, or some that are very like them. The golden-eagle, and the bird by the Italians call'd vaccaio from its keeping company with cows, as well as the kestrel, have very large ones: which last named bird hath also another fort of fleas no ways differing in shape from those of the raven, but of another colour; and the raven others very like the lesser sort of lice found upon the egret. Some of the bustard's fleas, if view'd at a distance, very much refemble those found upon the egret. On the woodpecker and chaffinch I have seen fleas resembling those of the starling, and on the wild-duck of the larger kind, much the same fort of fleas with those of the wild-goose. In the feathers of a crane are to be found nests of white lice, marked, as it were with arabic or algebraic characters. Farther, it is remarkable that the bigness of each bird's fleas bears not adequate proportion to the bigness of the birds they are found upon; but amongst the larger kind of birds may be found a lesser and larger sort of fleas of a different kind; and I remember that I have seen fleas upon a blackbird as large as those found upon a swan.

IF you view fleas when upon their feet, there is not the leaft appearance of a mouth to be discovered, but if you turn them upon their backs, you may discern the situation of their mouth plac'd on the underside of the proboscis or trunk, in the form of a pair of pinchers, much resembling that of the wood-louse. In a word, there is such a wonderful variety of fleas of distinct sorts, so strangely different one from another, that I thought it much better to exhibit 'em drawn upon copper Plates than to give the reader a long and tedious description of them. As to their colour, 'tis generally the same, or very near that of the seathers of the birds on which they are found. 'Tis true I must own I'm of opinion (which experience countenanceth) that sleas when

when they are first bred out of nits are white; but, as they grow bigger, by degrees assume other colours, yet so that preserving the transparency of their bodies. By the help of a microscope, the motion of their entrails, and circulation of their juices may very plainly be discerned.

OF those larger kind of Spiders, Plate (XXXV,) Marian tell us she found very many on the tree Guajava, in which they make nests, representing a caterpiller's web. They are cover'd all over with hair, arm'd besides with sharp pointed teeth, with which they give dangerous wounds, insusing some liquid matter from them at the same time. Pismires are their common food; in scarcity of which they take the little birds out of their nests, and suck out all the blood of their little bodies. They shed their coats now and then, just as caterpillers do, yet were never observ'd to change into the volatile kind. I take this Spider to be the male to N°. 173.



FINIS.

