

Royal Society, by the Hands of Mr. *East* Surgeon, a Member of our Body.

An Account of Mr Mark Catesby's Essay towards the Natural History of Carolina and the Bahama Islands, by Dr Mortimer, R.S. Secr. No. 415. p. 425.

5. Our Author proposes in this Work to give the Figures of the Birds, Beasts, Fishes, Serpents, Insects, and Plants, the greatest Parts whereof have never been described by any Author, or no good Figures given of them. He gives the Description of them in *English* and *French*, with Observations of the Air, Soil, and Water; and an Account of the Agriculture, Grain, Pulse, Roots, and other Productions of the Country, with a Map of the same. He was near four Years in these Parts, where he designed every thing from Nature in their proper Colours: In order to make the coloured Prints almost equal to his Original Paintings, he engraves and colours them with his own Hand.

C H A P. II.

The Structure, External Parts, and Common Teguments, of the Body.

Of the Callus of the Hands and Feet, by Mr Leeuwenhoek. Translated by John Chamberlayne Esq; No. 373. p. 156.

I. **I**N Sept. 1719, feeling an acute Pain in one of my Feet, at the Joint, between the Foot and the little Toe, which I imagined to proceed from the more than usual Thickness of the *Callus*, or hard Skin, upon that part; I caused my Servant, partly with his Nails, and partly with his Penknife, to take it off and let it fall upon a blue Paper. It was composed of little scaly Shivers lying upon one another, and the whole Piece was as large as a small Nail of a Man's Hand. I viewed the said Shivers through a Microscope, but could not satisfy myself, because they lay so irregularly on each other.

I took a little Bit of it, laid it on a clean Glass-Plate, steeped it in pure Rain-Water, and gently dividing it with a Piece of a Quill, I was amazed to see into what a vast Number of Particles it separated, and that with as much Readiness, as if they had never been joined.

Of these Particles, many were of the Figure of a Weaver's Shuttle, being broad in the middle and pointed at each End, with a Line in the middle, like those upon the uppermost or outside Skin of Fruits, or of our Bodies, but generally irregular; they were very thick, in proportion to their Bigness. I took two or three of them and laid them on a clean Glass, and put to them a Drop of Water, as large as a coarse Grain of Sand, and divided the same as well as I was able; and viewing the divided Particles through a Microscope, I was astonished at the prodigious number of exceeding small Particles that occurred

curred to my Sight, and which were of the same Figure as before said.

I took some of the thickest Pieces of the horny Skin, but not half so thick as the Back of a small Knife, and slit them into as thin Slices as I could, and placed them upon a clean Glass, with the Design of discovering the exceeding thin Particles lying upon one another; and having moistened them, they spread themselves out further, and when became dry again, they separated into several Parts; each of which were composed of many thinner Particles lying on each other. In order to have a clearer Notion of the Contexture of those Particles, by which the Skin of the Hands and Feet of those who are inured to hard Labour, or walk much, increases in Thickness, and is surrounded, I caused a small Portion of the aforesaid separated Particles to be drawn, though they were not all so exact and compleat, as they are represented; and according to my best Observation, they had all been separate Pieces, and none of them united to one another. Fig. 61.

Again I placed little Pieces of this hard Skin, which I had cut off at the thickest part of it, before a Microscope, and moistened them with fair Rain-Water when I put them upon the Glass-plate, by which Means they acquired a great Extent; and being dried, they shrunk again, and thereby appeared in several long Particles, and each of them seemed to consist of other long Particles, as they are represented in Fig. 62. So that AB or CD was the Thickness of that piece of thick Skin, which I had cut through. Fig. 62.

From this Observation, I considered with myself, whether one of these long stripe-like Particles, such as appeared to the Eye at AC or BD, might not be the Thickness which the horny Skin had acquired in the Space of a Month; and whether the very thin Particles, which appeared in such a little Stripe, were not the Accretion which the hard Skin received in one Day. This last mentioned little Piece was not so large to the naked Eye as a common Grain of Sand. And whereas I placed before a Microscope another very small piece of Skin, that was something thinner than the former, I could perceive the exceeding thin Particles represented by Fig. 63. which were the *Strata*, or Beds, in which the horny Particles of the Skin lay, and so composed the Thickness thereof. Fig. 63.

For my further Satisfaction, I sent for a Mason's Servant, who was a laborious Workman, and cut out of his Hand, where it was most thick and brawny, two Bits of the hard Skin; and then I slit it into small Slices, and observed easily enough the thin Particles lying upon each other, but could not separate the little Scales, of which each little *Stratum* of the hard Skin consisted, because, as I fancied, through the hard working of the Man, the Particles of the said Skin were so pressed upon one another, and so closely joined, that they could be no longer separated.

As the Hands of the Masons or Bricklayers are often covered with the sharp Salts of the Chalk or Lime, we might prevent the Separation of the very small Parts of the hard Skin; I sent for a Master-Carpenter, who was likewise a diligent Workman, and viewing his Hands, in order to pare off some of the Brawn thereof, I found them as soft in the Palms, as if he had never been used to Labour; upon which I said to him, you wash your Hands very often, I believe; to which he replied, ten times a Day at least, for I hate to see them foul. Then I sent for a Ploughman, who was mostly a Tiller of Corn-Land; this Person's Hands was very hard; I cut two pieces of horny Skin out of them, which after I had done, I cut them in little Bits, but they were so hard, that a sharp Knife, got several Notches in doing it. And I observed that the uppermost part of the Skin was full of little Rents, and all the *Strata* were pressed so closely together, that I could not make any Discoveries therein, save only that the little Beds lay on each other, and that the Thickness of the Skin consisted thereof.

I put the two pieces of hard Skin into warm Water, in order to soften them, and then to separate the Parts from each other, but could not do it, because they were so strongly joined together.

I have several times observed, in washing my Hands, that when I rubbed the Palms of my Hands strongly against one another, with very little Water between them, some Particles would be rubbed off from the Skin, and continue between my Hands.

For my farther Satisfaction in this Matter, I put one of my Fingers into fair Rain-Water, and with that washed the part of my Thumb which is joined to my Hand; after which I rubbed both Finger and Thumb hard against each other, then I gently scraped with a Pen-knife, the Matter, which I had loosened from the Skin by moistening and rubbing it; and taking off a little of that which stuck to the Knife, I put it upon a clean Glass-plate, and setting it before a Microscope, I saw with Astonishment the great number of Particles of Skin, which lay scattered upon the Glass, but were more irregular than those, which I separated from the brawny Skin of my Foot, and which were not very closely pressed together, because I do not walk much.

After this I moistened the back of my Hands, and then rubbed them ten or twelve times against each other, and having so done, I scraped off, with a Pen-knife very gently, some of the Matter I had loosened by rubbing; and placing it on a clean Glass, I viewed it with a Microscope, after having separated the Particles of the said Matter from each other with a little Water, and discovered abundance of little Scales which come off our Hands.

As the Skin of my Hand is in no part thicker than that, which is upon my Thumb next to the Nail, having in my advanced Age, chiefly used my Thumbs in the Examination of Microscopical Objects, I made
one

one of my Thumbs a little moist, and rubbed the other against it, and placed the rubbed off Matter before a Microscope, through which I observed such a prodigious number of Particles, like those represented by *Fig. 61* but all irregular, that no Man can conceive it without having seen it.

Now as we find that such a Quantity of Particles is separated from the Hands, and is daily renewed in a well constituted Body; we must conclude, that we eat several of the said rubbed off Particles in our Bread, and that they turn to Nourishment; and I am of Opinion, that there is hardly any Food prepared for us, especially such as passes pretty much through the Hands, but that some of the rubbed off Particles are mixed therewith, especially when they knead Dough from Meal or Flower; and still more, when the Bakers knead with their Feet, as in making of Rye-Bread.

Since these Observations concerning rubbing of my Hands, I take more notice thereof, when I wash and dry them, than formerly; and I stand amazed at the numerous Particles that daily separate themselves from my Hands, and grow on them again; and at the particular Provision, that is made for producing these Particles, in the Palms of our Hands and Bottom of our Feet, whereas we do not by far meet with such a Quantity of Particles constantly produced in other Parts of our Body; for we observe those, who work much with the back of their Hands, we shall not meet with any of that hard Skin we have been speaking of, but only a kind of Tumor, or rising, as the Dry-sheerers, of those who dress Cloth, have upon their left Hands.

The Manner of the Production of these small Particles will be a Mystery to us, though our Hands and Feet must be fortified with such a Matter, to enable them to support all that Force, and Pressure, which they are obliged to undergo.

II. A Country Labourer, living not far from *Euston-Hall* in *Suffolk*, shewed a Boy (his Son) about fourteen Years of Age, having a cuticular Distemper, of a different Kind from any hitherto mentioned in the Histories of Diseases.

His Skin (if it might be so called) seemed rather like a dusky coloured thick Case, exactly fitting every part of his Body, made of a rugged Bark, or Hide, with Bristles insome Places, which Case covering the whole excepting the Face, the Palms of the Hands, and the Soles of the Feet, caused an Appearance as if those alone were naked, and the rest cloathed. It did not bleed when cut or scarified, being callous and insensible. It was said he sheds it once every Year, about Autumn, at which Time it usually grows to the Thickness of three Quarters of an Inch, and then is thrust off by a new Skin which is coming up underneath.

It was not easy to think of any sort of Skin, or natural Integument, that exactly resembled it. Some compared it to the Bark of a

Of a Distempered Skin.

Tree; others thought it looked like Seal-Skin; others like the Hide of the Elephant, or the Skin about the Legs of the Rhinoceros; and some took it to be like a great Wart, or Number of Warts uniting and overspreading the whole Body. The bristly Parts, which were chiefly about the Belly and Flanks, looked and rustled like the Bristles, or Quills, of a Hedge-Hog, shorn off within an Inch of the Skin.

His Face was well featured, and of a good Complexion, if not rather too ruddy; and the Palms of his Hands were not harder, or in worse Condition than is usual for Workmen or Labourers. His Size was proper for his Age; his Body and Limbs strait, and, excepting as to this Deformity, well shapen.

This rugged Covering gave him no Pain or Uneasiness, unless that sometimes after hard Work, it was apt to start and cleave, and cause a Bleeding. And notwithstanding the unusual Disposition of his Humours to form so strange an Integument, his natural Excretions were said to be in the ordinary Course and Manner, without any thing remarkable attending them.

The Father knew of no Accident to account for this Distempered Habit. But said, that his Skin was clear at his Birth as in other Children, and so continued for about seven or eight Weeks, after which, without his being sick, it began to turn yellow, as if he had had the Jaundice; from which by degrees it changed black, and in a little time afterwards thickened, and grew into that State it appeared in at present. That he has been in Health from his Birth, and hath no Sickness at the Season when he sheds it. He further said, that his Mother had received no Fright, to his Knowledge, whilst she was with Child; and hath born him many Children, none of which have ever had this, or any other unusual Distemper or Deformity.

Fig. 64. Represents the Back of the Boy's Hand. Fig. 65. Represents a Portion of this extraordinary Epidermis, which was probably a Prolongation of the Nervous Papillæ, grown to about the Size of common Twine Packthread; and these standing as close together as the Bristles in a Brush, seemed, like them, to be all shorn off even, and of the same Length, viz. about half an Inch above the Skin. Fig. 66. Shows some of these Bristles, or Stumps, magnified; where it is visible that some of them are flat at Top, others concave; some pointed like a Cone, and others very irregular.

Extract of several Letters and Certificates sent the King, concerning a very par-

III. *Jeremias Rudolph von Walthausen*, a Captain of the Garrison at Danneberg, near Lunebourg, was born Oct. 24, 1680, with a very singular Mole upon his right Arm, Shoulder, and Hind-part of his Side, not unlike the Branch of a Vine, with it's Leaves and Grapes. It hath been affirmed and attested, both by the deceased himself,

himself, and several of his Relations and Friends, that his Mother, when big with Child, had an earnest Desire for Grapes, and impatient to stay, till they were full ripe, went down into the Garden to pull off some of those unripe; whereupon it happened, that a whole Branch, with it's Leaves and Grapes, suddenly fell down upon her right Arm, which much frightened her. Some Time after she was brought to Bed, and the Child was observed to have several reddish or bluish Spots, beginning from behind his Shoulder, and from thence running over the same, down the right Arm to the Fingers. The Captain's whole right Side was bigger than the left by an Inch and upwards, and so continued to his Death. The Veins of the right Arm were much raised, lying almost immediately under the *Cuticula*, which made them very conspicuous, they were, besides, very much distended, chiefly between the Elbow and Hand, where they were almost as big as a Man's Thumb. On the Inside of the fore Finger the Vein was extended into a small Tumour, of a reddish, or purple blue, Colour, about the bigness of a Nutmeg, corrugated with some lenticular Protuberances, which made it in some measure resemble a Grape. The like Tumours, but not so big, were observed in several other Parts of the Arm, in the Spring Time; and, as they thought, when the Sap began to enter the Vines, as also when the Vines flowered, and, in *Autumn*, when the Wine was fermenting, the Captain was taken ill, with violent and itching Pains, in the affected Arm, for some Days. The whole right Side then swelled more than usual, and the Veins and Tumours above-mentioned were so distended with Blood, that at last, a ferous Matter was forced out of the Pores of the said Tumours, which as it gave the Patient some Relief, so he promoted it, by scraping the Tumours with the Edge of a Penknife. If the Captain held up his affected Arm, the Running of the Blood backwards in the distended Veins was very visible. If he held his Arm down again, the Blood returned with some Noise, and sensibly filled the Vessels, which by the preceeding Action had been emptied. For this Reason, the Captain, when he was in Bed, was obliged to lay his Arm upwards. In *February* last, the Captain was again taken ill with the violent Pains, and a strong sensible pushing of the Blood into the affected Arm; for both which, they being not only more violent, but continuing longer than usual, he was advised to be let Blood on his left Arm; as this did not immediately relieve him, they applied, at his Desire, externally, *Epithemata* of Plants boiled in Wine; this eased his Pains, and made him somewhat more quiet, so that he could walk about the House, but he nevertheless continued restless for some Days, and was, on *Saturday* the 17th of *February*, S. N. early in the Morning, seized with a violent Oppression of his Breast, which in a few Minutes made an End of his Life. The Surgeon, then present, did not bleed him, but gave

*ticular Nævus
Maternus, or
Mole. Com-
municated by
Dr Steigertahl,
F. R. S. No.
389. P. 347.*

him only some spoonfuls of a strong Cordial Mixture, which he happened to have about him, and of which the Patient, with much Difficulty, could swallow but a small Part. He was, when he died, 44 Years, 3 Months, and 24 Days old; he was otherways a strong robust Man, much given to Fatigue, and discharged with great Bravery all the Duties of a good Soldier, as appeared by his Conduct throughout the last War.

An Account of a
Book, entitled
Adversariorum
Anatomico-
Medico-Chi-
rurgicorum
Decas tertia.
Auctore Frede-
rico Ruysch,
M. D. Ana-
tom. & Botan.
Prof. Amstel.
R. S. S. No.
379. p. 428.

IV. In § 8. He treats of the *Epidermis*, or Scarf-Skin, with a good Method of separating it for publick Demonstrations. He takes off a Piece of the whole Skin, and nails it upon a Board with the Outside uppermost, and then puts it into boiling Water, which raises it so, that with a blunt Knife it is easily separable, which is a much better Way, than that of burning and blistering. He says, the different Colours of the Skin are owing to the *Corpus Reticulare*, which in Blackmoors is perfectly black, in Moors of a tawny Colour, in white People perfectly white. The *Epidermis* is ever found absolutely void of Blood-Vessels: Upon which occasion he charges Mr *St Andre*, with falsely asserting he has Preparations which shew these Vessels, and has pretended to show them to some of his Countrymen the *Dutch*. He adds, that he guesses the Occasion of his Mistake to be thus: The Skin of new-born Infants, in some certain Places, if it be carefully separated from all Fat, is so fine and thin, that it becomes like the *Epidermis* in Adults. This no doubt is extremely full of Vessels, and is what he has imagined to impose upon Mr *St Andre*.

C H A P. III.

The H E A D.

Observations
on the Brains
of three Per-
sons, who died
of the Epilepsy,
by Dr Walte-
rus Curiensis
Rhætus, No.
399. p. 315.

I. **V**IR 35. *Annorum*, temperamenti & habitus gracilis, abhinc duobus annis correptus dolore gravativo capitis in parte anteriore versus frontem & à D. Professoribus multa ac multa remedia accepit, sed frustra: transactis duobus annis Hæmorhagia narium Larga contigit, quæ tamen spontè cessavit. Post Hæmorhagiam amisit sensum olfactorium, & postea correptus fuit per duos annos Paroxysmis Epilepticis sæpiùs ingruentibus, denique mortuus est.

Seçto cranio, vidimus Cerebrum in parte anteriore versus *Duram Matrem* circa Regionem *Cristæ Galli*, in parte dextrâ durum & callosum, & arctissimè cum *Meninge durâ* connexum: in parte Cerebri anteriore

teriore versùs sinistram partem, inventa fuit extravasatæ materiæ sanguinæ aliqua quantitas, reliqua naturalia.

Anasarca laborans Mulier 60 annorum vehementissimis iisque sæpè repetitis acerbissimis *Insultibus* correpta obiit. Secto cranio, invenimus intrà *Piam Meningem* & Cerebrum, atque in anterioribus Cerebri ventriculis magnam satis extravasatæ lymphæ quantitatem, ut eâ ventriculi fermè turgidi fuerint. In *Plexibus Choroideis* conspectui sese tradidere plurima corpuscula albicantia, pellucida, serum aquosum in se continentia, variæ magnitudinis; maxima ad magnitudinem seminis *Cannabini* majoris accedebant.

Dissecto Cranio *Vetulæ* alicujus quæ per multorum annorum tractum. *Epilepsiæ* valdè obnoxia erat, vidimus intra *Piam Matrem* & Cerebrum, mediocrem *Seri* extravasati copiam, in anterioribus autem Cerebri ventriculis tanta talis *Seri* quantitas fuit, ut crepaturam illorum quasi minabatur. *Plexus Choroideus* instar veri racemi apparebat uterque; vesiculæ inibi plurimæ, rotundæ, pellucidæ, & variæ magnitudinis nobis visui sese obtulère, & instar elegantissimarum apparabant *Perlarum*.

II. 1. On the 13th of *July* in the Year 1720, he couched a *German* Soldier of Cataracts in both his Eyes, who immediately after the Operation recovered the Sight of both, and continued to see till his Death, which happened of an acute Illness, on the 6th of *April* this present Year. Upon this, Signor *Benevoli* took the Eyes out of their Orbits, in order to examine whether the Cataracts consisted of a membranous Pellicle, as some Writers maintain; or, as others pretend, of a preternatural Opacity in the Crystalline Humour. Upon a careful and very exact Examination of all the Contents of it, he could not find any such thing as a Pellicle within it, but discovered a small yellowish Body at the bottom of the Bulb of the Eye, of a lenticular Shape, without Adhesion to any of the other Parts of the Eye, which, upon taking it out, appeared to be the Crystalline Humour grown opaque, and something less than it's natural Size, having two or three small Dents in it's Circumference, which it had received from the Needle during the Operation of couching.

The next Day he examined the right Eye in the same manner, in the Presence of several eminent Physicians and Surgeons, and other curious Persons, whom he had invited to the Demonstration, and found in it the Crystalline grown opaque and depressed in the same manner as the former, to the bottom of the Eye, still carrying the Marks of the Needle evidently upon it, but found no Pellicle within the Eye, notwithstanding the most diligent Search he could make for it. He farther relates, that having formerly made Experiments upon the Eyes of dead Subjects; he had introduced the Needle into the Eye in the same Place, and in the same Manner, as is commonly practised in the Operation of couching, and having afterwards dissected the same Eyes, he had always found, that the Needle had passed

An Account of a Letter from Sig. Antonio Benevoli to Dr Valsalva, containing two Observations upon Cataracts, printed in Italian at Florence. 1722. N^o. 393. p. 194.

into the Eye on the back side of the Crystalline Humour, so that it had been impossible to bring the Needle forward from thence into that Part of the aqueous Humour, which is seated between the *Uvea* and the Crystalline Humour, in order to depress a Pellicle seated there, according to the common Opinion, unless he would have passed his Needle through the Body of the Crystalline.

He likewise observes, that the aforesaid Space, between the *Uvea* and the Crystalline Humour, is so very narrow, that though he finds it not impossible to introduce a Needle into that Space, yet there is by no means room enough to turn the Needle up and down in all Directions, with that Freedom, that is used in couching Cataracts, without wounding either the *Uvea*, or the Crystalline.

Lastly, He observes, that in his Practice of couching Cataracts for many Years, having generally couched about twelve or fourteen in a Year, he had always found, that he worked upon a hard and resisting Substance, which being tenderly touched by the Needle, would vibrate and fluctuate backwards and forwards, and would sometimes return against the Needle with a sensible *Impetus*, which by no means agrees with the common Notion of the Cataract's consisting in a Pellicle or membranous Substance.

Of the Dissection of an Eye with a Cataract. By Mr John Ranby, Surgeon. No. 381. p. 36.

2. Sept. 21, 1723, I was consulted by one *William Sollars*, aged Fifty, who complained of a Decay in his Sight; upon examining his Eyes, I found two Cataracts, that in his right Eye almost ripe, the other just forming. There being no other obvious Method of relieving him, I proposed the Operation, but first advised him to consult some others of the Profession, and accordingly he advised with Mr *Tanner*, who upon viewing his Eyes, declared them both Cataracts, but neither of them as yet was fit for the Operation. In the mean time the poor Man fell ill of a Fever, and died the 2d of *March*. I procured the right Eye, in which the Cataract was most confirmed, in order to make an exact Dissection of it: In examining it, I found the Aqueous and Vitreous Humours in their natural State, but the Crystalline was opaque and of a foul Pearl Colour, and more solid Substance than in it's natural State. The generally received Opinion, that a Cataract is a Film growing behind, or sometimes before the Pupil, made us examine both Chambers of the Aqueous Humour, with the utmost Exactness. but all to no Purpose, for the Aqueous Humour had it's natural Transparency, nor could we observe any thing preternatural either on the *Iris* or *Uvea*, except too great a Contraction of the Pupil. This very much strengthens the Opinion of *Maitrejan*, *Brisse*, *Heister*, and *Valsalva*, who have severally asserted, that a Cataract is only an Opacity of the Crystalline Humour, and that it naturally proceeds from a ferous Acid, which so far astringes and corrodes it's Substance as to destroy it's Transparency. This, *Maitrejan* confirms by an Experiment of emerging the Crystalline Humour in a Composition of three Parts Water and one of *Aquafortis*, by which he tells us it may be

be rendered hard and opake; but in this Point I cannot help siding with the learned Dr *Pitcairn*, who has sufficiently proved, that there is no such serous Acidity in an animal Body. To me nothing seems more easy than to deduce this Opacity of the Crystalline Humour from an Inflammation in the Blood, or an increased *Momentum* in the Fluids, with which it is supplied: For in that Case grosser Particles, inconsistent with the Transparency, may be impelled into the Lymphatic Vessels of which it is composed; and that there is an Inflammation is sufficiently demonstrated from hence; first, the Patient feels often a pungent Pain in the Eye, which as it is generally the forerunner of a Cataract, so it certainly indicates an Inflammation of the Part. Secondly, Those *Maculæ*, which appear as it were swimming in the Air, plainly prove that there are opake Particles already entered the Lymphatic Vessels, which compose the Vitreous Humour.

Thirdly, the *Iris*, whose Colour arises from the Blood Vessels, as it changes from a lighter to a darker Colour, shews the Violence of the Inflammation, and is therefore esteemed a Symptom of the worst Consequence.

3. *Johannes Wright*, senex milesque emeritus, suffusione seu Cataractâ utriusque oculi laborans, visu tandem omnino privatus est. Curæ se commisit Domini *Caywood*, Oculistæ *Dubliniensis*, qui acu punctoriâ oculum utrumque perforavit ad Crystallinum è sede suâ depri-mendum. Operatione verò in oculo dextro minus feliciter succedente, sinistri usum solummodo recuperavit. Paucis mensibus post operationem peractam, in hospitium regale militum emeritorum prope *Dublinium* receptus est, ubi per annos octo vel novem mansit, & per totum istud tempus, visus aciem satis acutam habuit, adeo per urbem solus ambularet, & sodalium facies distinguere possêt. Mortuus est tandem 5^o die Aprilis 1722. suffocatus per casei morsulum hærentem in gula, quam adeo arctam habuit, ut eundem mortis aditum paucis abhinc annis bis ægre evaserit: Oculi ejus, e cranio exempti, missi sunt per Nosocomii Chirurgum ad *Thomam Molyneux* Medicinæ Doctorem, Collegii Med. Regalis in *Hibernia* Socium, & in *Academia Dubliniensi* Medicinæ Professorem. In ædibus ejus cultro Anatomico aperti sunt, per Oculistam supradictum, meque, ut interesset operationi, accersere dignatus est. In oculo sinistro (cujus aciem recuperatam fuisse supra notavimus) sublatâ corneâ cum portione tunicæ scleroticæ, ne vel minimum invenimus rudimentum pelliculæ in aqueo humore fluctuantis, aut limbo iridis adnatæ, sicut se observasse scribit *Wolboutsius*. Quod vero multo magis mirandum est, nullæ profus reliquiæ inventæ sunt humoris Crystallini, cujus opacitati morbum adscribit Doctor *Briffeus*. Humor Vitreus, quoad situm & consistentiam, nihil præternaturale oculis nostris exhibuit; tunica choroidea & retina fusci coloris erant tam intus quam extra. In oculo dextro eadem omnia observavimus; nullum nempe pelliculæ aut Crystallini rudimen-

Two Eyes with
Cataracts dis-
sected. Commu-
nicated by Sa-
muel Moly-
neux, Esq;
F. R. S. No.
384. p. 149.

tum occurrebat. Tunica cornea rugosa erat & flaccida, quod aqueus humor per puncturam extravasatus, numquam renovatus sit: adeoque istius oculi usum amisit penitus. Crystallini vero defectum quod attinet, res est prorsus inaudita, neque ab ullo Anatomico, quantum scio, defuisse observatus est, vel leviter suspectus. Militem hunc Crystallinum habuisse in utroque oculo ante operationem, nullus dubito; cum vero acu a sede sua detrusus est, ligamentis ciliaribus vasisque, quibus nutrimentum hausit, penitus disruptis, eum sensim contabuisse credo, tandemque in auras dissipatum fuisse. Summopere vellem hanc rem experimento sæpius iterato confirmatam esse: suspicor enim idem semper evenire statim tempore post depressum Crystallinum.

Hoc certo constat ex hac historia, hominem nempe absque Crystallino videre posse, contra opinionem *Wolbousii*, eaque amplius confirmatur sententia D. Doctoris *Briffei* de Cataracta.

Of the Substance of a Cataract, by Dr Walterus Curiensis Rhætus. N° 399 pag. 317.

4. Vetula circiter 50 annorum, dum viveret, fistebat *Cataractam veram* in oculo sinistro, Coloris *Perlacæi*, magnitudine mediocri, ita tamen ut aliquantisper plusquam dimidiam, eamque mediam *Pupillæ* partem occupabat, vidi manifestè eam Cataractam retrò *Uveam*, & in 2dâ oculi *Camerâ* esse suspicabar. Interrogatus à *Santorino*, in præsentia decem plùs minùs Medicorum, quid iudicium meum sit de hac *Cataractâ*, an sit *Cuticula* vel *Crystallini* vitium? respondi, me potiùs pro *Cuticulâ* habere quam pro *Crystallini* vitio, attamen id absolutè & indubiè affirmare nolle, quoniam signum Pathognomonicum non datur. Respondenti mihi ridere cœpit, quod audeam aliquid de *Cuticulâ* sive *membranulâ* statuere, persuasus enim est ipse, *Heisteri Systema* certum esse &c. *Mortuâ dissectâ*, *Crystallinus humor* erat pellucidus quibusvis institutis experimentis, nec ullâ maculâ aut minima obfuscatione imbutus; erat equidem per totam ipsius molem ubique & æqualiter levissimè, citrino Colore perfusus, vix namque aliquid hujus Coloris apparebat, in vivis adhuc existente *Vetulâ*. *Cuticula* eadem *Libera* in nominatâ *Camerâ* existebat, & non nisi duâbus subtilissimis fibrillis *Uvæ* adhærebat: *Pupilla* naturali quoque aliquantulum major reperta.

A partial Sight of Objects, by Abraham Vater, Prof. Med Wittemb. F. R. S. N° 384. P. 147.

III. Fæmina mediæ ætatis, anno superiori, a retro-pulsa, par balneum, & subsequens refrigerationem, Coryza, unica nocte incidit in cataractam nigram, seu guttam serenam: nam mane e somno exprorecta, usu oculorum orbatam se sentit, nullo extrinsecus in oculis vitio apparente. Post usurpata vero medicamenta varia laxantia & sanguinem purificantia, interpositis simul vesicatoriis, una cum decenti *Diætâ*, visus sensim rediit ita tamen ut notatu dignæ visus vicissitudines, ac singularia in eo phænomena occurrerent. Primum enim omnes ipsi obvios homines, capite quasi truncatos vidit, solo corpore absque capite in oculos incurrente. Successu temporis, cessante hac observatione, objecta quidem tota, sed quasi per nebulam aut per rete vidit, & hoc cessante, maculas tamen & flocculos oculis obversari percepit. Tandem affectus hic in visum partialem, quo hoc ipso tempore adhuc laborat, degeneravit. Nunc enim, utroque oculo aperto, & versus objectum

jectum directo, illud quidem totum conspiciunt: alterutro vero eorum clauso, pars objecti, macula aut nebula rotunda tecta, videtur, quæ macula tanto major apparet, quo longius oculus ab objecto removetur. Prout autem oculus sive dexter, sive sinister, occluditur, semper quidem media objectorum pars, at diversa, obscuratur. Ita si, exempli gratia, has tres voces in charta scriptas (*Ego sum cæca*) intueatur oculo sinistro tantum, pupilla versus mediam vocem *Sum* directa, hæc in visum non incurrit, sed tantum duæ voces *Ego* — *cæca* conspiciuntur. Pupilla vero versus vocem *Ego* directa, hæc evanescit, ita ut tantum — *Sum cæca* videat. Quod si e contrario oculum sinistram claudat, & oculum dextro inspiciat objectum, tunc medium quidem pariter obscuratur, ita tamen, ut tantum pars quarta visum fugiat, tribus partibus clare conspectis. Ita si, exempli gratia, oculo huic objiciat has quatuor voces, in charta scriptas, (*Ego opto esse sana*) tunc pupilla ad medium directa, omnes voces videt, præter vocem *opto*, quæ macula itidem rotunda obscuratur, & videt ægra ita tantum, *Ego esse sana*. Quoniam ergo ex hoc casu apparet, maculam illam rotundam, qua pars objecti obscuratur, esse fixam quidem, sed pro varia pupillæ directione locum mutare, dubium videtur, utrum vitium in humore crystallino, an in tunica retina hæreat? In tunica quidem cornea nulla obscuritas aut macula patet. Majoris vero momenti, ac explicatu difficilior videtur antecedens phænomenon, ubi ægra totum hominis corpus, excepto tantum capite, conspexit.

IV. Though we say of the Gentleman that he was blind, as we do of all People who have ripe Cataracts, yet they are never so blind from that Cause, but that they can discern Day from Night; and for the most Part in a strong Light, distinguish Black, White, and Scarlet; but they cannot perceive the Shape of any thing; for the Light by which these Perceptions are made, being let in obliquely thro' the aqueous Humour, or the anterior Surface of the Crystalline (by which the Rays cannot be brought into a *Focus* upon the *Retina*) they can discern in no other Manner, than a sound Eye can thro' a Glass of broken Jelly, where a great Variety of Surfaces so differently refract the Light, that the several distinct Pencils of Rays cannot be collected by the Eye into their proper *Foci*; wherefore the Shape of an Object in such a Case, cannot be at all discerned, though the Colour may: And thus it was with this young Gentleman, who though he knew these Colours asunder in a good Light; yet when he saw them after he was couched, the faint Ideas he had of them before were not sufficient for him to know them by afterwards; and therefore he did not think them the same, which he had before known by those Names. Now Scarlet he thought the most beautiful of all Colours, and of others the most gay were the most pleasing, whereas the first Time he saw Black, it gave him great Uneasiness, yet after a little Time he was reconciled to it; but some Months after, seeing by Accident a Negroe Woman, he was struck with great Horror at the Sight.

Observations made by a young Gentleman, who was born blind, or lost his Sight so early, that he had no Remembrance of ever having seen, and was couched between 13 and 14 Years of Age, by Mr W. Cheffelden, F. R. S. No. 402. p. 447.

Observations made by a young Gentleman who was blind.

When he first saw, he was so far from making any Judgment about Distances, that he thought all Objects whatever touched his Eyes, (as he expressed it) as what he felt, did his Skin; and thought no Objects so agreeable as those which were smooth and regular, though he could form no Judgment of their Shape, or guess what it was in any Object that was pleasing to him: He knew not the Shape of any Thing, nor any one Thing from another, however different in Shape, or Magnitude; but upon being told what Things were, whose Form he before knew from feeling, he would carefully observe, that he might know them again; but having too many Objects to learn at once, he forgot many of them; and (as he said) at first he learned to know, and again forgot a thousand Things in a Day. One Particular only (though it may appear trifling) I will relate; having often forgot which was the Cat, and which the Dog, he was ashamed to ask; but catching the Cat (which he knew by feeling) he was observed to look at her stedfastly, and then setting her down, said, So Puss! I shall know you another Time. He was very much surprized, that those Things which he had liked best, did not appear most agreeable to his Eyes, expecting those Persons would appear most beautiful that he loved most, and such Things to be most agreeable to his Sight that were so to his Taste. We thought he soon knew what Pictures represented, which were shewed to him, but we found afterwards we were mistaken; for about two Months after he was couched, he discovered at once, they represented solid Bodies; when to that Time he considered them only as Party-coloured Planes, or Surfaces diversified with variety of Paint; but even then he was no less surprized, expecting the Pictures would feel like the Things they represented, and was amazed when he found those Parts, which by their Light and Shadow appeared now round and uneven, felt only flat like the rest; and asked which was the lying Sense, Feeling or Seeing?

Being shewn his Father's Picture in a Locket at his Mother's Watch, and told what it was, he acknowledged a Likeness, but was vastly surprized; asking, how it could be, that a large Face could be expressed in so little room, saying, it should have seemed as impossible to him, as to put a Bushel of any thing into a Pint.

At first he could bear but very little Sight, and the Things he saw, he thought extreamly large; but upon seeing Things larger, those first seen he conceived less, never being able to imagine any Lines beyond the Bounds he saw; the Room he was in he said, he knew to be but part of the House, yet he could not conceive that the whole House could look bigger. Before he was couched, he expected little Advantage from Seeing, worth undergoing an Operation for, except reading and writing; for he said, He thought he could have no more Pleasure in walking abroad than he had in the Garden, which he could do very safely and readily. And even Blindness he observed, had this

this Advantage, that he could go any where in the Dark, much better than those who can see; and after he had seen, he did not soon lose this Quality, nor desire a Light to go about the House in the Night. He said, every new Object was a new Delight, and the Pleasure was so great, that he wanted Ways to express it; but his Gratitude to his Operator he could not conceal, never seeing him for some Time without Tears of Joy in his Eyes, and other Marks of Affection: And if he did not happen to come at any Time when he was expected, he would be so grieved, that he could not forbear crying at his Disappointment. A Year after first seeing, being carried upon *Epsom Downs*, and observing a large Prospect, he was exceedingly delighted with it, and called it a new Kind of seeing. And now being lately couched of his other Eye, he says, that Objects at first appeared large to this Eye, but not so large as they did at first to the other; and looking upon the same Object with both Eyes, he thought it looked about twice as large as with the first couched Eye only, but not double, that we can any Ways discover.

V. *Fig. 67* and *68*, represent the Figures of two Eyes, on which a new Operation was performed, by making an Incision through the *Iris*, which had contracted itself in both Cases so close, as to leave no Pupil open for the Admission of Light.

The Perforation in the Eye, *Fig. 67*, was made a little above the Pupil, the closing of which ensued upon the putting down a Cataract, which not knowing how low it might be lodged, I made the Incision a little higher than the Middle, lest any Part of it should lie in the Way.

The Eye, *Fig. 68*, was one I couched not long before, where the Patient had been blind but a few Years. At first he thought every Object further from him than it was; but he soon learned to judge the true Distance, the Cause of which I shall endeavour to explain by *Fig. 69*, in which let the Circle *A, B, C*, represent the Eye, *A* the Place where an Image through the natural Pupil *B* was represented from the Place *E*; now the artificial Pupil being at the Place *C*, the Object at *D* is now painted at the Place *A*, where the Object *E* was also to be perceived; therefore it was, I suppose, that the Patient mistook the Place *D* for the Place *E*.

Fig. 70, Is a sort of Needle with an Edge on one Side, which being passed through the *Tunica Sclerotis*, is then brought forwards through the *Iris* a little farther than *F*. This done, I turn the Edge of the Needle, and cut through the *Iris* as I draw it out: The Handle of this Needle is half black, and half white, which though it is not of much Use in this Operation, is very much so in couching Needles, we being thereby able to judge of their Position, when we do not see them.

Fig. 71, Is an Instrument to keep open the Eye-lids. *G* is a Bit of Iron, which as it is moved backward, or forward, the Instrument opens and closes.

An Explication of the Instruments used in a new Operation on the Eyes, by the same. No. 402. p. 451. *Fig. 67 & 68.*

A prodigious
Swelling of the
Eye, by Mr
Jac. Theod.
Klein, F. R. S.
No. 426 p. 429.

VI. Fig. 72, is a Draught is of a prodigious Swelling of the Eye of a Subject of the Princess of Radzivil. This Swelling was occasioned by Hail; and it daily encreases and grows hard, except at the Place marked by the Letter *a*. This Circumstance is very singular, that the Optic Nerve, and the Tunicles have stretched so much, that the Eye quitted it's Socket, and fell down to the Beard, Letter *b*. The unhappy Man is still living, and can move this Eye, which weeps, but, as is no Wonder, cannot see with it. The Tumour is not painful, but it is very troublesome to him about his Nose.

A vast Quan-
tity of Matter
running out of
the Mouth of
a Boy, and
causing a rot-
tiness of the
Cheek-bone,
&c. By Peter
Hardisway,
M.D. No. 400.
P. 374.

VII. Feb. 16. 1724. Advocabar ad Puerulum decennem, qui à sex septimanis febre lentâ decumbemat malè multatus. Præscriptis quæ res postulabat remediis, intrâ sex vel septem dierum spatium à morbo liber evasit: Verùm diebus aliquot elapsis, ingens in Genæ dextræ interioribus subortus est Tumor, puero nihilominùs, quoad cætera benè valente. Ore ejus ægrè diducto, in conspectum veniebat ingens Puris quantitas, at unde manaret, præ Pueri protervia non licuit pro hâc vice explorare. Ideò consulebam tantùm, ut ficum in lacte coctam ad tumorem emolliendum, atque si fieri posset rumpendum admoverent. Mane sequenti Os incredibili ferè puris copiâ, teterrimi odoris (tumore intereâ disrupto) diffluebat. Gargarismate modicè detergente præscripto, circâ vesperum pus pari omninò quantitate atque priùs depluebat. Mirabar sanè unde hoc provenire posset, cùm Ulcus in Genâ tanto proventui nequaquam sufficere videretur; suspicabar autem (foetore præ cæteris suadente) materiæ istius fontem in capite alicubi intrâ ossa latitare: quod cùm paulò diligentius investigarem, ecce Os Maxillæ superioris ad dextras carne (quæ quasi semicocta utrinque recesserat) denudatum prorsus atque Carie correptum, & ex Dentium Alveolis (dentes enim puerulus, ceu inutiles, suis nullo negotio jam extraxerat digitis) hoc materiæ purulentæ profluvium jugiter delabi: quapropter Chirurgus è viciniâ advocatus est, cui committebatur negotium. Huic suadebam, ut dum Ossis medelæ incumberet, Ulceris itidem deterfioni & consolidationi operam daret; verùm quicquid dicerem, nulla quæcunque Genæ suppuratæ adhibere voluit medicamina: quo factum est, ut ea iterum in molem ingentem, atque alterâ (sinistrâ sc.) duplò major citò excresceret. Mandibulæ Cariosæ solummodò penicillum tincturâ quâdam, forsan Myrrhæ, imbutum applicabat. At longo temporis spatio tandem emenso, cùm parùm suâ tincturâ proficerit, hamulo admoto, quod temporius factum debuerat, Os Mali integrum evellebatur. Ab Ossis extractione Gena nequicquam subsidebat, sed potiùs incrementum sumebat, & materiæ purulentæ copia nullatenùs minuebatur. Osse autem abrupto, Ossis Palati dimidium cum Narium Septo absumptum est; parte etiam infimâ Orbitæ oculi simul abreptâ, ut in Iconibus adjectis clariùs ostendere sim conatus. His addendum, quod Tumore Processui Zygomatico superstiti incumbente, Gena mole duplò insignior sinistrâ extat, & oculum pœnè claudit, pure quasi ex fonte perenni indefinenter fluente.

Fig. 73.

Fig. 61.

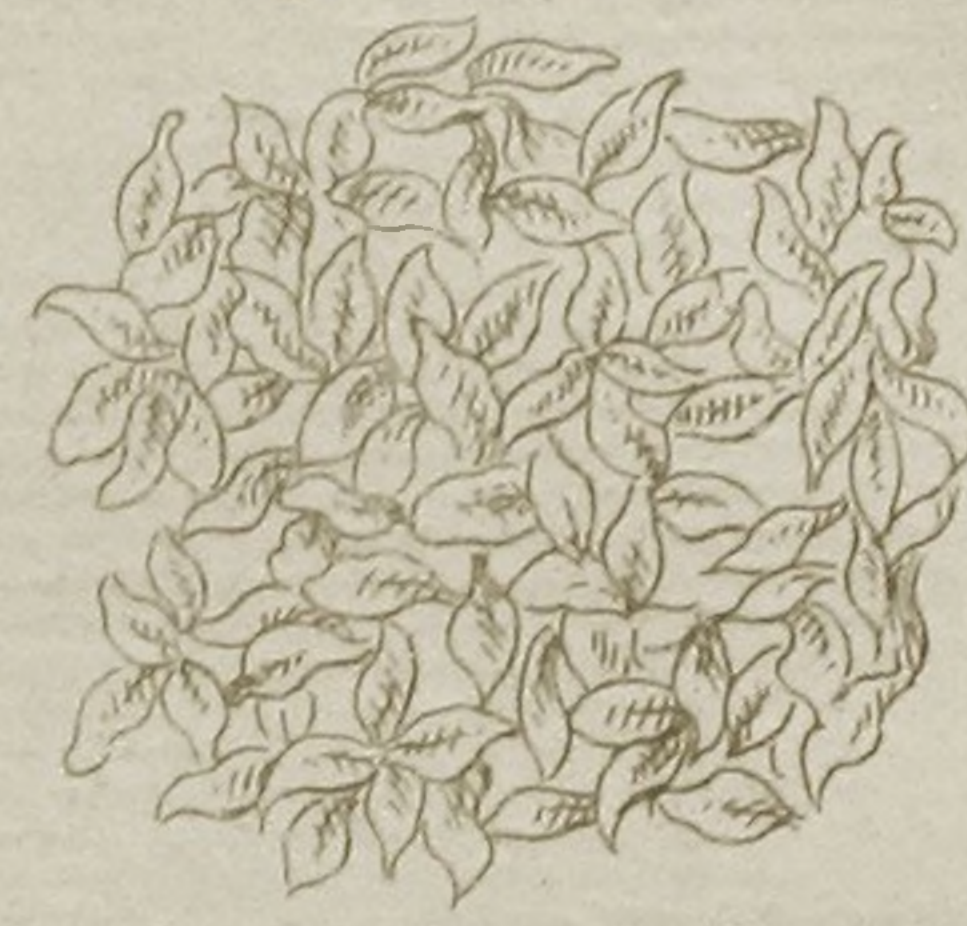


Fig. 63.



Fig. 65.



Fig. 64.

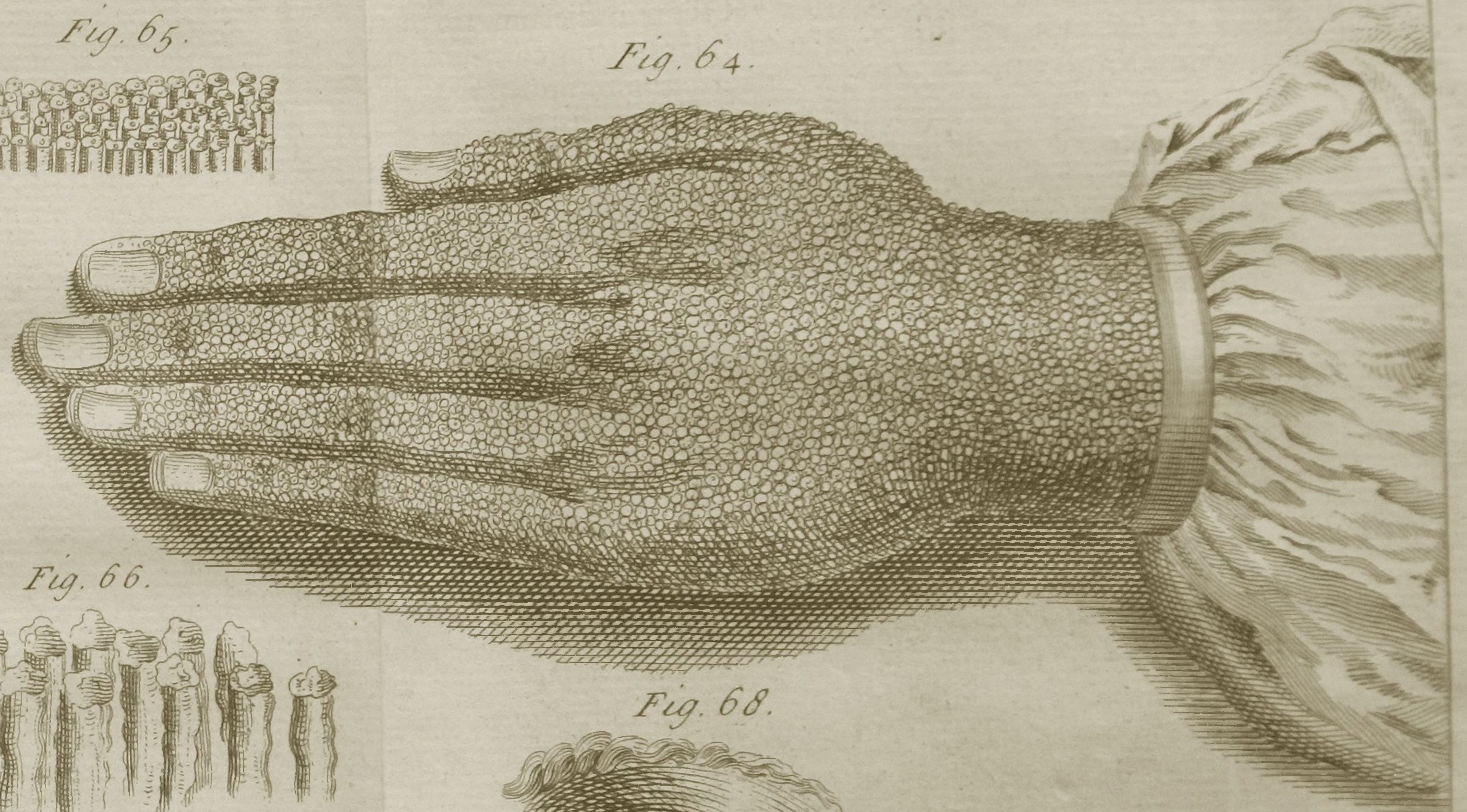


Fig. 66.

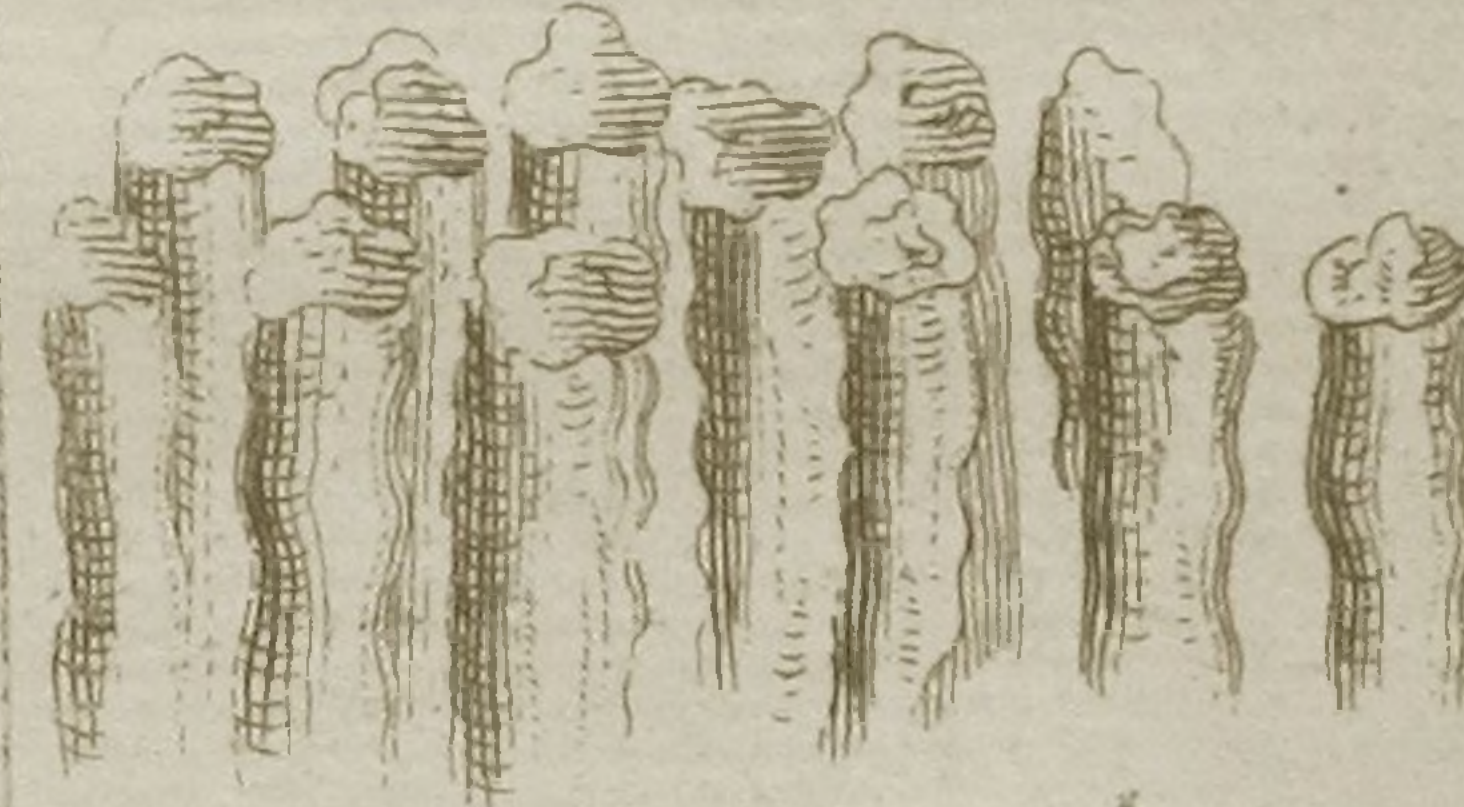


Fig. 68.

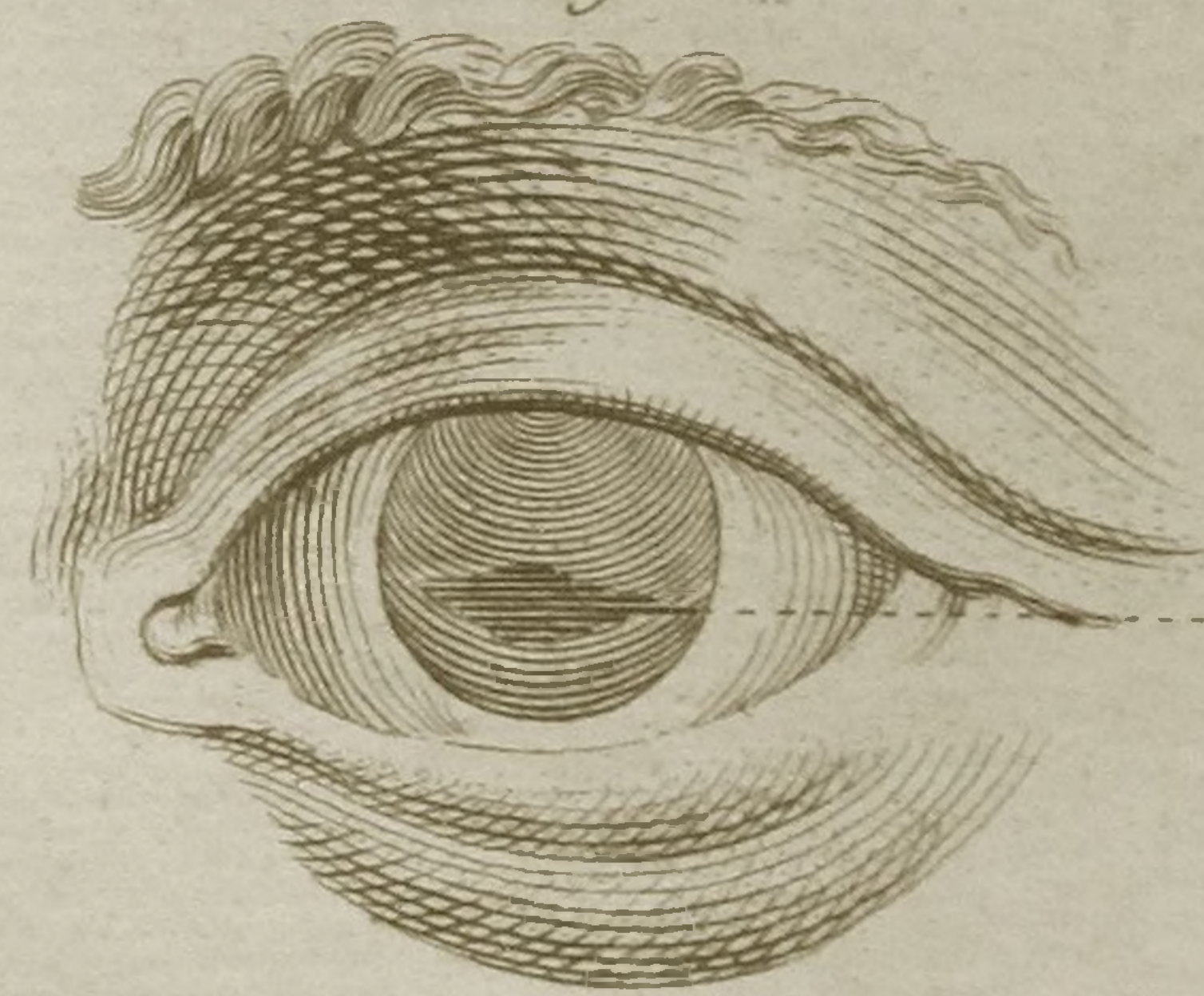


Fig. 67.



Fig. 69.

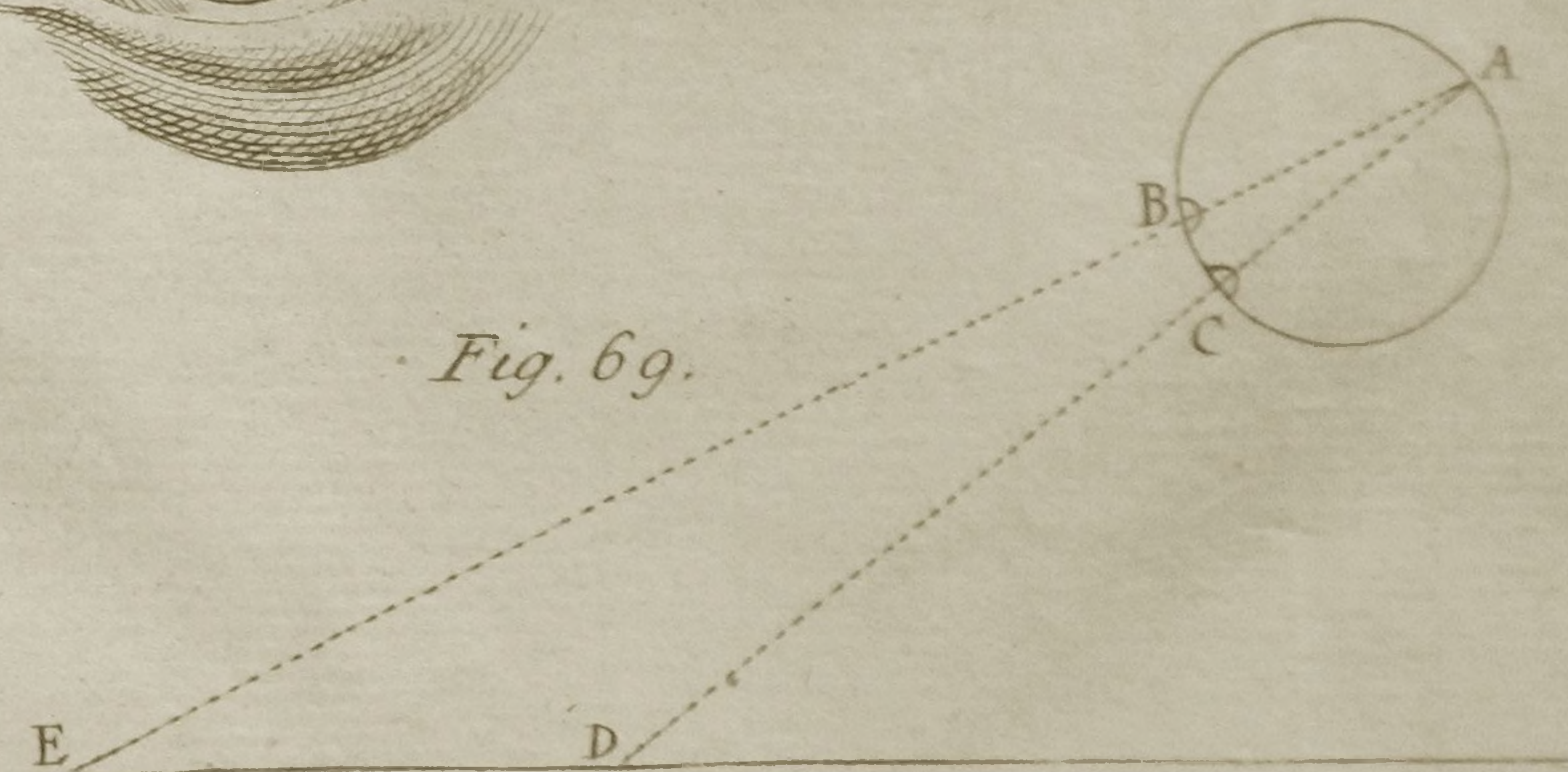


Fig. 73. Facies Ossis externa. a, a, a, a, a, *Alveoli Dentium.* b Fig. 73. *Dens molaris* remotior. c. *Pars Orbitam* oculi faciens. d. *Pars Ossis* ubi abruptum circa *Nasum.* e. *Pars Ossis* ubi *Processus Zygomaticus* terminatur. f. *Pars Ossis* sub *Labium superius.*

Fig. 74. Forma interior Ossis. 1 *Pars ad Nasum* abrupta. 3 *Pars* Fig. 74. *Mandibulæ* exterior & *Dentis alveolos.* 4 *Pars Ossis oculum* attingens. 5 *Pars Maxillæ* remotior. 6 *Pars Naris dextræ, septo* abrupto. 7 *Dens Molaris.*

Fig. 75. Os resupinatum exhibit. D, D, D, D. *Pars Ossis Palati.* Fig. 75. E, E, E, *Alveoli dentium.* F, F. *Pars Mandibulæ exterior.* G. *Pars anterior* ejusdem. H. *Dens Molaris.*

Fig. 76. Facies interior Ossis parùm reclinati. A, A, A, A. *Pars* Fig. 76. *Mandibulæ, & Alveoli Dentium.* B. *Locus* ubi os abruptum circa *Nasum.* C. *Pars Ossis oculum* attingens. D. *Maxillæ* pars remotior. E. *Dens Molaris* remotior. F. *Pars Ossis Palati.* G. *Pars Naris dextræ septo* abrupto, ut in Fig. 74. N^o 6.

Post hæc, idem per Literas die 24. Decemb. 1727. datas *Editorem* certiore fecit. “ *Tumorem* supra descriptum in eodem adhuc re-
“ *manere* statu, *Materiâ Puriformi* Os & *Fauces* prò solito irrigante.
“ *Puer cætera* sanus edit, bibit, dormit, & unà cum aliis suæ ætatis
“ *quotidiè* alacriter ludit.”

VIII. 1. *Fœmina* rustica in Polonia, in terris Principis Radzivil, an-
no ætatis 15^o, viro nupta, incidit 18^o, in morbum Poloniæ Endemi-
um, qui *Plica Polonica* a capillo inenodabili vocatur. Hanc *Plicam*
per 50 annos fœmina gestavit, ac per totum fere illud tempus dolore
arthritico contracturis tandemque marasmo universali corporis afflicta
tecto affixa fuit, tandemque senio confecta anno ætatis 78 diem suum
obiit. *Fœminam* istam adhuc viventem vidit non tantum, & ad vi-
vum depingere curavit, sed ipsam *Plicam* post obitum resectam secum
Wittebergam attulit D. Flouricke dicti Principis Medicus. Erat au-
tem *Plica* quatuor ulnas longa, palmum lata duosque pollices crassa, sed
altero tanto longior foret, ipso referente, nisi magna ejus pars, temporis
quo ægra decubuit diuturnitate, squalore & attritu consumpta fuisset.

A remarkable Plica Polonica,
by Abr. Vater,
M. D. Prof.
Anat. Wittem-
berg, F. R. S.
No. 417. p. 50.
Fig. 77.

2. This stupendous *Plica Polonica*, was sent to *Dresden*, where I
saw it. It is remarkable, that the Woman affected with it, who liv-
ed in the District of *Novogrod*, during 52 Years that she laboured un-
der it, never changed her Resting Place but twice a Year, viz. in
Spring and Winter. Upon the Approach of Winter she could en-
dure Cold so very well, that she shunned all Sort of Heat, even that
of a lighted Candle. She never used any strong Liquor, but lived on
very bad Bread, raw Herbs, and Water, to 70 Years of Age. In
the Spring she used to be carried to some Place where the Heat could
not easily penetrate. She at length died, near two Years ago *.

A farther Ac-
count of the
same, by Mr
Jac. Theodor.
Klein, F. R. S.
No. 426. p.
428.
Fig. 78.

* This is dated July 4. 1730.



Of the Cause
of the Plica
Polonica,
translated
from the High-
Dutch, by Sir
Conr. Sprengell,
M. D.
F. R. S. No.
417. p. 51.

3. The *Plica* has been always thought to be a Distemper, and to proceed from a Fever or Convulsions; but for my Part, from the best Information I could get concerning it, I think it a Product of Nastiness, by not combing their Hair, nor washing their Heads; for if it were a real Distemper, the People of Fashion could no more be free from it than the ordinary People, among whom it only happens. This is confirmed by the following Article in the *Transactions* of the Society of *Breslaw*, entituled *Sammlung von Natur. &c. Anno 1724, Artic. 17, Mense Augusto*, p. 126.

“ The great Multitude of People in *Poland*, who are troubled with
“ this *Plica*, first made me reflect, whether it were a real Disease or
“ no? But I am now convinced, that their swinish way of living, and
“ the common Opinion so deeply rooted in the Generality of People,
“ that this Lock of Hair cannot be taken off without Danger of their
“ Lives, have contributed more to this Complaint than any real In-
“ disposition of Body; considering that it is the middling or poor
“ People, who are troubled with it; whom then one cannot look on
“ without Horror: But no *German*, of whom great Numbers live in that
“ Country, ever had any such thing grow. Many of them, who are
“ married to Women of *Polish* Birth, are scarce able to persuade their
“ Wives not to train up their Children to this Nastiness. Not long
“ since I saw a Fellow in the Church, who had about seventy of such
“ Locks hanging down from his Head, which were as hard twisted,
“ as so many Penny Cords; that one might easily have taken his for
“ for a *Medusa's* Head; and who knows, but that, in ancient Times,
“ some such Locks as these might have given Rise to the Poetical
“ Fiction of Snakes growing on the Head instead of Hair? Be that
“ as it will, this is certain, it is a most odious Sight.”

IX. The Author tells us, he first found out the Fabrick of the cortical part of the Brain; that it is made of small pulpy Canals from the End of the Arteries.

Account of a
Book, entitled,
Adversario-
rum Anatomico-
Medico-
Chirurgico-
rum Decas ter-
tia. Auctore
Fred. Ruysch,
M. D.

Anat. & Bot.
Prof. Amstel.
R. S. S. No.
379. p. 428.

C H A P. IV.

The NECK and THORAX.

Account of the
Operation of
Bronchotome,
as it was per-
formed at St
Andrews, by
George Mar-
tin, M. D.
No. 416. p. 448

I. A Young Lad being in a good State of Health, was all of a sudden taken ill with a violent Trouble in his Throat; in which however, I could see nothing wrong, the *Amygdalæ*, and other Parts in view, being in all Appearance sound enough, but only looking a little drier than ordinary; without any external Tumour appearing about the *Larynx*, and no considerable Frequency or Strength in his Pulse. But he had great Pain and a *Dyspnœa*, with an Impossibility of swallowing

Fig. 70.

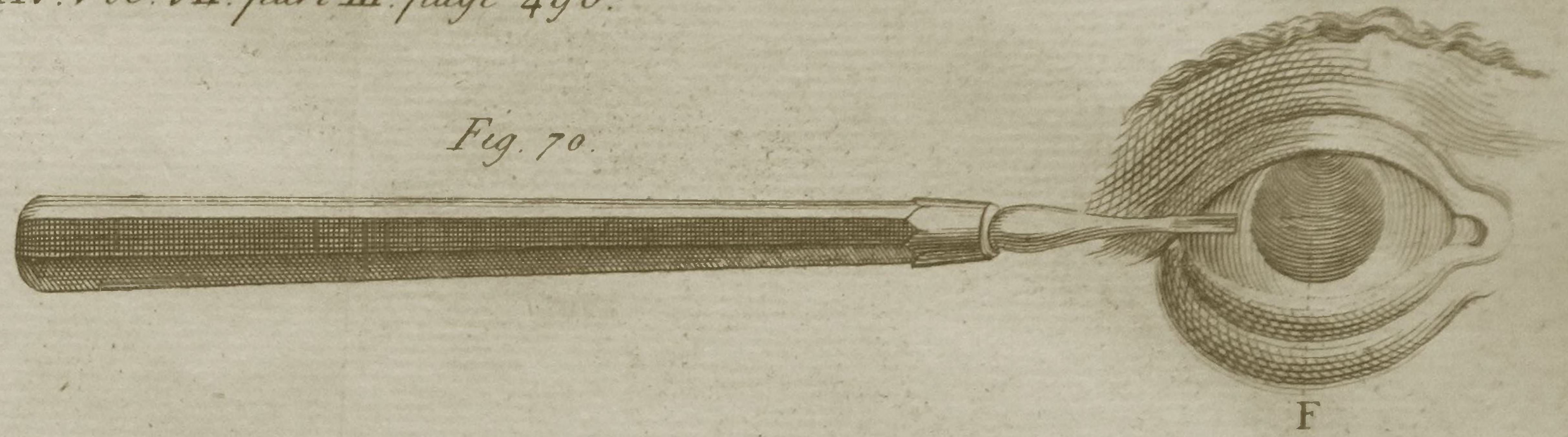


Fig. 71.



Fig. 72.



Fig. 73.



Fig. 76.

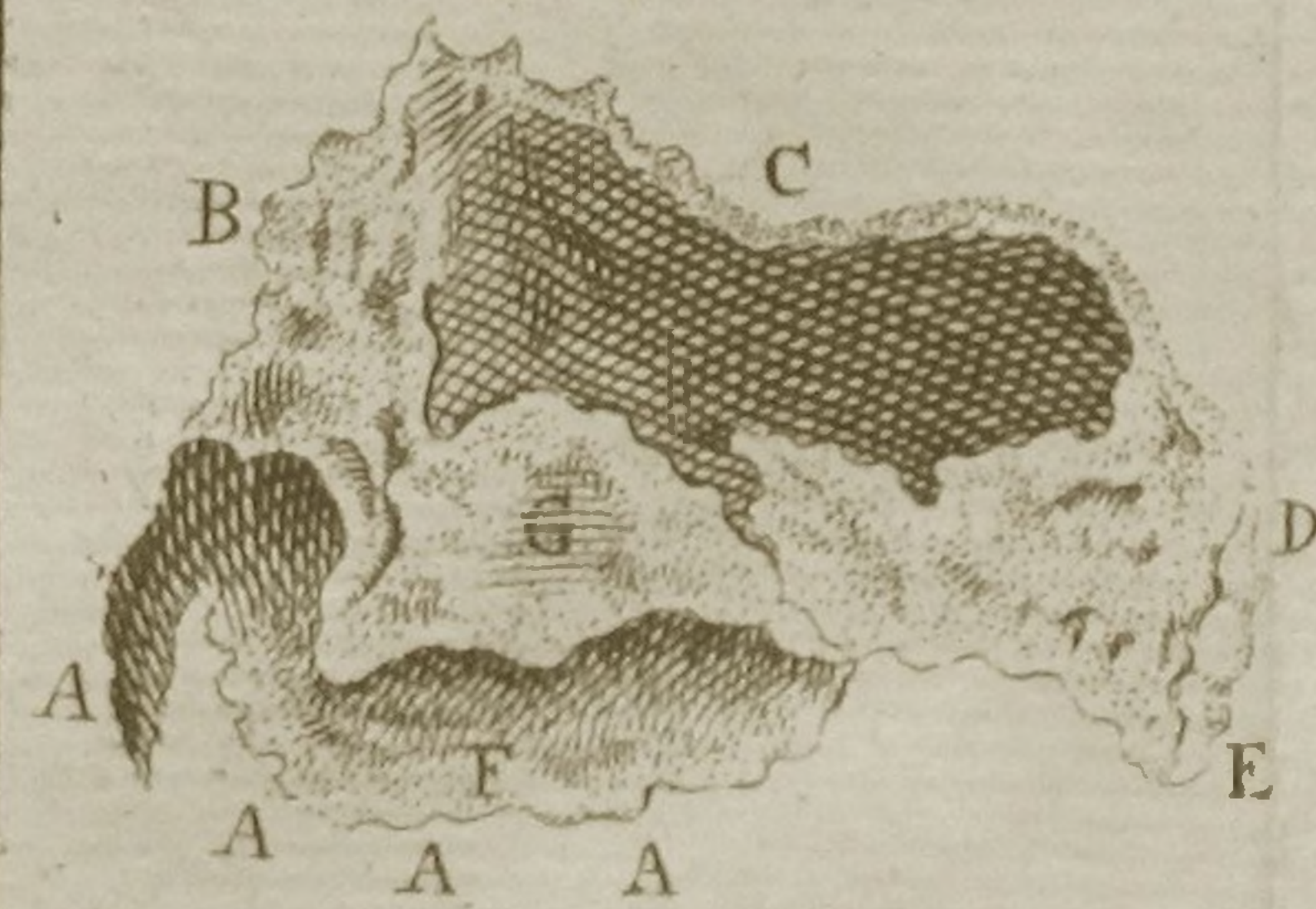


Fig. 75.



Fig. 74.



Fons sculp.

swallowing either Liquids or Solids; every thing returning forcibly by the Mouth and Nose, when he made an Effort to get it over. From all which I reckoned it an *Angina* of one of the worst kinds, *sine apparente tumore* (a), and the Seat of the Disease in the *Larynx* and the Fibres common to it, and the Top of the Gullet.

Notwithstanding repeated Bloodings, Blistering between his Shoulders, Cupping, &c. the Disease continued so obstinate, and the Patient so like to suffocate, that next Day in the Afternoon his Friends, although very averse in the Morning, when I first proposed the piercing the Windpipe, at length earnestly desired that the Operation might be performed; and the poor Lad bad us try any Experiment to preserve his Life. He had good Reason so to do; for indeed, in all Probability, in a few Hours he would have been strangled to Death most miserably. We directly set about the Operation, which was done with such Success, that in less than four Days, his Breathing being perfectly easy, and his Deglutition being almost so, we removed the *Cannula*, and left the *Glottis* to do it's own Office.

According to *Cælius Aurelianus*, (b) and the Author of the *Liber Introductorius* (c) ascribed to *Galen*, *Bronchotomy* was proposed by *Asclepiades*, (however inconsistent with his Delicacy, and the rest of his Character, the seeming Harshness of this Operation may appear) and is described and earnestly recommended by almost all the systematical Writers of Surgery from *Paulus of Ægina* (d), and, as he says, *Antyllus*, and some other of the best Surgeons before him, down to the present Times. But when they are at so much Pains to defend the Reasonableness of it, and when they shew so much Fondness of citing and telling Examples of the healing accidental Wounds of the *Trachea*, without ever mentioning their own regular Performance of the Operation (which would have been a shorter and much more effectual Recommendation of it) when I say I consider all this, I find myself obliged to think that it has very seldom been reduced to Practice. So rare had it been that *Aretæus*, a Man of vast Judgment and Skill in Diseases (e) thought the Operation had never been actually done with Success. And *Cælius Aurelianus* looked on it as an impracticable Whim of *Asclepiades*. Neither *Avenzoar* (f) nor *Albucasis* (g) knew any of their Countrymen who had undertaken it. And the *Arabians* are reputed to have been hardy Surgeons enough. The most I know of amongst them of this Kind is in *Avenzoar*, who tried the Experiment on a Goat, and cured the Wound which shews the Ingeniousness and Industry of the Author. For as to what you will find some Writers telling you, that *Rases* (h) saw *Andrusius* the Physician do it (the Copy I looked into, printed at *Venice* 1505, calls him *Ancilifius*: and perhaps it should be *Antyllus*

(a) See Hippocr. Prognost. xxiii, 3. & Prænot. Corc. iii. 96. (b) Acut. iii. 4.
 (c) Cap. 13. (d) De Re Medic. vi. 33. (e) Cur. Acut. i. 7. (f) Medic. i. x. 14.
 (g) Chirurg. ii. 43. (h) Contin. vii. Fol. m. 77.

for them both) I think this flows from a mistaken Interpretation of that Author's Meaning. If you read the whole Context, I think you will easily conceive, that all he says of the Operation is upon hearsay; and consequently, that he had only seen in Books, that such a one had done it. That most accomplished Anatomist and Surgeon *Fabrizius ab Aquapendente* (i) frankly acknowledges, that neither he nor any of his Contemporaries had ever ventured to perform it. Neither does his Successor in the Profession of Surgery, and his Rival in Anatomy, *Julius Cassarius* of *Placentia* (k) pretend to have done it; though he has endeavoured to illustrate the Operation by some very neat Figures; which you will not readily suspect to be from any but dead Bodies. And next to him *M. Aurelius Severinus* (l), who was a very judicious and learned Man, and the best and boldest Surgeon of his Time; though he recommends it with a great deal of Warmth and Keeness, yet it seems even in his latter Days, he never had occasion to try it: so that the first undoubted and distinctly recorded History I can find of this Operation being actually practised, is in the learned *Anton. Musa Brasavolus* (m) who performed it in a desperate Squinace, when the Surgeon refused to do it; and repeated it again in the like Case. Mr *Arnaud* the Frenchman did it; but his Patient died (n). However, his Countryman Mr *Binard* had better Success (o). Dr *Friend* (p) cites *Purman* doing it; and (q) tells us of another Case communicated to him by a Surgeon whom he does not name. And besides these, I believe there are but few Instances can be produced, of any who really performed the Operation on a living Person. I hear now that Mr *Baxter*, a Surgeon in *Coupar* of *Fife*, not far from us, and Dr *Oliphant* in *Gask* in *Perthshire*, did it with very good Success within these few Years.

In the actual Performance of the Operation they certainly did, or might have observed some things omitted by Authors, and even some not perfectly agreeing with the common Accounts that are given of it. I think it worth while to observe, that in the very cutting, before we got a free Aperture into the *Trachea*, and the Pipe introduced, the Patient felt some Relief; which I thought might be ascribed to the Effusion of Blood in the Operation; a small Quantity whereof evacuated so near the Part affected, could not, according to the true Laws of *Hydraulics*, and the Observations and Practice of the Ancients, (however disagreeing with *Bellini's Theory*) but make a more considerable Revulsion, than a much greater taken away at a great Distance. Whence the judicious *Fab. ab Aquapendente* (r) with very good Reason supposed that by the Derivation here, the Patient

(i) Operat. Chirurg. xliv. p. 477. (k) De Voc. Org. i. 20. (l) Chirurg. Effic. ii. 40. (m) Com. in Hippocr. de Diæt. in acut. iv. 35. (n) See Garengcot Operat. Chirurg. xxxi. p. 489. (o) Garengcot ibid. xxxii. p. 498. (p) Hist. Phys. l. p. 206. (q) Pag. 207. (r) Pag. 480.

would

would be more apt to feel some Relief than Trouble. Which *Julius Guastavinus* too made no Doubt of in his Dispute upon this Subject against *Aretæus* (s). And now their Supposition and Conjecture is confirmed by Experience. And since there continued a greater Flux of Blood to the Wound while it was suppurating, I reckoned the Circulation in the Muscles of the *Larynx* to be with less Force than ordinary, and so probably to contribute to the diminishing the Strength of the Voice, which for a good many Days after the Operation, was observed to be much weaker than it used to be. Which I all along thought was rather owing to this, and the Lowness of his Body by his slender Diet, &c. than to any Hurt of the recurrent Nerves; which being cut, do indeed destroy the Voice, but by their Deepness, are in less Hazard than some in old Times used to think.

In doing the Operation on a living Person, one cannot but remark at the very first, that the *Cannula* should not be made near so short as is ordinarily proposed in Books and chirurgical Lectures: For we found that upon cutting the Parts, especially the *Thyroid Gland* (which is not so much minded in most of the common Descriptions of this Operation as should be) soon become so tumified, that it will require a Pipe above an Inch long, to penetrate sufficiently into the *Aspera Arteria*. Which is more than double of *Garangeot's* Allowance of six Lines; who is one of the recentest Writers, and has communicated to us all the Surgery the *French* are Masters of. The Leaden Pipe we had prepared not answering the Design, that which we made use of was too long and too small, being the common *Cannula* for tapping in the Dropsy, flattened a little at the End, and hindered by a very thick Compress, perforated in the Middle, from penetrating too deep into the *Trachea*.

The mucous Particles and Steams arising from the Lungs, made a constant weeping of a thin slavery Liquor, from the Mouth of the Pipe, part whereof thickening, and stuffing it's Cavity, sometimes very much incommoded the Patient's Respiration by it, so as to render it necessary to have it taken out and cleaned. And hence, when some Moderns very precisely bid us put a thin Slice of Sponge, or a bit of Muslin, &c. close over the Orifice of the *Cannula*, to prevent the Ingress of Dust, Down, or the like, into the Lungs, it confirms what I said before of the Unusualness of the Operation, and looks as if they had only contemplated the Matter in *Abstracto*, as the *Metaphysicians* say, without considering they had not to do with a pure thin dry Air, but with a heterogeneous Fluid, that is moistened and thickened with viscid Particles, which are apt to run together in stiff Concretions. And therefore, though it must be acknowledged, that there would have been less Hazard of a Stoppage, if our *Cannula* had been shorter, and wider, especially at the Mouth. I cannot but think it

(s) See *M. Aur. Severin.* p. 103.

an ingenious Proposal of one of our Ministers here, to make the Pipe double, or one within another; that the innermost might safely and easily be taken out and cleaned when necessary, without any Molestation to the Patient: For it is no small Trouble to him, to be obliged to have the Bandage frequently removed, and the Pipe fitted a-new to the Orifice made in the *Trachea*.

And indeed we found no Inconvenience in our Patient's breathing the Air as it passed through the Pipe, without any cleansing or intercepting *Medium*, though the Houle was none of the cleanest, being an ordinary Tradesman's here. But if by a larger, and consequently a more patent Tube, one, especially of more delicate and ticklish Lungs, should be incommoded that Way, I think the Access of Dust, &c. might conveniently enough be hindered by a Piece of Muslin, or thin Hair-Crape, tied slackly about the Neck over the Orifice of the *Cannula*, so however as not to touch it, or to be wetted by the Liquor coming from it.

The Patient was soon perfectly recovered: He breaths, speaks, eats, drinks, and performs all the other Offices of Life, and goes about his Calling as formerly. And now I cannot but take notice the needless Pain some Writers are in about healing up the Wound by Bandaging, Sticking, &c. For we found it easily to fill up of itself in a very few Days, by only dressing it every other Day, or so, with a soft Tent, made less and less every Dressing, and armed in the common Way with *Liniment. Arcaei*. I believe indeed it would have taken a little more Time to heal, if our Patient had been older.

Observations
on a Treatise
writ by M.
Helvetius, of
Paris, to prove
that the Lungs
do not divide
and expand
the Blood, but
on the contra-
ry cool and con-
dense it; by F.
Nicholls, M.
B. Præf. Anat.
Oxon. and F.
R. S. N^o 410.
p. 163.

II. The Matter in Question between the Author and *Michellotti* is, whether the Lungs cool and condense the Blood, according to the Opinion of the Antients, or whether they mix, attenuate, and, of consequence, expand it, according to the System of Dr *Pitcairn*.

The Author, in order to support the Opinion of the Antients, brings several Arguments to confute the System of Dr *Pitcairn*: The most considerable of which (and which indeed he makes his *Argumentum crucis*) is, that the right Auricle and Ventricle being considerably larger than the left Auricle and Ventricle, and the pulmonary Artery having a larger Capacity than all the pulmonary Veins taken together, the Blood must evidently occupy a greater Space before, than after it's Passage through the Lungs; and because the Difference in the Capacity of these Vessels cannot be ballanced by any Increase of the Velocity, he concludes, that the Blood is not attenuated and expanded, but must be condensed in it's Passage through the Lungs. And this he conceives is done by the Air, which (as a Fluid relatively cold) must cool and condense the Blood, to which it is so nearly applied in the Action of Inspiration.

That the Blood is cooled by the Action of Inspiration, is a Matter of which I believe few Physicians doubt, when they consider, that in Inflammations of the Lungs, nothing is more earnestly desired than
the

the breathing cool and fresh Air, nor does any thing more evidently conduce to the Cure of Inflammatory Dispositions, than the Use of fresh Air.

If we consider the State of the Blood at it's Return to the Heart, and how careful Nature has been, not to use this Blood for the Nourishment of the Lungs, before it has passed through the pulmonary Vein and Artery (though it would in that Case have been as effectually cooled in the Bronchial Arteries as in the pulmonary Vessels) we are naturally led to believe, that it is some other Quality, which has rendered it improper for Nourishment, and which is to be destroyed by the Action of the Lungs.

For this Reason, and from the Structure of the Parts subservient to breathing, it seems evident, that the Blood is mixed, attenuated, and consequently re-expanded in the Action of Expiration. I shall now consider, whether the Action of Inspiration, so far over-balances the Action of Expiration, as to condense the Blood into a less Bulk, than it had before it's Passage through the Lungs.

The accurate *Santorini* of *Venice*, in the 8th Chap. and 3d Sect. of his Observations, has carefully examined the Fact, as stated by *Helvetius*; and finding it true in that one Subject, as to the Auricles, and pulmonary Vessels, but false as to the Ventricles, he proceeds to prove, that this Difference in the Capacity of the pulmonary Vessels, could not be designed on Account of the Blood's being condensed in it's Passage through the Lungs; because, if so, the right Ventricle ought to have been larger than the left Ventricle; and the pulmonary Artery ought, not only to have been larger than the pulmonary Veins, but it ought likewise to have been larger than, or at least equal to, the two *Venæ Cavæ*; whereas, in his Subject, the two *Venæ Cavæ* were to the pulmonary Artery, as 228 to 188.

In the mean time, he recommends the repeating the Enquiry to other Anatomists, as doubting whether the Fact is constantly so in healthy Subjects.

As such an Enquiry may be of Consequence, not only in settling the Point in Question, but in explaining other Parts of the Animal Œconomy, I doubt not but it will be agreeable to the Society; and the rather, because the Subjects from which I have taken the several Calculations, are here produced before the Society, and submitted to a Re-examination if desired.

The Measure which I have here used, is the 113th Part of an Inch.

I have taken the Triple of the Diameter for the Periphery, and computed the *Area*, by multiplying the nearest whole Number to $\frac{1}{4}$ of the Diameter into the Periphery. Though this Method is not sufficiently exact to shew the real Contents of Circles, yet as my Design here, was only to find nearly the relative Contents of the several Vessels, I have chosen to avoid embarrassing the Sums with Fractions.

The first Heart is of an Adult, in which

	The Diam. Per. & Areas, are		
Of the Vena Cava descendens	79	237	4740
Pulmonary Artery	115	345	10005
Superior left pulm. Vein	69	207	3519
Inferior left pulm. Vein	73	219	3942
Superior right pulm. Vein	49	147	1764
Middle right pulm. Vein	40	120	1200
Inferior right pulm. Vein	57	171	2052
Aorta	110	330	8910

The ascending Cava being tied above the Diaphragm, could not be measured in this Subject.

As Mons. *Helvetius* no ways mentions the Disease, of which the Subject died, from whom he took his Observation, so I cannot say how proper it was for such an Examination; but it is evident, his Observation does not tally with the Calculations made from this first Heart; where the pulmonary Artery is to the Sum of all the pulmonary Veins as 10005 to 12477. And yet this Subject (besides a cancerated Ovary, and a Putrefaction of the right Kidney from the Ureter's being compressed) had her Lungs full of small Tubercles, and the Glands lying between the great Divisions of the *Trachea*, almost petrified by atheromatous Concretions: By all which it is highly probable, that the Passage of the Blood, through the Lungs, was very much impeded, and of Consequence, the pulmonary Artery much dilated beyond it's natural Capacity.

And this I am the rather induced to believe from examining the second Heart, which is of a Child nearly twelve Months old. As to it's Death, I can say nothing more, than that it's Lungs appeared perfectly sound, and of a pale clear Colour; and therefore the more proper for an Examination of this Kind.

	In this second Heart, the Diam. Per. & Areas, are,		
Of the Aorta above the Coronaries	43	129	1419
Pulmonary Artery	43	129	1419
Superior left pulm. Vein	29	87	609
Inferior left pulm. Vein			
Superior right pulm. Vein	26	78	507
Middle right pulm. Vein	17	51	204
Inferior right pulm. Vein	32	96	768

We may here observe, that the Aorta, after giving off the Coronary Vessels, is equal to the pulmonary Artery. As to the Proportion between the pulmonary Artery and Veins, the Artery in this Subject is to the Sum of all the Veins here measured, as 1419 in 2088, and yet the lower

lower left pulmonary Vein is here omitted, as being tied too close to admit of being measured. But if we suppose the inferior left pulmonary Vein to be to the superior left pulmonary Vein, in the same Proportion as in the first Heart, we shall then find it's Diameter nearly 31, and it's Area at least 700, which will make the pulmonary Artery in this Heart, to the Sum of all the pulmonary Veins as 1419 to 2788 ; and in that Case, the left pulmonary Veins will be to the right pulmonary Veins, but as 1309 to 1479.

The 3d Heart is of an Abortive, nearly of 5 Months : By it's Appearance, I judged it suffocated by too much Blood. In this Subject, the

	Diam.	Per.	Areas are,		
Of the Vena Cava descendens	14	42	197	}	
Vena Cava ascendens	24	72	432		629
Aorta above the Coronaries	16	48	192		
Pulmonary Artery	20	60	300		
Canalis Arteriosus	12	36	108		
Right pulmonary Branch	11	33	99	}	
Left pulmonary Branch	11	33	99		198
Superior left pulm. Vein	11	33	99	}	
Inferior left pulm. Vein	9	27	54		294
Superior right pulm. Vein	7	21	42		
Middle right pulm. Vein.	11	33	99		

The inferior right pulmonary Vein is here cut too close, and other-ways injured, so that it's Area cannot be measured. Nevertheless we find the remaining pulmonary Veins to the pulmonary Branches of the pulmonary Artery, as 294 to 198.

We may here observe a remarkable Difference between the Capacities of the two *Venæ Cavæ* taken together, and the pulmonary Artery ; the two *Cavæ* being more than double the pulmonary Artery, and the pulmonary Artery still one Third larger than the Aorta. As this Difference could not arise in this Case from the Blood's being condensed by the inspired Air, so it seems a Proof, that had the Fact been true, as stated by *Helvetius*, it had nevertheless been an insufficient Demonstration of his System.

III. Dec. 15th at 10 at Night, I was sent for to an Officer of the Excise in *Salisbury*, who was taken with so violent a Flux of Blood, that in a short space of time he lost near three pounds : By the time I came, it was pretty well over ; only he seemed to have something, when he coughed, that stuck in the Passage, which he could not get up, and by it's rattling I thought it very loose. I ordered what I thought proper in such a Case, and left him : Next Morning they told me that, half an hour after I was gone, he had coughed up what they shewed me on a Sheet of Paper. Upon putting it into Water, I found it a *Polypus* ; and, as I think, a very remarkable one. I here

A Polypus coughed up from the Wind-pipe, by Dr. Samber, N^o. 398. p. 262.

send

Fig. 79-

send you an exact Draught of it. I could find by my Blow-pipe, that it was hollow; but it's being torn off with such violence, has made so many Holes in it, that it cannot be blown up. You will (I believe) conclude, it lined the *Bronchia*, and that the Air had a Passage through it, and that a violent Fit of coughing had separated the Adhesion, and brought on that violent Flux of Blood, &c. He had been tormented with a Cough for more than six Months, was a gouty Man; but after this was coughed up, and so large an Ulcer made, he had all the successive Symptoms of a fatal Consumption; as Cough, Spitting, Hectic, colliquative Sweats, Diarrhæa, and died the 16th of *January*, aged near 50.

A Polypus, resembling a Branch of the Pulmonary Vein, coughed up by an asthmatic Person. By Frank Nicholls, M. D. F. R. S. N^o. 419. p. 123.

2. *Nicholas Tulpius*, in the 7th Observation of his second Book, presents us with the Case of a Man, who, with a large Effusion of Blood, threw up, by coughing, two Branches of the *Pulmonary Vein*, six Inches long, with their several Ramifications, freed from the *Trachea*, and Substance of the Lungs, as if dissected by the most accurate Anatomist. This Case he observes to be very extraordinary, and not to be paralleled in the Writings of physical Authors.

A little Acquaintance with the Structure of the Lungs, sufficiently evinces the Impossibility of the Fact, as there stated; wherefore (not doubting the Veracity of the Author) I always believed him to be deceived by a *Polypus* of the Vein, which might be coughed up in the Manner by him described.

But the following Case will give another Light to this Affair. *July* the 18th 1730, I was consulted on Behalf of one living in *Essex*, who was asthmatic, and coughed up Phlegm, resembling Worms; to remedy which, I directed a *Lac Ammoniacum*, with Squills; from the Use of which he expectorated more easily, but continued still to cough up the same Substances.

The 11th Instant, on the Road to *London*, he was seized with a Shivering, and pleuritic Pains; a white Tongue, hard and quick Pulse, &c. By repeated Bleeding his Pains decreased, but the Cough remained more violent than usual. On examining the expectorated Phlegm (which was tinged with Blood) I found it fibrous, and when expanded in Water) exactly resembling the Vessels in the Lungs. These Substances are as tough as the Coats of the Veins, and (like them) hollow. He has coughed up more or less of them every Day, for seven Years; sometimes perfectly white, and sometimes tinged with Blood: Notwithstanding which, he has had no other Complaint, has had a good Appetite, and Colour, and a greater Share of Fat than any Man would choose. The Specimen here shewn was expectorated, when I was present, the 16th Instant. It nearly resembles the first Draught of *Tulpius*, and is no more than a viscid Phlegm, secreted by the relaxed Glands of the *Trachea*, and afterwards concreted by the Heat of the Part.

Fig. 80.

IV. 1. May

Fig. 77.



A Scale of 4 Paris feet

Fig. 79.



Jones sculp.

IV. 1. May 10th, 1726, I opened the Body of a Person, who died the foregoing Day of a *Peripneumonia*; in the right side of whose *Thorax* I found an osseous Substance, about $\frac{1}{4}$ of an Inch thick, 6 Inches long, and 3 broad, extending itself under the third, fourth, fifth, and sixth Ribs, closely and strongly connected to the *Periosteum* of the Ribs, and the *Tunica propria* of the inner Intercostal Muscles, by Fibres, which shot from a strong and thick intervening Membrane, which closely adhered to it's outer Surface or Back, and was continued over it's inner likewise, thereby forming a *Capsula* for this præternatural Substance. It's upper Edge lay immediately below, and was contiguous to that Part of the Ribs, where they become cartilaginous: The Membrane that adhered to, and covered it, continued thick some distance from it, and gradually grew thinner, and was at length lost in the *Pleura*; from whence I judged this extraneous Body to have been formed between the two *Lamellæ* of that Membrane. The Lungs so strongly adhered to it's Inside, that upon separating them, part remained to it: Upon cutting into which, I observed all the Cells stuffed with a thin, but somewhat digested, *Pus*.

A præternatural bony Substance found in the Cavity of the Thorax, by Mr. William Giffard, Surgeon, N^o 395 p. 152.

Upon farther Enquiry, I found on the same side, towards the Back, another Substance, but perfectly Bone, invested as the former, with a strong and thick Membrane, and by the Fibres, which shot from it, tied to the Body of the *Vertebræ*, and the fourth, fifth, sixth, and seventh Ribs, and Intercostal Muscles.

It's Back, or Outside, was convex, agreeable to the concave Surface of the Ribs, which had made Indentations on that part of it where they pressed: It's Inside was concave as the Ribs; the right Lobe of the Lungs strongly adhered, part of which, for that reason, remained to it after Separation: It's Length was about seven Inches, Breadth about three from Edge to Edge: It's Thickness, in some Parts $\frac{1}{3}$, in others $\frac{1}{4}$ of an Inch. It had, as the former, a thick Membrane running from it, which gradually thinning was at length lost in the *Pleura*; from whence I judge this extraneous Substance to have been formed as the fore-mentioned.

2. He was troubled for some Years with a short Cough, which latterly was accompanied with a difficulty of Breathing, and great Labour in Inspiration; and some time after, with a Weight and Pain on the right Side; which Symptoms encreasing more and more, brought on the *Peripneumonia*, of which he died in a few days. The Rise and Succession of those different Symptoms proceed naturally from the Formation and Growth of this præternatural Body, as well as the particular Part of the *Thorax*, where it was lodged.

A farther Account, by W. Ritty, M. D. No. 395. p. 153.

The

C H A P. V.

The A B D O M E N.

An extraordinary sharp Impostumation of the Liver; by Tho. Short, M.D. No. 420. P. 184.

I. I Had a Patient, who died lately of an *Impostumation* of the *Liver*; I opened him, and out of the lowest and thinnest *Lobes*, I took six Quarts of purulent, thick, most intolerably fetid, reddish-brown Matter, very acid; for no sooner was it exposed a little to the open Air, than it fermented exceedingly. The Patient had drained off the thinner part the last Week of his Life by violent vomiting, and purging to thirty or forty times a Day. It was thrown into the *Duodenum*, by the *Ductus Cholidochus communis*, and there pumped up and thrown out, both by it's Sharpness and Stimulation. All the upper Part of the Liver, to about an Inch below the Gall-bladder was found. The Tumour had so compressed the right Kidney, that it was emaciated away to less than the *Glandula Renalis*.

Two Cases of Wounds in the Stomach, by the Rev. Mr James Field, Rector of St John's in Antegoa, No 371. P. 78.

II. A lusty young Negro-Man, returning home about Noon, went into his House, where seeing some ripe Plantains, he eat of them heartily; his Father in-Law, about 60 Years of Age, coming home soon after, and finding the young Fellow had taken his Plantains, gave him a most desperate Wound with his Knife, in the upper Region of the Belly, a vast Gash being made in the Stomach, in so much that the Plantains which he had eaten, burst through the Wound, which was made streight up and down.

The old Man immediately fled for it, the young Fellow's Companions, hearing what was done, pursued him, who seeing them follow him in this manner, and get ground of him, and suspecting their Design was to kill him, pulled out the same Knife, with which he had stabbed the other, and gave himself as desperate a Wound, as he had given him, and in the upper Region of the Belly, his Stomach being likewise seen, only with this Difference, that this last Wound was transverse, or from left to right; the old Fellow was carried Home, and laid in the same House, where the other wounded Fellow lay.

This Accident happened about Noon, and Mr *Forrest*, the Surgeon, came not to dress them till between four or five; he stitched up the Stomachs of them both entirely, and their Bellies too, only leaving in each a small Hole for Suppuration; a Fever seized each of them, the old Man was in most Danger, the Fever held them about a Fortnight; the Wounds were brought to a good Digestion, and in a Month's time, or thereabouts, the young Fellow went abroad, but the old Man lay something longer. They were both perfectly cured, and have been very well ever since, though it is above fifteen Years since this Accident happened.

III. I had

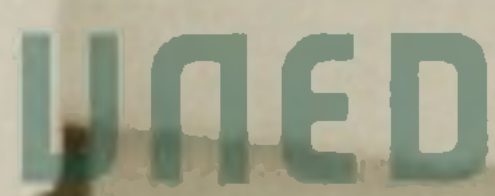
III. I had a Patient about seven Years ago, who had a large Tumour on the upper Part of her Belly, it was hard and painful, but did not alter the natural Colour of the Skin, and had been three Months in coming. I applied a warm Gum Plaister to it, which in about a Fortnight's time brought it to a Suppuration. I then applied a Caustic about the bigness of a Shilling; when the Eschar fell off, I saw a solid kind of Substance appear in the Orifice, I laid hold of it with my *Forceps*, and pulled it gently towards me, upon which there thrust forcibly out a quantity of it, that near filled my Hand, so I dress'd it. Next dressing, the same Substance appeared again, which on her straining, forced out near twice as much as before. I was at a great Loss to determine what this stuff was, but at last concluded it was the *Omentum* itself in which Opinion I was confirmed by some other Surgeons to whom I shewed it. I was still in doubt, whether the Stomach was concerned in this Case or not, till the next Removal of the Dressings, at which there spurted out above half a Pint of Ale, in a full Stream, which she had drunk a little while before. I now concluded the Case mortal, however, I ordered her to keep her Bed, to lie constantly upon her Back, and feed on Things of easy Digestion. The greatest part of what she eat or drank, came through the Ulcer for eight or ten Days, so that I had no hopes of ever curing it; yet, contrary to my Expectation, in about six Weeks, she was perfectly cured, and is now living, and in good Health.

An Imposthumation in the Stomach; by Mr Atkinson, Surgeon, No. 371. p. 80.

IV. *James Skidmore* had complained for three or four Years last past, of a violent Pain in his Stomach and Bowels, never being able to rest in his Bed at Night, 'till he had vomited up the greatest Part of what he had eat or drank the Day before. He would often compare his Pain to some great Weight, lying upon the Region of the Stomach, which, he in some Measure alleviated, by pressing hard with his Hand upon that Part. When he turned himself in Bed, from one side to the other, he told me, he could plainly perceive some Fluid fall down with Noise to the depending Side; which Fluid he believed to be the Occasion of all his Misery: For which Reason he often said, he would willingly consent, nay, often earnestly pressed, that the Surgeons would cut him open (as he expressed it) and let it out.

A preternatural Perforation in the upper Part of the Stomach; by Mr Christoph. Rawlinson, Surgeon, No. 400. p. 361.

He had no apparent *Tumour* upon the Part, nor was his Belly more extended than usual. He had had the Advice of several able Physicians, before he came into the Hospital, but all without the least Amendment to his Disease. When he died, we were desired to open him, and try if we could find out the Cause of his Complaints. As soon as we had penetrated the *Peritonæum*, there flowed out a whitish Liquor, not much unlike Whey, only a little more thick and fæculent; nor did it emit so noisom a Smell, as might be expected from it's long Residence in that Place. We computed there were above four Quarts of this Liquor contained in the *Cavity* of the *Abdomen*.



We found the Stomach perforated in it's upper Part, about the middle Space betwixt the two Orifices, wide enough to contain the end of one's Finger, We cut it open length-ways, and found it pretty full of a thick glutinous Matter, inclining to be yellow; and to it's inner Coat, on the lower Side, there firmly adhered the Stone of a *Prune*, or some other Fruit resembling it. On it's Inside, near the preternatural Perforation, it was gangrened for two or three Inches; and on the other Side of the Perforation there was an Ulcer near the same bigness. The whole Stomach was a great deal thicker than usual; but that Part, next the *Pylorus*, was above four times thicker than in a natural State. It adhered closely to all the Parts about it; and to the *Pancreas*, it was so firmly tied down, that it could not be separated without tearing. The Spleen did not exceed a quarter of an Ounce in Weight. The *Pancreas* was *schirrous*, though pretty near it's natural Size. In the Liver and Kidneys, there was no apparent Defect; nor had the Parts in the *Thorax* received any visible Alteration, except that the Lungs adhered more firmly to the *Pleura* than usual. The *Intestines*, and all the *Viscera* contained in the *Abdomen*, were of a whiter Colour than usual, by being so long sodden in the Liquor in which they floated.

A Stricture in the middle of the Stomach, dividing it into two Bags.
By Claudius Amyand, Esq;
F.R.S. N^o 422.
p. 260.

V. Upon opening the Body of a young Country Girl, dead of a Consumption, I found her Lungs suppurated in many Places, and a Stricture in the middle of the Stomach, dividing it into two Bags. This Stricture appeared to have been of some standing, and likely to have occasioned some Difficulty in Digestion; but upon Enquiry, her Mistress and Fellow-Servants said, that her Appetite and Digestions were natural, and that she had continued in a good Plight, till upon coming to *London*, she contracted a Cough, that had brought on the Consumption.

Vomiting of Blood cured, by drinking excessive cold Liquors in Winter; by Peter Anthony Michelotti,
M. D. F. R. S.
N^o. 419. p. 129.

VI. Quum Ludovicus Maffetti, rure, ubi venatione, & perequitando se vehementer exercuerat, in urbem reversus Sanguinem 10^o. Cal. Jan. 1728. ad uncias quinque sexve matutinis temporibus vomeret, hujuscemodicationem institui. Primùm, quod Cruoris in Arterias, Venasque vim, eas distendere continenter nitentem insigniter, & præcipuè ex superfluente Sanguineæ materiæ copia adauctam animadvertentem; minimèque ignorarem Juvenem laborare schirrhoso lienis tumore, ob quem, & Sanguinem vel hos ante quatuor annos evomuerat, & narium copiosis hæmorrhagiis à prima usque adolescentia vere, & autumnò quotannis tentari consueverat; quæ, postquam fortuito à lusoribus follis capiti impactus fuerat, ferè ex toto defecerant; quòd hæc, inquam, minimè ignorarem, ad uncias circiter 8 ex hæmorrhoidibus Sanguinem per hirudines protinus mitti, ejus copiæ demendæ, atque à liene, & ventriculo avertendæ causa præcepi; tùm aquam ex Plantaginis succo, corallato, nitro bene saturam cyathi mensura sæpius eo die forbendam præbui ad Sanguinis fervorem compescendum. Sanguineo verò vomitu circa secundam noctis vigiliam vehementiùs urgente, sub eoque, Sanguine maximo impetu
copiosissimè

copiosissimè ad os ruente, aquam ex Lactucæ succo, cydoniati J. B. Helmontii *Laudani* guttis duodecim, unciarum quatuor pondo commistam confestim potui dedi, & Cruoris potissimum velocitatis minuendæ, & somni accersendi ergo: quod medicamentum, quum Æger, Sanguine ex ventriculo tertium, quartumque ingenti copia erumpente, rejiceret, ad catapotia ex perfici *Philonii* scrupulis sex, ex aqua succi Sanguinalis herbæ devoranda decurri. Sub idem tempus gelidam aquam frigido aceto permistam ore contineri, spongiamque perfrigido aceto benè imbutam epigastricæ regioni admoveri jussi, ad sanguifera stomachi vasa, sive exesa, sive rupta, sive quocunque modo patefacta constringenda: quem in finem, quandoquidem idem cruentus Vomitus quintum, sextumque revertebatur, atque Æger exanimari videbatur, non modò ad confectionem ex contusis albi papaveris, & hyosciami feminibus rosaceo saccharo, armenia bolo, ac lapide hæmatite adjectis, semicochlearii pondere devorandam decurrebam; sed ad consolidantia quoque catapotia, quæ sub Autore *Helvetio* Patre feruntur, quorum terni scrupuli quarta quaque hora assumebantur ex aqua modò commemorata, in qua modica pollinis ex margaritis, & rubris coralliis in calcem redactis, itemque ex magisterio oculorum cancrorum portio soluta erat. Per hæc auxilia consecutus sum, ut Sanguis per aliquot horas conquieverit.

A Sanguinis per sectas Venas detractioe ea nocte abstinui: primum, quòd Sanguinem ad libras 12, & amplius duarum circiter horarum spatio ex ore processisse, jacentemque ob id, in conclavi frigido, paucis vestimentis corpori injectis quietus animo linqui perspicerem; tùm, quòd Cordis, & Arteriarum coagitatio, & quod consequabatur, residui Cruoris paucissimi velocitas esset quam maxima; indè, quòd ad avertendum tantæ sanguineæ materiæ à ventriculo cursum, exiguum Sanguinis emissionem, & parvo quidem tempore duraturam, sive ex parte ab ipso affecto ventriculo minus remota, sive ex Vena quàm longissimè ab eo distante haud sufficere, existimarem; postea, quòd, vel per medicam, hujuscemodi rebus circumstantibus, Sanguinis detractioem, sulphuratarum sanguineæ massæ particularum ad coccineas massulas pænè ex toto deficientes proportionem jam notabiliter (uti ex magna siti, corporis calore, brachiorum, & crurum jactatione, insignique pulsus frequentia conjiciebam) incrementem, una cum Sanguinis velocitate cruentum Vomitum rursus excitare valente summopere adaugeri posse, providerem.

Albente cælo, Vomitu denuò reverso, ad Sanguinem, qui notabili tum quoque copia evomebatur, supprimendum, frigidum ex urenti urtica Succum, cui tostis opii grana 8 admista erant, ad uncias 4 potandum obtuli; qui quum ex toto non responderet, ad extremum ratiocinando constitui, & Sanguinis Ductus in ventriculi cavum pertinentes ejus aërem condensando comprimere, & Sanguinem ab iis supportatum reprimere perquam gelidissimis potionibus, quia verò cujusquomodis generis cibos, sive ex contrito pane, sive ex recentium ovo-

rum vitellis, in gallinaceorum pullorum jusculis solutis, sive ex prisana hordeacea, oryzæque cremore, Æger morbo fusus, stomacho maximo-perè languente reddebat, forbitiones virium imbecillitati succurrentes, neque onerantes delegi: & primùm quidem ex *Chiocolatte*; tùm ex vaccino lacte, & saccharo; indè ex hoc, & cremore ex dulcibus amygdalis, albique papaveris seminibus recens expresso: cujusmodi liquores frigoribus ex glacie & nitro congiaciati, scilicèt modò unus, modò alius quinta, sextave quaque hora ad uncias circiter septem hauriebantur, interpositis non multis quidem, sed sæpè nocte, ac die haud leviter sitienti datis ex frigida Nucerina aqua potionibus. Quæ curandi via maximè, quemadmodum ego arbitror, rationalis mirificè quum conferret, in ea perstiti ferè usque ad Februarii mensis proximè insequentis initium; quo tempore victum primis quidem diebus ex decoc-ta in gallinaceo jusculo, oryza conscissove triticeo pane, eodem jusculo, bene madente, aut recenti ovo; in sequentibus verò diebus ex car-nibus quoque, modò gallinaceis, modò vitulinis, & interdum ex avi-bus imperavi: prætereàque ad imbecillum stomachum confirmandum præscripsi tincturæ ex absinthio sine vini spiritu extractæ guttas circi-ter 60 quotidie paulo ante prandium ex Pimpinellæ herbæ aquæ coch-leario fumendas.

Prætereo, me tertio, quartove morbi die vaccinum lac, butyro, ovi vitello, ac rubro saccharo admistis in ultima intestina per clysteres infundi, curasse ad atrum sanguinem ex ventriculo ad inferiores par-tes defluentem educendum: quem propterea quòd crassi ex fuligine pulveris formam habere, animadverterem; à medicamentis ad Cruo-ris in ventriculi caveam effusi concretionem prohibendam, tollendam-ve, in quocunque Vomitu Sanguinis ab aliis medicis præscribi solitis abstinere, satius duxi, quàm iis propinatis, ad effectum à curatione per gelidissimas potiones jam prosperè inceptum perficiendum vires adhibere videri, ejusmodi quam frigidissimarum Cruorem cogentium forbitionum viribus planè atque omninò contrarias.

Atque hac quidem ratione medendi Ægrotantem ad desperationem redactum ex gravissimi, & periculossissima, de qua hætenus retuli, valetudine, liberavi: cui in eundem morbum deinceps relabatur, San-guinis uncias septem octove, tertio quartove quoque mense mitti ju-beo, plerumque ex brachiis, interdum ex hæmorrhoidibus. Istiusmo-di autem præsidii genere ad Sanguinis profusionem prohibendam u-tendi, causa hæc est. Splenis scirrho supra commemorato, Sangui-nei ad eum attinentes Ductus magnoperè obstructo Sanguinis copiam, cui continendæ apti creati sunt, profectò capere nequeunt; reliqui igitur corporis, & quod consequitur, eò magis ventriculi ipsi lienì propinqui canales Sanguinem ducentes, quantitatem ejus naturali ma-jorem contineant, necesse est: hique proptereà sic extrorsum trudi, ac dilatari poterunt, ut Sanguini continenter ex ipsis manare conanti patefiant; sicuti plerumque contingit in maribus, fœminisque, qui-bus Sanguinis sputa, vomitus, aut ejus ex naribus profluvia propter insignes

infignes vasorum vel infimi ventris obstructions fiunt. Sed in lienosis præsertim copiosas, & immodicas Sanguinis fusque deque rejections vidisse se narrat Jo. Riolanus; historiasque ex Hippocrate, & Valverda affert eorum, qui Sanguinis Vomitu ex turgente splene interiére. Id ergò malum ne accideret, præcavendum mihi existimabam repetita Sanguineæ materiæ detractio. Et quoniam Sanguinis in suos Ductus impetus velocitatis quoque incremento augeri potest; ob hoc, & aquæ frigidæ potum vini loco, & abstinentiam à venatione, cursu, aliisque ejuscemodi Cruoris motum vehementer accelerare potentibus imperavi, & eventu sanè ad ultimum usque mensem An. 1730, prosperimo

Nam eo anno postridiè Calendas Decemb. in eundem Sanguinis Vomitum noctu relabatur. Ad eum visendum protinus accitus; quandoquidem libram unam tantummodò, alteramve Sanguinis evomuerat, & plenitudinem boni adesse Cruoris videbam: quanquam cruenta Vomitus continuabat, & Arteriæ sub ea penè ex toto submittebant sese; nihilominus tamen Sanguinis uncias circiter 10, ad eum à ventriculi sanguiferis vasis avertendum ex vena in lævo brachio secta, nulla interposita mora, mitti jubeo; indè liquidi *Helmontii Laudani* guttas 15, 18 ve ex pimpinellæ minoris aquæ unciis quatuor sumendas præscribo; atque hujusmodi remedium somni inducendi, & cruoris velocitatis retardandæ causa in usum vocatum, ter, quaterve, quòd Sanguinis Vomitu redeunte rejiciebatur, ea nocte ad propositum mihi finem consequendum repetere coactus sum.

Vomitus vix horas duas sub hisce auxiliis conquievit: eo autem semel, iterumque reverso, ex hæmorrhoidibus quoque Sanguinem ad uncias circiter quatuor educi præcipio, eodemque tempore ad quam gelidissimas, quæ aliàs felicissimè cesserant, optimèque nunc respondent in quadam Virgine profusissimò Cruoris ex uteri vasorum oppilationibus Vomitu ferè exinanita, sorbitiones devenio: & primùm quidem ad *Chioccolatte*, tùm horis circiter quatuor exactis ad alios congeliatos liquores, quos *Sorbetti* ex *Spumiglia*, & *Pappina*, vernacula Lingua hïc appellant. Ex cujusmodi artificiali gelu concretis liquidis, nempe modò ex uno, modò ex altero ad coercendum Vomitum, viresque reficiendas non multum quidem, ne ventriculum morbo solutum oneraret, sed sæpe Æger fermè exanimis degustabat. Hujusmodi per summè gelidas sorbitiones curandi ratione, Cruoris maximè gastricis Arteriis ac Venis contenti motum valentissimè refrenare potente, obtinui, ut Vomitus ad insequentem usque diem quieverit; in quo bis reversus, iisdem quam gelidissimis potionibus pertinaciter tertia, quartave quaque hora repetitis iterùm compressus est.

Tertio mali die, Sanguinem quidem, at non in multa copia, Nobilissimo Ægrotanti denuò circa vesperam vomenti catapotia auri bracteis obvoluta, ad accersendum Somnum, & ad Cordis atque arteriarum coagitationes præternaturales compescendas, devoranda ex aquæ Tormentillæ herbæ succi unciis 3 dedi, quæ recipiebant persici *Philonii* grana 30, tosti Opii Ἐβ. Hæc autem adeò responderunt, ut, &

Vomitus protinus sedatus sit, & longiusculus somnus noctu accesserit. Dum hæc adversus Sanguinis Vomitionem gerebantur, alvus lacte, butyro, saccharo, ac ovi vitellis commistis, & in inferiores partes infusis, secundo, tertiove die ad nigrum Sanguinem ex ventriculo ad intestina sub bilis atræ specie jam quoque delapsum evacuandum ducebatur; aquaque prætereà ex Millefolii succo, in qua Cotoneum malum parumper ebullierat, glacie gelidissima reddita ad stomachum æstu suo languidum erigendum, ad Ductus Sanguinem in eum importantes confirmandos, & ad sitim, quæ die tertio urgere cœpit, moderandam sæpius die, ac nocte, parcè tamen, ne Stomachus ipse tunc multum admodum infirmus ad resistendum obduretur, potui dabatur.

Dies 12^o frigidissimam hanc, tenuissimamque victus rationem, sub qua flatus quamplurimi per inferiora maximo cum crepitu descendebant, satis feliciter adhibui: post quod tempus, quum de ventriculi distendente dolore Ægrotus (quòd præmemorata glaciale aqua ad depellendam, qua continuo ardebat, sitim abusus esset) gravissimè quereretur, illam dimisi; atque in ipsius locum substitui victum paulò pleniorum ex calidis gallinaceorum pullorum jusculis, in quibus recentis ovi vitellus cum permodica succi ex Limonio malo portione solutus erat. Quæ juscula bis in die hauriebantur, interposita summis matutinis temporibus benè calida ex *Chioccolatte* sorbitione, cui frigidæ aquæ potio, tum ventriculi refrigerandi, tum importunæ sitis elidendæ ergò præmittebatur. Adversus autem istiusmodi permolestam stomachi distentionem præter calentes sorbitiones, catapotia quoque modò proposita inordinatos nervorum, & animalium Spirituum motus componendi virtute prædita propinavi.

Die 14^o dolor, & tumor ponè sinistram aurem ad inferioris mandibulæ medium, & amplus sese exporrigens, posteaquam caput proximè antecedentibus diebus leviter doluerat, extemplò suboritur; eodemque tempore febris, quæ alioqui continens quidem, sed nequaquam ingens erat cum levi frigore, & aliqua mentis turbatione intenditur. Contra quem dolorem calida, humidaque fomenta ex Vaccini lactis, & Aquæ simplicis, in quibus Sambuci flores decocti erant, partibus equalibus, spongiis admotis sæpè repetenda præscribo: per quæ humoris parotidam efficientis coitus intra 8 dies ferè ex toto solutus est. Post quod tempus febricula circa noctem paulum increfcens, mane se remittens continuabat; Æger siti non adeò cruciabatur, frigidam Nucerinam aquam potabat; interdium vigilabat, noctu conquiescebat; calidis, quas dixi, sorbitionibus reficiabatur, & interdum ptisana quoque ex Oryza utebatur. Natura vel dum benè valebat ructuosus, aliquando conquerebatur de quibusdam (ut ipse aiebat) acidis ventriculum irritantibus, pituitæ, & nonnunquam alimentorum rejectum moventibus: adversus quæ Absinthii tinctura semel die circa meridiem, sæpius frigida aqua ex Nucertino Fonte huc importata haud improspere pugnabam; atque interdum remediò

perfici *Philonii*, & tosti *Opii*; interdum quam gelidissima ex lacte, & saccharo, gelu artificiosè concretis, sorbitione ad crebrò ructantem, calidisque fermentationibus (quod ut facilè credam, haud leves sunt causæ) commotum stomachum componendum prospero successu, noctu utebar.

Circà diem quadragesimum aquosi humoris Vomitus decebat; Arteriæ naturaliter ordinatæ erant; venter quotidie satis; copiosam verò urinam vesica reddebat; & vires, ac ciborum appetentia accedebant sic, ut valentiosem cibum, frigidum videlicet ex cervino cornu, & vitulinis pedibus gluten Convalescenti paulo antequam nutritia juscula supra commemorata sorberet, quotidie ter offerret offerre. Ab ejusmodi alimenti Genere primum ad *Oryzam* in capi jusculo coctam, & gallinacea jecinora elixa; inde ad tenerarum Gallinarum, Vitulorum, Coturnicumque carnes transit: edullo ex Vaccino lacte, recentis ovi vitello, & tantilla sacchari portione, ad cochlearium unum, aut alterum commanducato, alvi movendæ gratia. Atque in præsentia sanus est, & bene valet.

Propositum Sanguinis Vomitum per congelatasquas recensui sorbitiones supprimendi rationem, quam solidissimis ratiocinationibus esse innixam, demonstratu haud ità difficile est. Primùm namque sanguiferi ductus Sanguinem in ventriculi cavum sive rapturâ, sive erosione, sive raritudine propriarum tunicarum, sive orum suorum aperturâ profundentes, glacialis ejusmodi congelatarum celeriter in ventriculum defluentium potionum frigoris vi, nulla re interposita tacti, quasi perusti, quàm citissimè, validissimèque fieri potest, corrugantur; tùm Sanguis his ipsis Ductibus contentus vehementissimè cogitur, atque in majores canales repellitur; deindè toto corpore ob idem gelidissimum frigus inhorrescente, reliquum Sanguinis in suis motibus lationis, & agitationis multum admodum retardatur, ac pro in ejus impetus ex Cordis, & Arteriarum pulsus velocitate enascens, arteriosorum, venosorumque canalium extremis orificiis patefaciendis peropportunos notabiliter imminuitur; postea illæ ipsæ quam gelidissimæ potiones ex satis nutrientibus massulis coagmentatæ per notissimas chyli vias Sanguinis alveos influentes residui Cruoris particulas, congregando absque ullo impetu rescindunt. Quum igitur, quam expono, adversus Sanguinis Vomitum pugnandi ratio, & ventriculi vomendi conatus cohibere, & Sanguinem sistere pluribus de nominibus valeat; subveniendique insuper, & promptè quidem imbecillitati Ægrotantis sufficienti virtute polleat: ecquis Saniorum saltem Medentium jam est, qui eam & maximè rationalem, & efficacissimarum in Cruorem vomentibus virium esse, non fateatur?

Bartholini de Nivis usu Medico libellum nuperrimis diebus quum evolverem, inveni non Abensinam modo potionem nive refrigeratam in calidis ventriculi passionibus imperare, sed & Galenum. Hic, eodem referente Bartholino, Senecam, *solutum & æstu suo languidum stomachum*

*stomachum perurente frigore erigendum esse, in Naturalibus quæstionibus scribentem fortasse secutus : in ventriculo curando refrigerationem sibi proponit per aquam, cibos, fructus nive refrigeratos. * Vidisti, inquit, & tu quosdam uno die, vel potius hora, frigida potione levatos ; quorum aliis non aquam modo dedi fontanam recentem, sed etiam quæ nive esset refrigerata, veluti Romæ præparare solent : cibos præterea ad eundem modum refrigeratos identidem me illis permittere vidisti : iisdem dedi, & ptisanam probè coctam pari ratione refrigeratam, aliaque id genus sexcenta.*

Præter Abensinam, & Galenum, Rhasem quoque Zacutum, Amatumque Lusitanos, Lud. Septalium, Laz. Riverium, atque alios, qui ad percalidum ventriculum multùm infrigidandum, colicosque ex calidis, ac biliosis humoribus coortos dolores depellendos cibo, & potu gelidio, & frigida aqua in linteolis ventri imposita usi sunt, adducit idem Bartholinus qui autem Sanguinis rejectiones, effluentiasve ex quacunque corporis nostri parte, potionibus nive, vel glacie, quam frigidissimis redditis ; aut alius generis gelidissimis sorbitionibus curarint, profert neminem. Quod ad me attinet : congelatos ex melonum seminum cremore, & modico Saccharo liquores parca manu circa primum vesperum oblatos satis fæliciter hisce frigidissimis diebus expertus sum in juvenilis ætatis, & fervidæ temperiei Moniali ; quæ ventriculi nervorum spasmo ab vehementi moestitia ortum ducente, lævumque ejus orificium ità constringente, ut, & gravem, suspiriosamque respirationem efficeret, & cùm esculentorum, tum potulentorum vel parcissimè assumptorum descensum penè ex toto prohiberet, graviter vexabatur.

Hippocrates, quanquam frigida, veluti nivem, & glaciem Sanguinis Eruptiones inducere, scribit Aphor. Sect. V. Aph. 24. nihilo tamen fecius Aphor. 23. asserit : *in his frigida uti oportere, unde sanguis eruptus, aut erupturus est, & quidem circa ipsas partes, unde fluit.* Memini, me sex circiter abhinc annis, Sanguinis ingens ex utero profluvium, communibus medicamentis, & ne perfrigida quidem aqua quicquam proficientibus, promptissimè in Matriona, media æstate suppressisse, perurente glacie genibus, & cruribus super imposita, cruralibus, & quod consequitur, iliacis, aliisque in uterum desinentibus Arteriis, ac Venis maximopere coarctatis, repressoque propterea, ac veluti ab consuetis viis intercluso Sanguine.

Verumtamen, tametsi quam gelidissimas, sorbitiones adversùs cujusquemodi profluvia Sanguinis, & maximè ex ventriculo, ab immodico Sanguinei amnis fervore, & accelerato motu enata, aut cum his conjuncta, & in juvenibus potissimùm, quibus cruor, & stomachus exæstuat, magnoperè collaudo : non ideò tamen suadere ausim, ut illæ ipsæ congelatæ sorbitiones mulieribus Sanguinem ex partu vomentibus, aut frigidis ventriculi, atque intestinorum fermentationi-

* Lib. vii. Met. Med. Cap. iv.

bus obnoxii sine ullo discrimine propinentur. In Sanguinis ex partu vomitionibus : uti neque *multa calida aqua lavarem*, neque *tepefactoria* (quemadmodum Hippocrates tùm in libro de Morbis Muliebribus, tùm in eo, quem de Natura Muliebri inscripsit, indiscriminatim præcipit) tam facilè adhiberem; sic asininum, & vaccinum lac ab eodem Hippocrate iis in casibus præscriptum haud quaquam planè damnam. Sanguinem, inquam, ex lochiorum suppressione, aut imminutione evomentibus; primum venas in pedibus secari ad Sanguinem à ventriculo revocandum; tùm calidis fomentis ex aqua, & albo vino, in quibus emollientes, aperientesque herbæ ebullierint, hypogastricam regionem frequentissimè foveri, cruraque, & pedes eodem tempore multa calida aqua lavari juberem ad uteri vasa referanda; indè ad lac, humectandæ & reficiendæ fanguineæ massæ causa, transirem. Sin verò mulieri sanguinem vomendo rejicienti puerperii purgationes naturaliter fluerent, non calidis fotibus, & lavacris, sed remediis Sanguinis impetum sedantibus, ejus calorem cogendo moderantibus, confirmantibusque vasa ventriculi, ad singulas circumstantes res attentè respiciendo, cruentum vomitum suppressere pertentarem. Eo autem compresso ad lacteam diætam, vel hac non conferente, ad reficientes portiones ex *Chiocolatte*, nutrientibus gallinaceorum pullorum, ranarum, terrestriumve testudinum jusculis, atque horum similibus devenirem.

VII. Vir annorum 24 castra secutus, anno 1706, ab inflicto in sinistro hypochondrio vulnere, per hos 14 annos magnam portionem intestini coli, ictu hoc secti atque inversi, spithamæ magnitudine è corpore prominentem gerit.

Part of the Colon hanging out through a Wound for 14 Years; by Abr. Vater, M. D. No. 366. p. 89.

Intestinum hoc, per vulnus in illud simul penetrans, egressum, interiori superficiem ad exteriora vertit, & ita in medio cohærens duas portiones efformat quarum altera versus superiora extensa orificium monstrat, quod ad intestina tenuia spectat, & fæces alvinas educit; altera vero portio ad inferiora propendens orificium ad rectum apertum ita habet, ut Clysterem injectum per anum reddat. In interiori superficie, nunc ad extra vergente, glandulæ apparent copiosissimæ, albi ac cinerei coloris, verrucarum instar eminentes, & jucundissimum spectaculum exhibentes, quæ inclementius tactæ sanguinem fundunt. Intestinum ita prominens nunquam totum regreditur intra abdomen ventriculo tamen vacuo quodammodo regreditur, illo autem pleno longius protruditur, imprimis spiritu retento. Utitur vir ille aqua gelidissima, imo glacie ac nive permista, ad abstergendas sordes, sine ullo incommodi sensu; fert etiam intestinum aërem frigidissimum; ab eodem tamen intra se retrahitur & indurescit, ac quodammodo pallescit. Cibos omnis generis perferre potest iste, fructus tamen recentes & olera cibus reliquis non miscentur, sed indigesta exeunt, quemadmodum & juscula sine solidis cibus assumpta.

A B C D. Intestinum colon inversum, ex vulnere prominens, & versus superiora & inferiora porrectum. a. Orificium superius ad intestina

testina tenuia patens, per quod exeunt fæces alvinæ. *b.* Orificium inferius, quod ducit ad rectum, & Clysterem per idem infusum per anum reddit. *c, d.* Vestigia vulneris à Chirurgo ampliati; per cuius medium adhuc apertum intestinum prominet. *e.* Umbilicus. *f, f, f.* Glandulæ copiosissimæ. *g.* Regio inguinalis. *h, h.* Dorsum. *i.* Coxendix. *K.* Regio Lumbaris.

A large Umbilical Rupture; by John Ranby, Esq; F. R. S. N^o. 421. p. 221.

VIII. About six Years ago, a Man gave his Wife a Kick on the Belly; and from that Time she complained of Pain, and a Swelling about the *Navel*, which in Time encreased to about the Size of a Man's Head, seildom giving her any Uneasiness but by it's Weight; and that chiefly when her Bandage was off, which she generally wore, except when her Diet, or any other Accident, brought on a *Diarrhæa*, which was always attended with Cholic Pains, particularly in the Rupture; to ease which, she had been advised to iron it with a hot Iron, and had thereby so often burnt it, that there remained on the Skin several large *Cicatrix's*. Three Days before her Death she was taken with the *Diarrhæa*, attended with a slight Fever.

On opening the Bag, the *Cawl* first presented, the greatest Part whereof adhered to the *Peritonæum*: On removing this, the *Small Guts*, to the Length of two Ells and a half, were contained in this Bag, together with all the *Colon*, except so much of it as is below the left *Kidney*; and the beginning of the *Colon*, with the *Cæcum*, were attached to the *Mesentery*, in such a Manner, as to be but two Inches distant from the *Pylorus*; which, with about one Third of the *Stomach*, was by this Means drawn into the Bag. The Beginning of the *Duodenum* just entered the Bag, and then returned out again; which, with but a small Portion of the *Jejunum*, was the chief that remained in the *Abdomen*.

A Child born with the Bowels hanging out of the Belly; by Claudius Amyand, Esq; F. R. S. N^o. 422. p. 258.

IX. Dec. 18th 1730, a Child was born with the greatest Part of the Bowels hanging out of the Belly, by an Aperture about half an Inch in Diameter on the Right Side of the Navel String. The Birth was natural and easy.

Being called, I found the Aperture lined with a Skin, and a Ligament that opposed the Reduction; the Parts livid, and tending to Mortification; yet the Child lived near three Days.

Upon opening, I found the *Prolapsus* to consist of all the small *Guts*, except the *Duodenum*, and of all the large ones, except of a small Portion of the *Rectum*; the *Gall-Bladder* was about two Inches long, one half of which stood out of the *Abdomen*, and a small Portion of the *Stomach*: All these were so coalesced together, and confounded, that it was impossible to separate them; though upon blowing, the Intestinal Pipe seemed to have it's usual Length. The *Liver* was much thicker and larger than usual, and convex in that Part of it, that is naturally concave: And the *Uterus* and *Bladder* pressed on the left Side, by the Weight of the Bowels pressing on the Right.

The

Fig. 80.



Fig. 81.



9

The Mother could ascribe no Cause for this præter-natural Formation. The Child came at full Term, but it's Inquietudes for some Months before the Birth, made the Mother apprehend he was not well. Saving this, nothing extraordinary appeared.

X. Vir quidam quadragenarius, biliosus, scorbuticus, diu multumque Colicis quibusdam doloribus, inferiorem præcipue Abdominis regionem infestantibus, laboraverat, flatu porro perpetuo & molesto. His biennium circiter, aut triennium ante mortem, accessere dejectiones biliosae, purulentae, foetidissimae cum strigmentis saepe mucosis, saepe sanguineis; ita frequentes insuper, ut persaepe intra tres, quatuorve horas Alvus vel vicies solveretur, persistente usque Tenesmo: tandem quoque prodiere. Carunculae fungosae, lividae, tetrae, quarum aliquae magnitudinis saltem nucis myristicae. At vero utcunque alvus citissime aegrotum plerunque exercebat; nonnunquam tamen, morbo presertim ingruente, foret adstricta valde cum horrendo tormento, nec nisi clystere ducta, aut catharticis irritata responderet. Subinde interea quasi Famelicus oblata quaecunque voraret; subinde ne quidem Delicatula, vel ad Dapes exquisitissimas nauseanti, placerent: Aeger autem indies emacuit. Fuit illi urina parciore & semper biliosa: Color vultus luridus, saepe subflavus. Tam dira, tam longa mala infracto admodum fortique plane animo pertulit, donec supervenerunt demum Tumor pedum Oedematosus, Delirium, facies Hippocratica, sudor frigidus & oleosus, certa mortis praenuncia.

A singular Sort of Cholic; by John Huxham, M. D. No. 422. p. 236.

Varia fuerunt à variis praescripta medicamina iisque utique in arte exercitatissimis celeberrimisque viris; ex Ipecacuana: scilicet *Emetica*, *stomachica*, *deobstruentia*, *glutinantia*; *balsamica*, *adstringentia* *Clysmata* multifaria, omnigena, incassum omnia, ni quod Laudanum, ad breve tempus, foret misero Solamen. Quid Aq; Bristol. & Bath. Spadana & Pyrmont. quid obstinata, quid accuratissima è Lacte & Vegetabili Diaeta potuerint inani omnino opera experiebatur; utut per breves aliquot dies paululum aliquando recreatus videretur.

Aperto abdomine perspeximus Omentum consumptum plane & putridum, Hepar praetumidum & *Schirrosis* Tuberculis, subalbidis, duris, refertum; Vesiculam felleam Bile subnigra semiplenam; totum Duodenum cum vicina Coli parte eodem Colore perfusum: Pancreas maxime schirrosus: mediam Ileii partem ad quinque fere digitos inflammata & ferme lividam Renes erant sani satis, nec Glandulae mesentericae aequè *schirrosae* ac expectassemus. At quod maxime notandum pars Coli Intestini suprema, quam veteres Coecum nominarunt perperam (cum id potius ejusdem Appendici, ab iisdem ita nominatae, conveniat) in hocce Cadavere non, quod assolet, Reni dextro, seu potius internae Peritonaei Laminae Renem contegenti, adnexa fuit, mediante Appendice vermiculari; sed in Pelvim delapsa tres circiter infra Tulpium Valvulam digitos cum superiore parte Intestini recti firmissime concreverat: Porro levius adhaesit Peritonaei Tunicae super Vesicam

ficam urinariam expansae, fursum inde reflexa, faciens cum superiore Intestini parte (si ita dicam) angulum valde acutum sub cavo dein Hepatis ascendens & infra ventriculi fundum porrecta descendebat more solito & in Rectum desinebat. Cum primum autem notavimus ambo Intestina & supra infraque adhaesionem Gangraena affecta esse, suspicantes hic latuisse fundamenta malorum, caute admodum lentaeque processimus Scalpello imprimis aperiendo Rectum Intestinum, quod ubi factum, vidimus internam Tunicam *Sphacelatam* omnino nigram quasi Atramento imbutam & maxime putidam; huic porro adhaerentes sex, septemve Carunculas subnigras, fungosas, quarum minores magnitudine nucem avellanam aequabant. Perscrutantes ulterius, Ulcus percepimus ex hoc Intestino in Colon, ubi cohaerebant penetrans, Digito mediocri facile patens: Intestina vero adeo putrida, ut vix tactum ferrent leviolem. Majorem Coli partem excrementis induratis observavimus infarctam, etsi plures liquidas Alvi dejectiones habuit, paulo ante mortem; tenuioribus nempe directe in Intestinum rectum per ulceratum orificium transeuntibus; solidioribus autem in Colo restantibus. Vesica urinaria fuit flaccida valde, intusque muco subrufo oblita.

En fidam utique, licet minus elegantem morbi Historiam! En quid inciso Corpore perspectum! Ex quibus conjectura haud difficilis, quae fuit Causa morbi: Ex Anatomicis enim notum est, quod Concretio Intestinorum inter se aut cum Peritoneo, motum peristalticum minuit maxime. Vid. Cowperi Anatomiam Explic. Tab. 34. Unde ad Locum Conglutinationis tarda admodum debilisque Excrementorum Impulsio, eorundem Congestio, Remora sequentibus; forte duris & acutis laedentibus, qualia Ossa Prunorum deglutita, aut tale quid; forte acribus & biliosis Humoribus non satis valide motu vermiculari propulsis, sed ad Angulum Coli acutum subsistentibus; exinde aut Intestini Inflammatio, aut Corrosio, Ulcus denique sequebantur; tandemque, in Homine valde *Cachectico*, Gangraena.

A vast Omentum; by the same. N^o 382. p. 60.

XI. Veterani cujusdam Militis uxor dolore colico & vomitu diu laboraverat, quibus supervenit ventris tumor durus, qui auctus indies magnam in molem excrevit. Jam evomuntur omnia, bilis atra, sincera, tandem & ipsae foeces alvinae. Dolor vero persaepe immanis in sinistro praesertim hypochondrio, fatus, cathartica, enemata, anodyna, plurima a Pharmacopoeio adhibentur; incassum omnia; permanet dolor, incressit usque tumor, digitorum pressui haud magis cedens quam si lignum fuisset. Ex hocce tumore plura quasi tubera enata sunt, quorum unum alterumve caput puerile, alia pugnum virilem, magnitudine aequabant: eminebat autem maximum in sinistro hypochondrio, ubi gravissimum persensit dolorem, ita ut saepius exclamaverit se voluisse tumorem ibidem loci fore perfossum. Incressente tumore facta est valde dyspnoica. Tanta tamque atrocita per menses fere 14 perpessa fuerat mulier, cum tandem grata venit morborum requies, mors.

Nudato cadavere montosum observavimus ventrem; reliquum vero corpus summa macie confectum. Secto abdomine in conspectum se dedit ingens quasi sebi massa (nisi quod colore fuit minus alba) totum ventris cavum adimplens, ita ut nec ventriculus, nec jecur, neque intestina apparerent ulla; adhaeserat enim omentum hoc enorme peritonæo pluribus in locis, in utroque praesertim hypochondrio, ubi & latior & firmior fuit cohaerentia. Secto autem in modum crucis peritonæo, & ab omento separato, conspeximus illum in pelvim fere detrusum, omentum etiam toti jecinoris cavo annexum, ventriculum hac mole oppressum, uti & duodenum, colon & jejunum: cum adiposo renum involucro (sinistro praecipue) connexum & quasi confusum fuit; adeo ut colon, altius paulo quam in rectum desinit, sebo hocce concreto fuit penitus involutum, hinc foecibus praeclusum iter, hinc dolores illi saevissimi, quibus ante mortem excruciatu fuerat mulier: & ut hic obiter notem, per plures dies ante mortem nec sua sponte nec vel clysmatibus acerrimis irritata alvus foeces dejecerat ulla.

His lustratis ingens separavimus omentum à jecore, ventriculo, schirroso pancreate, intestinis, tandem & à mesenterio, & ab interna peritonæi lamina renibus instrata. Splen fuit hac massa quodam modo demersus, contractior & quasi coriaceus.

Pendebat omentum hocce $\text{lb xvi } \frac{1}{2}$ *Avoird.* nec tamen abstulimus unam saltem alteramve libram partibus adhaerentem. Pondus hercle maximum! Si consideramus ex obesiore homine omentum vix libras pendere tres, majus certe inveni antehac nunquam, quanquam & secui & diffexta vidi plurima hominum cadavera. Fateor equidem longe majus à *Gregorio Horstio* in suis observat. memoratum fuisse, majus etiam in *Ephemerid. German.* ann. x. veruntamen hoc quoque nostrum monstris annumerari merito debet.

Hujus & in extima parte, nec non in interiore substantia, plura observavi vasa sanguinea, eaque certe maxime dilata, quorum aliqua penna anserina majora, aliqua vero quasi in aneurismatibus terminantia. Ex horum aneurismatum (si ita dicam) maximo uncias circiter sex nigricantis sanguinis extraxi cum quibusdam grumis albidioribus; anne adipis particulae à venis epiploicis absorptae atque morbo congelatae?

Ex plurimis lobis conflari mihi videbatur massa haecce, sibi invicem arcte haerentibus; aliquos tamen separavi, quorum pauci potius minori fuere magnitudine aequales, forma haud absimiles. Media hujus pars, caetera durior, cultro haud facile cedebat.

In isthoc cadavere sequentia etiam fuere observatu digniora. Inferior hepatis pars in schirrum abierat. Ex vesica fellea plures eximi calculos, carbonem fossilem colore referentes, friabiles, aquam innatantes, quos bilem haud improprie nominare splendidas; his quippe quum inerant plurimae particulae micantes, haud dubio salinae.

Mesenterii glandulae fuere schirrosae, imo quaedam in substantiam pene lapideam induratae. Intestina tenuia fuere inflammata, colon cum coeco fere totum gangrena correptum, etiam processus ipse vermicularis.

Ren uterque fuit fanus satis: dexter autem emisit ureteres duos: cum vero renem dissecuissem, percepi facile, quid esset in causa, cur ureter hic fuit duplex. Renis enim pelvis septo quodam fuit divisa, digitum transversum crasso, ejusdem perfectè substantiae cum reliquo renis parenchymate. Hic fuit ren quasi duplex, cui duplex pelvis, ureterque duplex. Erant in imo abdomine feri subcruenti librae quasi duae. Malum hoc immedicabile penitus visum est, nisi quis morbi principiis obstitisset.

Stones voided
per Anum;
by Mr. David
Martineau Sur-
geon in Nor-
wich. N^o 380.
P. 433.

XII. These Stones were voided by a poor Woman, *per Anum*, on the 26th, 27th, and 28th of *March* 1723; who was then pregnant about the 11th or 12th Week, according to Computation. I was called in the Night on the 23d, when, in Appearance, she was in the Extremity of a Convulsion Fit, attended with violent Vomitings; on the ceasing of which, she complained of great Pain in her Back, from her Reins downward to the *Anus*; whereupon I blooded her, ordered some *Anti-Emetics*, and left her: She continued with much Pain the whole Day; on the 24th, in the Night, her Fits returned with double Force: her Pains also increasing like unto Labour-Pains, put me upon farther Enquiry, but nothing appeared more than ordinary: The Extremity of Pain drove me to the Use of Glysters; which was attempted, but none could be thrown up, altho' repeated by some of the most experienced Nurses; upon which, I gave her a gentle Draught, which she observed increased her Pain with a strong *Tenesmus*, that continued near three Hours before the largest Stone appeared; which stopped at the upper Part A, D, *Fig. 82*, but was quickly removed by pressing the lower Protuberance C; upon which, with a plentiful Discharge, she had Ease, slept some Hours, waking with a Desire to Stool, and voided with it the 2d and 3d; and the next Day, at four Hours distance, the other two. She recovered perfectly, and was delivered of a very fine living Girl, on the 24th of *August* past. Upon Inquiry, it seems, she had been frequently troubled, for fourteen Years past, with Pains in her Side and Stomach without Vomitings; which is all she remembers.

Fig. 82.

The Largeness of the Stones, their Seat and Substance, is what to me seems worthy Speculation, they being all alike in Colour and Weight, according to their Dimensions, is the Reason I broke but one.

Wt. of the Stones. Their Dimensions in Circumference.

	oz. dwts. gr.			Inch.				
Fig. 82.	2	16	12	A. B. C. D.	8	A D. the Top of the Stone Oval.	Inch. $6\frac{1}{8}$	Fig. 82.
Fig. 83.		8	12	E. F. G. H.	$5\frac{1}{8}$	E. G.	$4\frac{1}{8}$	Fig. 83.
Fig. 84.		7	3	I. K. L. M.	5	I. L.	$3\frac{1}{8}$	Fig. 84.
Fig. 85.		7	12	N. O. P. Q.	$4\frac{6}{8}$	N. P.	$3\frac{2}{8}$	Fig. 85.
Fig. 86.		5	13	R. S. T. U.	$4\frac{3}{8}$	R. T.	$4\frac{1}{8}$	Fig. 86.

Fig. 87. A Shell taken off the Stone at the End 2. The Stone and Shell being like a Chesnut, soft, and like Wool, cutting into the Stone at 3; I found it hard.

XIII. An Apprentice to a Ship-Carpenter in *Great Yarmouth*, about 19 Years of Age, had violent Pains in the lower Part of the *Abdomen*, for 6 or 7 Months: It did not appear to be any Species of the *Cholic*; he sometimes made bloody Urine, which induced me to believe it might be a Stone in the Bladder. He was very little relieved by Physic: At length, a hard Tumour appeared in the left Buttock, on or near the *Glutæus Maximus*, two or three Inches from the Verge of the *Anus*, a little sloping upwards. A short time after he voided purulent Matter by the *Anus*, every Day for some Time: The Tumor broke: I suspected a *Fistula in Ano*, but could not get the Probe, by the Orifice of the Sore, into the *Rectum*. Shortly after, the Prongs of a Fork appeared thro' the Orifice of the Sore above half an Inch beyond the Skin, whereupon his violent Pains ceased. I divided the Flesh between the Prongs, according to the best of my Judgment; and after that made a circular Incision about the Prongs, and so with a strong Pair of Pincers extracted it, not without great Difficulty, Handle and all entire: The End of the Handle was besmeared with the Excrement, when I drew it out: It is six Inches and a half long, a large Pocket Fork; the Handle is Ivory, but is died of a very dark-brown Colour; the Iron Part is very black and smooth, but not rusty. He is likely to do well in a short Time; the Operation being performed the 11th of *October* last. He would not own how it came, till a Relation of his, on whom, in a great measure, his Dependance is, threatned never to look upon him more, unless he would give him an Account how it came: And he told him, that, being costive, he put the Fork up his Fundament, thinking by that Means to help himself, but unfortunately slipt up so far, that he could not recover it again. He says he had no Trouble or Pain, till a Month, or more, after it was put up.

A Fork put up the Anus, that was afterwards drawn out thro' the Buttock; by Mr. Robert Payne, Surgeon at Lowellstoft. No 391. p. 408

Two uncommon
Cases of Tu-
mours of the
Abdomen; by
John Boecler,
M. D. trans-
lated from the
printed Book
in Latin, by
W. Ritty,
M. D. R. S.
Secr. No. 405.
p. 562.

XIV. A Woman of *Strasburgh*, of 32 Years of Age, after an immature and hasty Labour, had her Belly grew gradually for ten Years together. During the whole Time of Gestation, she complained of scarcely any other Symptom than the Weight and Heaviness of her Belly; only now and then of a tense Pain and Difficulty in Respiration: She said nevertheless, that Flatules would sometimes be discharged from the *Pudenda*; and the more they were so, the less Uneasiness she perceived. The *Menstrua* were regular as to Time; but as to Quantity she did not explain herself: In the latter Months, towards her Death, she grew plainly cachectic. Her Countenance was cadaverous; her Breast and upper Limbs perfectly emaciated; her Feet oedematous, and the Belly much more turgid and prominent than before; so that at length she breathed with the utmost Difficulty, and upon taking any Nourishment, complained of a great Straitness in her Chest. Upon opening the *Abdomen*, two Days after her Death, some Water flowed out, of a wheyish Colour, tho' in what Quantity was not taken Notice of; but upon dividing the *Uterus*, a plentiful Quantity of a bloody Liquor issued from it, together with seventy-two *Molæ* of different Figures and Solidity, and chiefly of a black Colour. One only, the 76th, was fixed to the lower Part of the right Side of the *Uterus*, contiguous to it's internal Orifice. These solid Substances weighed 64 Ounces; as the Liquor also filled fifteen ancient *Alsace* Measures, so that taken together, the whole weighed 80 Pounds Apothecaries Weight. The Skin of the *Abdomen* was very thin, and almost transparent; the Navel perfectly obliterated; the Fat almost entirely consumed; the Muscles pale, flaccid, and very thin, and the *Peritonæum* in some Places so strongly attached to the *Uterus*, that it could not, without the utmost Difficulty, be torn from it. The Body of the *Uterus*, which is naturally thick, was extenuated to the same Degree of Rarity and Transparency with that of the *Cutis* of the *Abdomen*, and of a surprising Capacity. The Liver appeared pale, and so flaccid that it might be easily rubbed to pieces. The Height of the Belly from the *Vertebræ* of the Loins to the Navel measured $1\frac{1}{2}$ Foot; it's Length from the *Cartilago ensiformis* to the *Pudenda* $2\frac{1}{2}$ Feet; and it's Circumference at the Waist, 4 Feet $2\frac{1}{2}$ Inches, tho' the Woman was naturally of a small Size and Stature.

A Maid-servant in the same City, of twenty-three Years of Age, from a Suppression of the *Menstrua*, had her Belly grow slowly for three Years, without any other notable Disorder; till upon an accidental Fall, it increased so much in six Days, as to obliterate the Navel; and not being capable of a farther Distention, part of the Matter which caused the Tumefaction, flowed down to the Legs and swelled them likewise; which brought on a Difficulty of Breathing, a small, frequent, and uneasy Pulse, with a total Loss of Appetite. But what was more remarkable, the *Systole* and *Diastrale* of the Heart were plainly felt under the left Clavicle, the Heart being, upon Dis-
section,

Fig. 82.

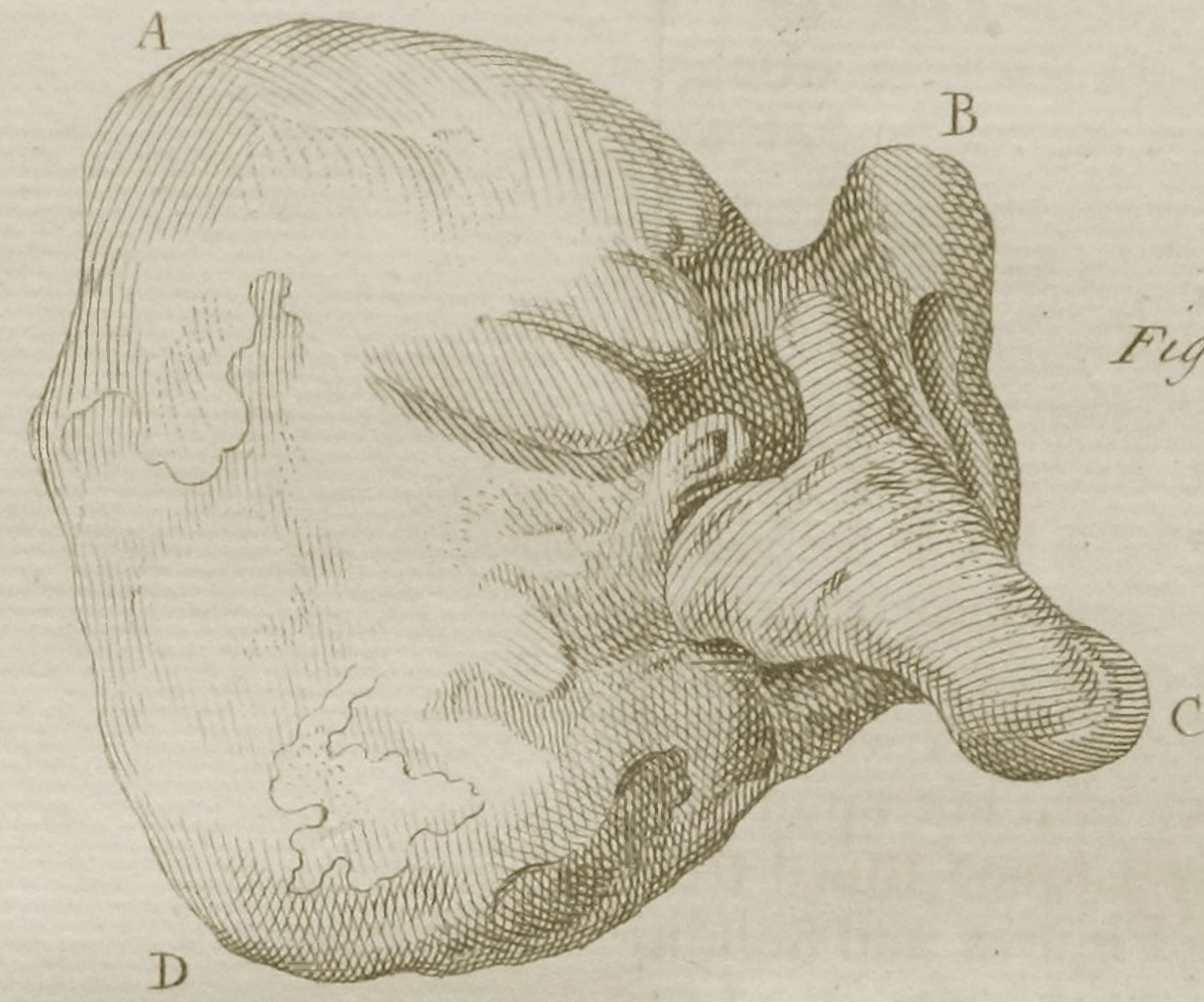


Fig. 83.

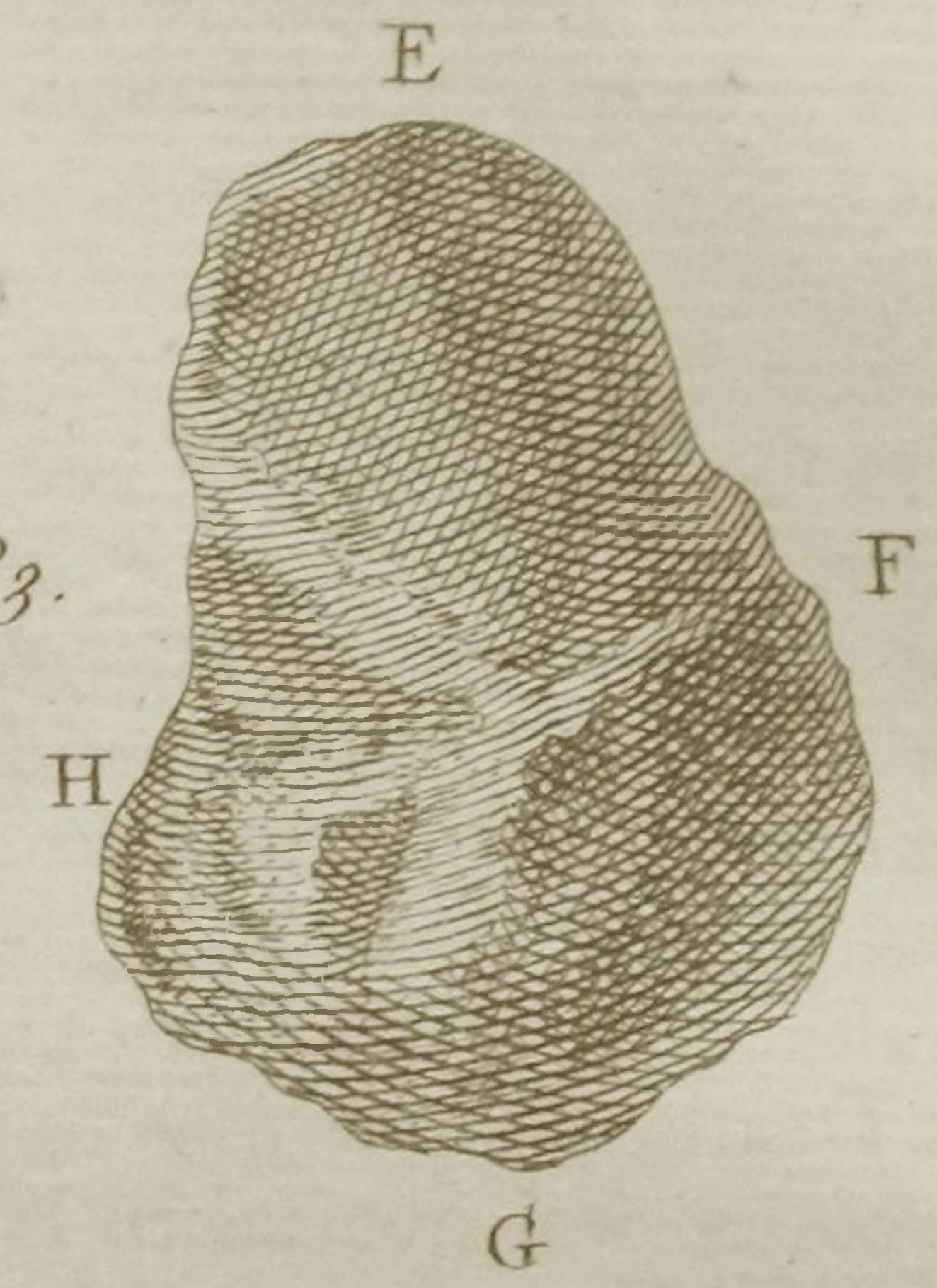


Fig. 84.

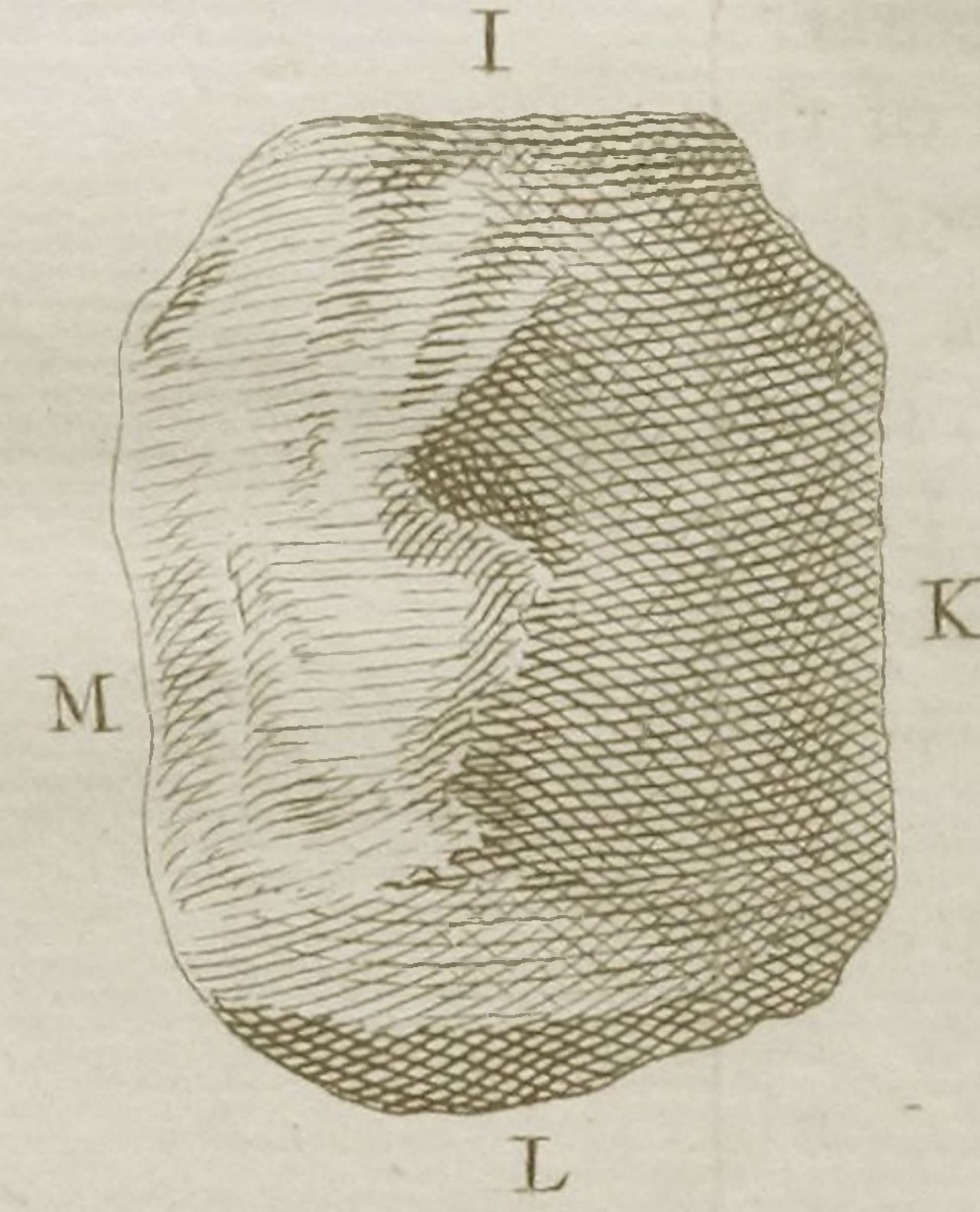


Fig. 85.



Fig. 86.

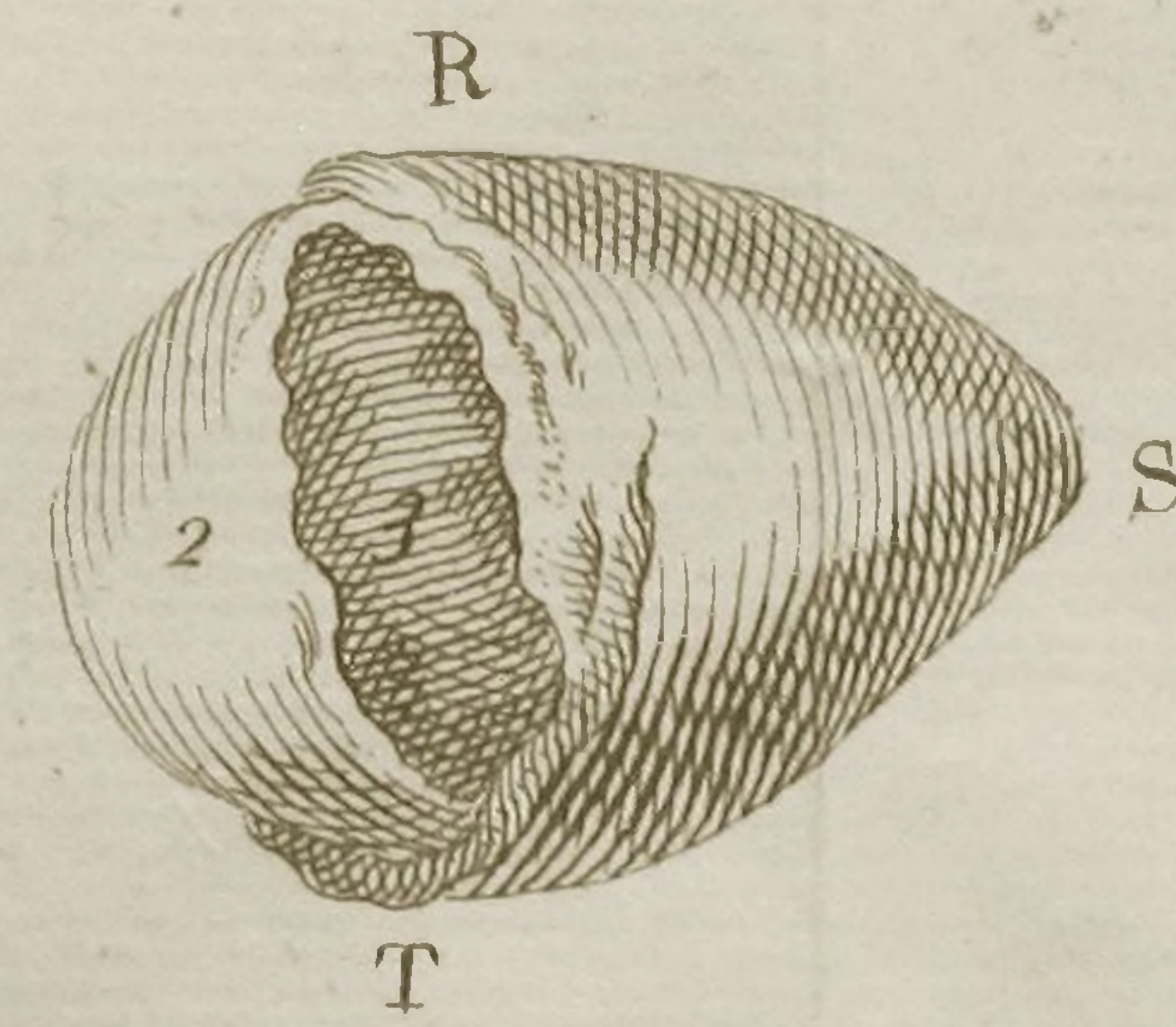
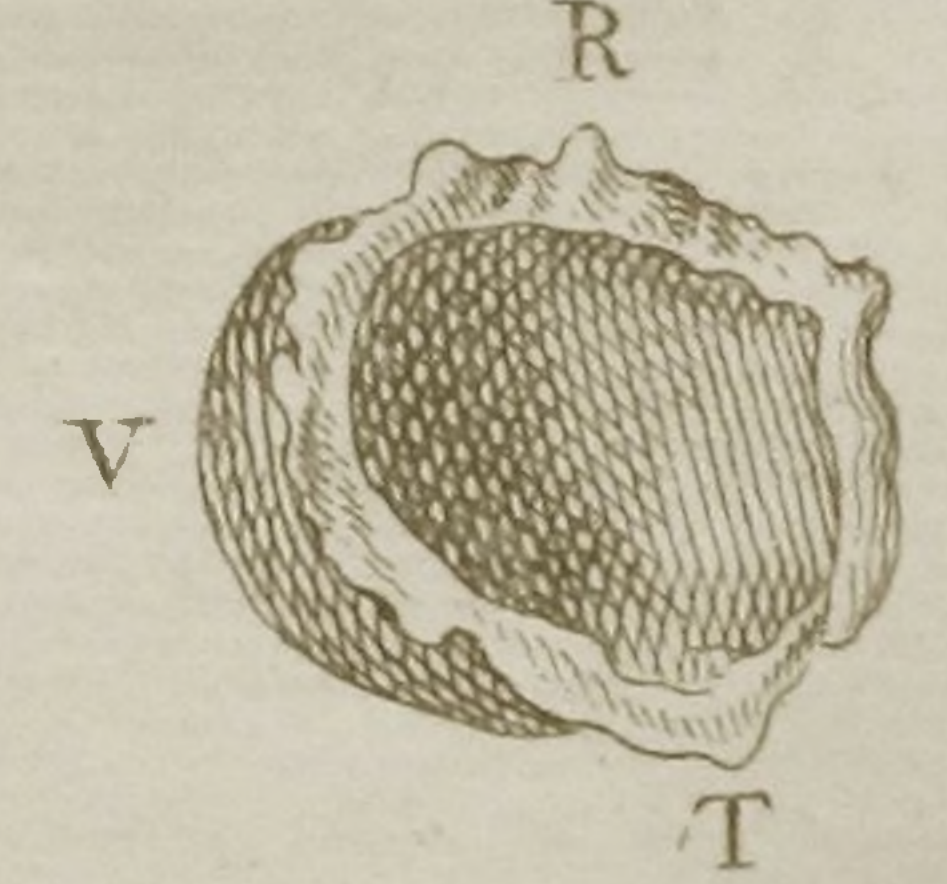


Fig. 87.



fection, found thrust up to that Part of the *Thorax*. The 14th Day from the Fall, a *Diarrhœa* came on, which killed her in a few Days. Upon making a small Incision in the right *Hypochondrium*, there gushed out from the Cavity a Liquor, in Colour, Consistence, and Froth, resembling well boiled Beer; which upon enlarging the Incision, was followed by a foetid purulent Matter, with Portions of the putrified Caul, which Matter filled 56 *Strasburgh* Pints. Upon this, the Belly subsided; but a large solid Substance still remained under the containing Parts of the *Abdomen*. Opening therefore the whole Cavity, there was found under the left Groin a considerable Tumour, nourished by it's proper Vessels, and every where fixed to the circumjacent Membranes; which being freed from, it weighed six Pounds common Weight. This Tumour proved a Congeries of incystated Abscesses (wrapt up in one common Covering) of different Sizes; the largest as big as a Man's two Fists, the smallest the Size of an Egg; and each of a different Sort of Substance: Besides which was a great Number of *Hydatides*. The *Peritonæum* was as thick as the *Cutis*; the Caul almost entirely destroyed; the Stomach natural, but perfectly empty; the Guts livid, very much thickened and vastly inflated, and moreover connected preternaturally to each other by peculiar Membranes. The Liver strongly adhered to the right *Hypochondrium*, and it's Coat parted from it's *Parenchyma* almost spontaneously. The left Kidney very near equalled the Spleen in Bulk, and the *Pancreas* was as hard as a Cartilage; but the *Uterus* and Bladder were found in *statu sano*. The Cavity of the *Thorax* was much smaller than usual, from the Contents of the *Abdomen* pressing up the *Diaphragm* into it; in which Cavity also was found the same Sort of bloody putrid Liquor, as likewise in the *Pericardium*. The right Ventricle of the Heart was preternaturally soft and flaccid, and being opened, was lined with *Hydatides*. The upper Parts of the Body were emaciated; the lower much tumefied by the Water contained within them.

XV. Rhedarius Baronis de Penterrider, aetatis 58 annorum, Temperamenti sic dicti Cholericæ Phlegmatici, Staturæ quadratæ, non obesus sed robustus, bene appetens, officio suo bene fungens, nec vino, nec liquoribus spirituosis immoderatè utens, bono satis Regimine vivens Augusti Mense 1721, auxilium meum petiit, pro Abdomine fortiter tumente & tenso, Ascitico minimè absimili, urinâ attamen bonæ notæ & in quantitate sufficiente optimè prodeunte, pedum nullo oedemate comparente, Respiratione liberrimè procedente ventre autem in dies crescente (qui Mense Junio tumere incepit) sanguine in vasis hæmorrhoidalibus stagnante, nodos ibidem magnos elevante & interdum dolorificè furente, Appetitu ac Viribus nunquam prostratis.

A great Number of Hydatides found in the Abdomen; by Barthol. Anhorn ab Hartuiss. N^o 370. p. 17.

Fateor Aenigma mihi fuisse an Tumor sit siccus humidusne? Ad satisfaciendum verò Indicationibus, in specie hæmorrhoidibus suppressis,

medicamenta chalybeata cum Purgantibus mixta exhibui, per quae fluxus haemorrhoidum mox excitatus, dolores sedati, & magna sordium quantitas cum aliquali levamine per tubulum intestinale fuit eliminata. Postea ad exemplum Etmulleri in hydrope sicco, Nitr. praeparat. quotidie ad $\bar{3}$ β . item Mercurium vitae & omnis generis Diuretica mitiora, fortiora, &c. omnia in cassum dedi.

Abhinc Aeger sub sanitatis recuperandae, spe, pro more Vulgi auxilium Empiricorum imploravit, qui statim Aureos ipsi montes promiserunt, multisque saginatum Arcanis miserum in malis deseruerunt.

Abdomine igitur mole suâ maximè urgente, ad Paracentesin sine morâ progrediendum erat; quam die 14 Jan. Chirurgus unanimi nostro consensu administravit; contenta verò consistentiam gelatinosam nacta per angustius Cannulae immiffae spatium exire non poterant. Incisio ergo cum Lancetta facienda erat; quâ factâ, materia gelatinosa coloris grisei & lutei, albumine ovorum spiffior, cum magna quantitate globulorum alborum sphaericorum, triangularium, vermicularium, gemellorum, testiculi, & ovarii-formium, &c. magnitudinem nucis avellanae adaequantium primo die ad mensuras sex evacuata erat, aegro quantum ad vires optimè se habente. Postero die, cum facile judicare licebat, factam incisionem non satis esse amplam pro exitu majoribus hujus naturae globulis concedendo, Lancettâ igitur vulnus ampliabatur, per quod globuli ovum Columbinum magnitudine superantes magno numero cum sex iterum gelatinae mensuris, & magno frusto massae cujusdam albae portionem omenti referentis, de novo excreti erant. Cui Massae plures dictorum globulorum filamentis fibrosis adhaerescebant.

In examinatione materiarum, gelatina super carbonum ignem indurescit & albescit, pelliculâ desuper se formante.

Spiritu Vitrioli, Spir. Sal. Ammon. vol. Ol. Tart. per deliq. Spir. Vin. rectific. Aceto affusis, manifesti nihil videtur, quàm levis induratio materiae ab uno quoque istorum liquorum, etsi naturâ inter se invicem contrariorum.

Globuli coloris sunt albissimi, sensui tactûs resistentes; rupti liquorem album chylo similem fundunt, membranâ seu pelliculâ manifestâ cincti.

Massa ista albicans quae portionem omenti refert, etsi crassitie pollicem adaequet, substantiam purè membranaceam habet.

Numerus globulorum majorum & minorum ad septem vel octo milia se extendit.

Hodie qui est inclusivè decimus sextus ab operatione dies, aeger quàm optimè se habet, venter est mollis, planus, vulnus pulcherrimum, urina, pulsus, respiratio bona, consequenter nulla febris, somnus tranquillus. Evacuatio materiae gelatinosae durantibus 13 diebus fuit copiosa, inodora, nunc purè serosa & parca, sed fortem odorem spirans,

spirans, immisumque Catheterem argenteum nigricans, quod corporibus heterogeneis corruptis magis quam visceribus gangraenâ prehendis attribuimus, quoniam febris abest. Hodie post injectionem Decocti ex Enula Campan. Agrimon. & Mell. cum Tinctur. Aloes. Myrrh. & Balsam. du Commandeur, rupta pellicula globuli fuit excreta, quem in statu suo naturali ovum gallinaceum mole adaequasse, forsan superasse, certum est.

Appetitus & vires nunc sunt quae nobis faceffunt. Medicamenta porrigo Traumatica. Alexiteria & Confortantia invicem combinata juxta victum Analepticum.

XVI. Ever since I was Anatomist and Surgeon enough, to reason upon the Causes of the Tedioufness and bad Success of the common Methods of Cutting for the Stone, I concluded that they were principally owing to the natural Structure and Situation of the Parts concerned. Therefore I began to consider why that Operation might not be performed the high Way, so frequently mentioned by Authors, but never approved of by any, except the most sagacious of all Surgeons, *Fr. Rossetus*, who has certainly been very little read, or else very ill understood, otherwise this Operation had not been so long a Secret. After making some Experiments on dead Bodies, I was convinced, that the Stone might be extracted that Way with a great deal less Trouble than commonly; and I was perswaded that the Wound would heal again, by the great Number of authentic Instances we have of accidental Wounds in the same Place being speedily and firmly cured; and therefore I resolved to make the Experiment on the first Patient I could meet with, which I could not procure till *December 1719*; and then I proceeded as follows.

An Account of the new Method of cutting for the Stone; by J. Douglas, Surgeon, F. R. S. N^o 371. p. 83.

The Patient was placed flat on his Back, on a Table, with a Pillow under his Head; then his Wrists and Ancles were fastened together, with Straps: Then I ordered one Assistant to his Head, another to each of his Shoulders, two to the *Penis*, one of which was to manage the Ligature, and the other the Prepuce, and one to each Knee, to hold them as fast and firm as possible. The Patient and Assistants being thus placed, the Operation consists of three Parts.

1st, In filling the Bladder, which is done thus: Pass the *Catheter*, *Fig. 88*, then draw out the *Stillet*, *Fig. 89*, then order the Ligature *Fig. 88, 89.* Assistant to cast the Ligature, which is a Skein of Silk, round the *Penis*, above the Glans. Then fix the *Key*, *Fig. 90*, to the Head of the *Fig. 90.* *Catheter*, *Fig. 91*, to keep it steady, while you screw on the *Syringe*, *Fig. 91.* *Fig. 92*; then screw the second part of the *Sucking-Pipe*, *Fig. 93*, to *Fig. 92, 93.* the first, *Fig. 94*. Then order the *Penis* Ligature to be straitened, *Fig. 94.* and the *Prepuce* Assistant to gather the *Prepuce* up about the *Catheter*, and to hold it as close as possible. Then order the *Water*, being a little warmer than *Milk*, to be clapped under the *Sucking-Pipe*, then draw up the *Water* into the *Syringe*, and thrust it into the *Bladder* at leisure, and repeat it till the *Bladder* is so full, that you can per-

ceive

ceive it's Tumour through the *Abdomen*, (at which Time you will also observe the *Penis* above, and the Prepuce below the Ligature, very much swelled, and the Patient in a great deal of Pain) which is a certain Sign that there is enough injected; then withdraw your Syringe and *Catheter* together, taking particular Care that your *Penis* Assistants straiten their Gripe, lest the Water should follow the *Catheter*, which would undo all.

2dly, In making the Incision, which is done thus: Order the *Penis* Assistants to turn the *Penis* towards the *Anus*, that so their Hands may be the more out of the way; then take the first Knife, *Fig. 95*, and cut at leisure, and with a steady Hand, from near the upper Part of the Tumour of the Bladder, or lower, according to the computed Bigness of the Stone, down to the *Os Pubis*, and exactly in the middle; when you are got a little more than half way through the abdominal Muscles, take the second Knife, *Fig. 96*, clap it's Back on the middle of the *Os Pubis*, then run it's Point down towards the *Sphincter*, until you get into the Cavity of the Bladder, which is discovered by issuing out of the Water, then run your Knife along very quickly towards the Fund of Bladder, as far as is necessary.

3dly, In extracting the Stone, which is done thus: Before you withdraw your Knife, introduce the fore and middle Fingers of your left Hand, between the Knife and the *Os Pubis*, into the Bladder; then withdraw your Knife, and thrust the fore and middle Fingers of your right Hand into the *Anus*, and raise the Stone up towards the Wound, and so you will easily catch hold of it, (tho' never so small) with your Fingers which are in the Bladder; then draw it out with the smallest End foremost: Then introduce your Fingers again, to see if there are any more Stones, which are to be drawn out as before.

Then take a Needle and Thread, and make one Stitch thro' the Skin, in the middle of the Wound, and tie it pretty close, then undo the Straps and carry the Patient to Bed.

The Patient being put to bed, I laid a Pledget, armed with Balsam, over the Wound, and a bit of sticking Plaister over that. Then I embrocated all the *Abdomen*, *Scrotum*, and *Penis*, with warm *Ol. Chamæmel.*; then I applied over the Dressing and all the *Abdomen* an *Emollient Pultice*, spread almost an Inch thick on soft Flannel; then I turned a Swath a little broader than the Patient's Hand once round about him, and pinned it on the Pultice Cloth, just tight enough to keep it on.

As soon as he was dressed, I gave him an Opiate (for nothing is so proper as Rest) such as this; ℞ *Aq. Cinnam. Hord.* ℥ij. *Laud. Liq. Gutt.* xv. *Syr. de Mecon.* ℥ij. which may be increased or diminished as the Case requires.

Next

Fig. 94.

Fig. 89.

Fig. 91.

Fig. 88.

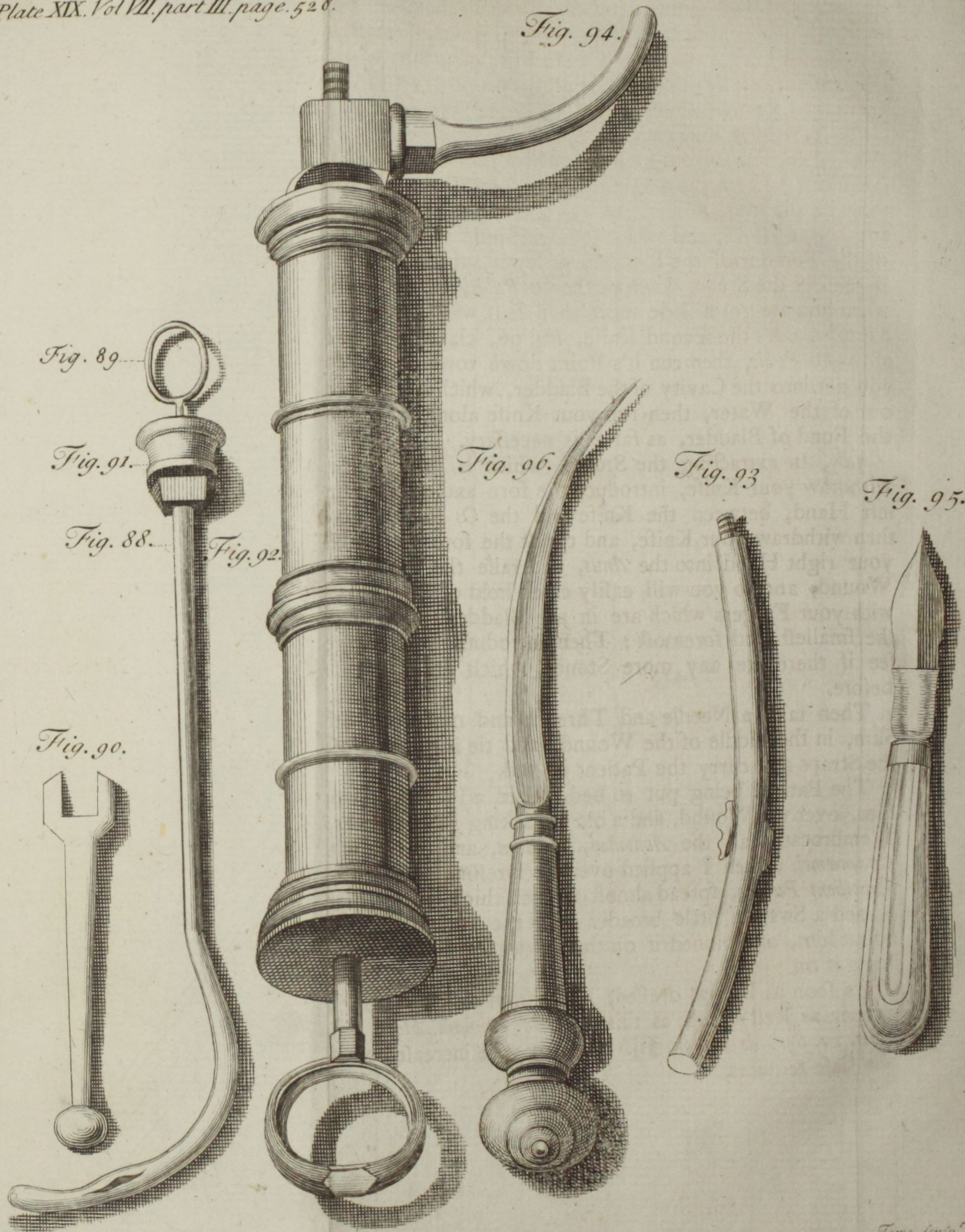
Fig. 92.

Fig. 90.

Fig. 96.

Fig. 93.

Fig. 95.



Next Evening I took off the Pultice and Dressing, and cut the Stitch; then fomented the Wound and all the Abdomen with Stupes wrung out of *Aq. Calc.* and fresh Urine, as warm as he could bear it; then dressed the Wound as before. Then I rubbed the *Scrotum*, *Penis*, and Groins, with *Unguentum Album*, to prevent their being scalded by the Urine, which flows from the Wound.

The Wound must be dressed twice a Day at least, till you have a plentiful Digestion.

After every Dressing, the Ointment and Oil was used, as before directed.

There is little Variation in the dressing of the Wound, except what is common in others.

The Urine flows always thro' the Wound, until the Wound of the Bladder is cured; which is sooner or later according to the Constitution of the Patient.

When the Urine begins to come the right way, it pains and scalds them much after the same manner, as when they had the Stone (which is caused by the Contraction of the *Urethra*, that has been so long useless) but it never lasts above a Day or two, and then they may make Water with the same Ease and Freedom as any other Person.

They ought not to be forced to go to Stool under six or seven Days, unless there is some particular Reason for it, because straining to go to Stool injures the Wound.

They ought never to be taken up, except to get their Beds made, until the Urine comes all the right way, because it makes them sick and faint; and consequently hinders the Cure of the Wound.

Cold is to be avoided as the Pest, because it puts them to a great deal of Pain either to stifle it, or to cough out.

N. B. If a flexible *Catheter* could be passed, and kept in the Passage without Pain, it would very much hasten the Cure of the Wound.

I made this Operation the first time on the 23d of *December 1719*, upon a Boy between sixteen and seventeen Years of Age, and in five Weeks time he was perfectly cured.

The Stone was of the Figure and Bigness of *Fig. 97.*

Fig. 97.

I made the second Operation on the 12th of *May 1720*, on a Boy of eight Years of Age, and in six Weeks time he was perfectly cured.

The Stone was of the Figure and Bigness of *Fig. 98.*

Fig. 98.

The third Patient was but three Years of Age, and was cut in *August 1720*; but died of *Convulsions* about fifteen Hours after the Operation.

Fig. 99. Shews the Form and Bigness of this Stone.

Fig. 99.

The fourth Operation was made on the 23d of *March 1720-21*, upon a Boy fourteen Years of Age; and in four Weeks afterwards he was perfectly cured.

This

Fig. 100.

This Stone is represented in Fig. 100.

In this Patient I made a small Wound in the *Peritonæum*, through which I saw the Guts present, but I pushed them back with my Finger, and then stitched the Skin; and we had no farther Inconveniency by it. These three Patients have been already shewed before the Society.

This Operation may be performed with equal Success on Females, when the Stone is large; but if it is but small, the common way of extracting them is very good.

From all which I think I may safely conclude in the Words of the inimitable *Rossetus*.

Post hæc nemini dubium esse debet, novam hanc nostram Cystotomiam, vetere illâ tot doctissimorum Chirurgorum Cystotomiâ (tam periculosâ, ut eam aggredi vel ipse Hippocrates Chirurgôn Chirurgoatos metuerit) & leniorem & tutiorem haberi.

Observations
upon dissecting
the Body of a
Person troubled
with the Stone;
by Dr Perrot
Williams. N^o
377. p. 326.

XVII. 1. Mr *William Bowen* of *Haverford-West*, aged between 40 and 50, having been, for about seven Years, severely afflicted with the usual Symptoms of the Stone in the Kidneys and Bladder, viz. bloody Urine after Exercise, Strangury, &c. died in *May 1722*. His Body being opened, there were found in the Bladder six smooth oval Stones, exactly of the same Figure, and nearly of the same Magnitude: There were also three Cells in each Kidney, the Figure of each suitable to that of the Stones: The *Ureters* were so preternaturally extended, as very easily to admit the largest of the Stones to pass from the Kidney to the Bladder. The *Viscera*, &c. appeared in their natural State.

---By *P. Hardif-
way, M. D.*
F. R. S. No.
377. p. 327.

2. *Homo septuaginta circiter annos natus, ventris dolore horrendo correptus est die Oct. 19, 1722. Accesserunt Vomitus & Urinæ difficultas, præ doloris atrociâ sese erigere non poterat, sed misere incurvatus, dies noctesque prope focum jacebat ejulans. Sexto morbi die, urinâ prorsus suppressâ, de dolorosâ circa Hypochondria stricturâ, perinde ac a funibus circumjectis, querebatur, postea de pondere quodam in vesicâ molesto, quasi Rapi majoris, (sic aiebat) inibi hospitantis. Omnibus in pejus ruentibus, die morbi duodecimo ad plures abiit. Cadavere aperto vesicam secuimus, quam ab ullis vel minimis calculi vestigiis immunem invenimus; in utroque autem rene (multâ aquâ refertis) repertus est calculus, insignis, scaber & multiplici ramo per parenchyma se dispergens, quem integrum extrahere nullâ arte potuisses, nisi totâ prius frustulatim decerptâ carne. Ramorum maximus in ureteris caput se insinuans, perbelle adeo id occupaverat, ut ampulla obturamento suo arctius occludi vix posset. Ulterius scrutari nobis non licuit, ideo unum tantum addam, nempe, quod Omentum instar fasciæ angustioris sub hepate retractum delitescibat. Pauper erat & corpore atletico, semper sanus, nisi quod a paucis annis, aliquando fabulosa per urinas excerneret.*

Fig. 101, 102.

3. Juvenis

3. Juvenis studiosus per duos annos Dysuria frequenti laborans, per illud tempus ultra quinquaginta calculos excrevit, quorum plerique sine insigni dolore inter mingendum secesserunt; quidam tamen eorum reliquis majores, pisorum majorum vel phaseolorum magnitudinum habentes, in urethra substiterunt, ac manu chirurgi comminuti aut sectione extracti fuerunt. Incidit hic sensim in Marasium totius corporis, ac urgente tussi sicca & Asthmate, accedente insuper tumore pedum œdematoso, tandem pridie ante mortem, lecto affixus, animam Creatori reddidit. Ad sectionem corporis defuncti accedentes, aperto Thorace pulmonem cum pericardio, diaphragmate & costis, hinc inde concretum, ac in dextro præprimis latere scirrhosum invenimus, in utroque præterea ventriculo cordis, Polypos insignes, qui truncos vasorum occupaverant, & proculdubio Asthmatis atque insequentis suffocationis, mortisque subitanæ præcipua causa fuerunt.

By Abraham Vater, M. D. F. R. S. No. 324. p. 102.

In abdomine hepar & lien nullo manifesto vitio laborabant; intestinum autem ileon sugillatum erat & colon in toto suo ambitu, à dextro inde latere, ubi hepatis accumbit, una cum recto, ita constrictum & contractum apparebat, ut vix digiti crassitiem æquaret, nullamque ferè cavitatem interiùs monstraret.

Tandem vias urinarias, utpote officinam tot calculorum visitantes, in renibus atque ureteribus nihil præternaturalis invenimus, in vesica verò tres calculos, phaseolorum magnitudinem habentes, eos tamen non liberos, sed membrana valida involutos, ac lateri anteriori prope sphincterem adhærentes deprehendimus, quos in rei memoriam una cum eorum involucre asservo. Unde hæc membrana, calculos involvens originem trahat, explicatu difficillimum mihi videtur; quæmobrem hac data occasione, flatu per ureterem utrumque immisso, inquisivi, an illa (viz. membrana) cum ureteribus communicet; & utrum sit ipsa membrana Vesicæ interior, à calculis in ureteribus, inter substantiam Vesicæ incedentibus, una cum uretere, vel hoc rupto, extensa: nihil tamen detegere potui. Hos tamen calculos Dysuriæ non tantùm continuæ, sed etiam propter irritationem perpetuam, constrictionis præternaturalis intestini coli atque recti extitisse, rationi conveniens videtur.

4. A Man aged 70 Years, died of a Suppression of Urine, occasioned by a Stone stopping in the Urethra, just within the Glans, of the Bigness of a Horse-Bean. This Appearance, with the Symptoms that had attended this miserable Man, gave me Reason to expect something remarkable in the urinary Passages. The Ureters and Pelvis were very much distended; which is common where great Numbers of Stones have descended down them, from the Kidneys to the Bladder. The Bladder contained about sixty Stones, the largest of which was about the Size of a Walnut, the others smaller; and just within the Neck, was a hard Tumour, as big as a Nutmeg, which almost closed the Orifice; and indeed the Situation of this

By Mr John Ranby, F. R. S. No. 401. p. 413.

Tumour

Tumour was such, that it not only made the passing the *Catheter* very difficult, and hindered our feeling the Stones, by directing the Instrument upwards; but likewise would alone produce the Symptoms of the Stone in the Bladder, by obstructing the free Discharge of Urine through the *Urethra*; the inner Membrane of which appeared as if lacerated in several Places, and the Tube filled with a glutinous Matter tinged with Blood. On the back Part of the *Vesiculae Seminales*, near the *Prostata*, were several Stones, as large as Peas, which closely adhered to the adjacent Membranes.

By Mr John
Dobyns,
F. R. S. No.
422. p. 452.

5. Mr *Laurence*, a Gentleman of about forty Years of Age, had for near twenty Years a Complaint in his Kidneys; making bloody Urine upon any extraordinary Motion, but free from the great Pain, and all other Symptoms usually attending nephritic Cases. However, upon opening the Kidneys after his Death, there was in each a Stone of an extraordinary Size and Figure, besides 100 smaller, which are brought for the View of the Society, with a Description and Draught of the two largest subjoined.

Fig. 103.

Fig. 103. Shews the Stone denudated, as taken from the *Pelvis* of the right Kidney. *a.* That Part which had branched into the *Ureter*, and totally obstructed it's Channel. *b. b. b.* The eminent Parts of it. *c. c. c.* That Part which filled the Capacity of the *Pelvis*.

Fig. 104.

Fig. 104. Shews the Stone taken from the left Kidney. *a.* That Part which had protruded itself into the upper Part of the *Ureter*, but did not totally plug it up, by which Means the Urine had a Passage. *b. b. b. b.* The eminent Parts which branched into the *Fistulae membranaceae*. *c. c. c. c.* The Body of the Stone which lay in the *Pelvis* of this Kidney.

Great quantities of Stones, voided during the use of the Pyrmont Waters. By Abraham Vater, M. D. F. R. S. No. 377. p. 322.

XVIII. *Nobilis Pomeranus, sanus ac vegetus, uti ipse de se refert, nulliusque mali sibi conscius, ante hos tres annos, suafu amici, conversationis causa, socium se ipsi adjuxit, in bibendis aquis medicatis Pyrmontanis. Factum autem est, ut, cum potando aliquot dies transegisset, calculos quosdam minores, absque ullo quidem dolore, excludi inter mingendum sentiret. Effectum hunc criticum esse sibi persuadens noster, aquas istas aucta dosi bibere incipit, quo facto, quatuor vel quinque dierum spatio, ultra quadraginta calculi, rursus tamen sine molestia, exierunt. Hoc viso, strenue & alacriter potare pergit, optimum hujus curae effectum sibi promittens. Assumpta vero ita nimia aquae quantitate, urina supprimitur, adeo, ut ne minimam ejus portionem per tres dies emittere potuerit, usque dum catheteris ope via aperiretur. Commonefactus itaque à Medicis, ab usu aquarum ulteriori abstinuit, rem ita peractam esse credens. Non ita multo post, vir iste iter faciens, continuo mingendi conatu lacessitur, ac iterum iterumque ex rheda descendere cogitur, tandemque inter gravissimos dolores sanguinem purum effundit. Duravit mictus cruentus & dolorosus, quamdiu aeger in itinere constitutus fuit, postquam vero hic, domum reversus, quieti studuit, statim cessavit, nec quicquam*

quicquam doloris remansit. Quoties vero ab illo tempore sive rheda, sive equo veheretur noster, rediit dolor, & sanguis cum urina secessit, sed quiete restituta, iterum evanuit, nullo planè dolore superstite. Contigit quidem interdum, ut calculus unus vel alter prodiret, rarius tamen hoc factum est, nec ullum ex eo dolorem percepit aeger, quoniam hi longè minores, quam quos inter aquarum usum reddidit, fuerunt. Symptomate hoc admodum molesto per duos integros annos vexatur aeger, tandem usu medicamentorum liberatus est. Cesante itaque penitus mictu cruento, nil magis timuit, sed integrae sanitati restitutus sibi visus, medicamentis valedixit. At, quid fit? Augetur post illud tempus indies Stranguria, virque continuo die nocteque ad urinam reddendam stimulatur, quo malo ipse ad hunc usque diem affligitur. Urina, quae parvissima quantitate, summoque cum dolore emittitur, crassa exit, ob pituitam viscidam admixtam, quae fundum statim petit, glutini ex farina confecto similis, tantae tenacitatis, ut in fila quasi trahi queat. Aeger interea appetitu bono gaudet, & somno quoque sufficienti utitur, nec ullibi praeterea in corpore dolorem sentit.

Si quis historiam morbi, quoad omnes ejus conditiones, accuratè *The Case considered.* perpendat, mecum confitebitur, eandem vix parem inter observationes Medicas agnoscere. Notatu dignissimum imprimis est, potu aquarum istarum mineralium, calculos sat insignes, in tanta copia, atque intra tam breve temporis spatium exclusos esse, a viro, uti ipse de se refert, ante aquarum usum perfectè sano, nec ullum calculi indicium unquam sentiente. Non levem hoc in animo excitare potest suspicionem, calculos non tam ab aquis propulsos, quam ex croco minerali, qualem aquae tales medicatae in sinu gerunt, generatos potius in hoc aegro fuisse. Parum quidem huic sententiae favere videtur tempus admodum breve tot calculorum concretioni vix idoneum, quoniam hi, paucos post dies ab inchoato aquarum potu, exclusi sunt. Non tamen existimo, quenquam facilè definire posse, quantum temporis spatium ad calculi in corpore generationem requiratur; poterit hoc forte esse exiguum. Longè enim minus veritati consentaneum videtur, calculos istos jam tum in viis urinariis latitasse, quoniam vir ille nunquam antehac urinae difficultatem, aut aliud calculi signum percepit. Confirmant è contrario omnes hujus casus circumstantiae, *concretionem istam subito factam esse.* Calculi enim ipsi nullatenus asperi atque angulosi, quales alias vesicae calculi esse solent, ob successivam spiculorum salinorum cohaesionem, sed pisorum majorum minorumque instar, rotundi, glabri, & politi observantur, quod coagulationem eorum subitanam docere videtur. Color eorum luteus convenit exactè cum sedimento illo, coctione ex aquis *Pyrmontanis* extracto, cujus minimam portionem ex quatuor unciis aquae hujus paratam addere volui, ut tanto melius convenientia ista pateat. Fracti calculi strata ejusmodi variegata interiorius monstrant, qualia in tophis thermarum Carolinarum deprehenduntur, quorum pariter particulam

ticulam exiguam adjeci. Addidi propterea quoque calculos duos, cum aliquot frustulis contritorum, paucissimos enim tantum obtinui. Ultimo tandem loco attendi quoque meretur singularis ista circumstantia, quod maxima horum calculorum pars inter ipsum aquarum usum exclusa sit, post illud tempus vero rarissimè tales, iique longe minores prodierint. Non tamen ideo culpa hujus rei in aquas istas medicatas conjicienda erit, quasi hae ad calculi generationem disponent, cum potius debilitati viscerum, ac pravae digestionis adscribi debeat effectus ille extraordinarius.

A large Stone voided through the Urinary Passage, by a Woman. By Dr Rich. Beard, F. R. S. No. 397. p. 211.

XIX. A poor Woman in the Parish of *Fladbury* in *Worcestershire*, aged 63, about * three Years ago, was afflicted with the usual Symptoms of a Stone in the Kidneys, and afterwards in the Bladder. The Fits of Pain occasioned by it increased as it's Bulk did; till she was so emaciated by them, that her Case was judged desperate. Finding Relief (towards the End of last Summer) by a plentiful Use of Mallow-Tea, she persisted in it for a while; when on a sudden, in the Presence of some Women, she perceived an uncommon Weight and Force within, which assisting with all the Strength and Breath she had left, a Stone came away with a Noise that very much surprized the whole Company, and with less Pain and Effusion of Blood then, or Soreness afterwards, than might have been expected. She is since easy and in health, and feels no other Inconvenience now, but that unavoidable one, an *Incontinentia Urinae*.

Fig. 105.

The Stone (of which I send you the Side-view, drawn as near to the Life as we could) is of the same Colour and Texture with others of this kind that I have seen, formed in human Bodies. It's Weight, as I at present find it, is $\text{ʒij. ʒj. 55. gr. Avoird.}$ When first voided, 'twas considerably more, several Pieces having been rubbed off at *cc*, and likewise on the other Side: The greatest Circumference is 7 Inches and $\frac{1}{2}$; 'tis 4 Inches $\frac{1}{4}$ round at the thickest Place, and the Length on the Convexity is 4 Inches $\frac{7}{8}$; the Parts of the Stone at *aaa* are somewhat jagged and stained with Blood, as is the little Protuberance on the opposite Side *b*. Here, I suppose, it met with the most Resistance, at the Time of it's Expulsion thro' the Urinary Passage.

A Stone broken in the Bladder, and discharged thro' the Urethra; by Laurence Heister, M. D. F. R. S. No. 417. p. 13.

XX. In terris Brunsvicensibus in Coenobio seculari, quod *Marienthal* appellatur, & ad horae circiter distantiam ab Helmstadio, celebri Academiae Juliae sede, situm est, rerum oeconomicarum hujus Coenobii Praefectus, nomine Widmannus, vir sexagenario major, sed robustus & duro vitae victusque generi adfuetus, qui per plures annos primo calculo renum saepe & vehementer laboravit, eorumque sensim magnam copiam, quorum multi Pisi magnitudinem superarunt, per iter urinae haud sine magnis doloribus excrevit. Tandem vero quatuor ab hinc annis calculi quoque vesicae om-

* This Paper is dated June 29, 1727.

Fig. 97



Fig. 98



Fig. 99

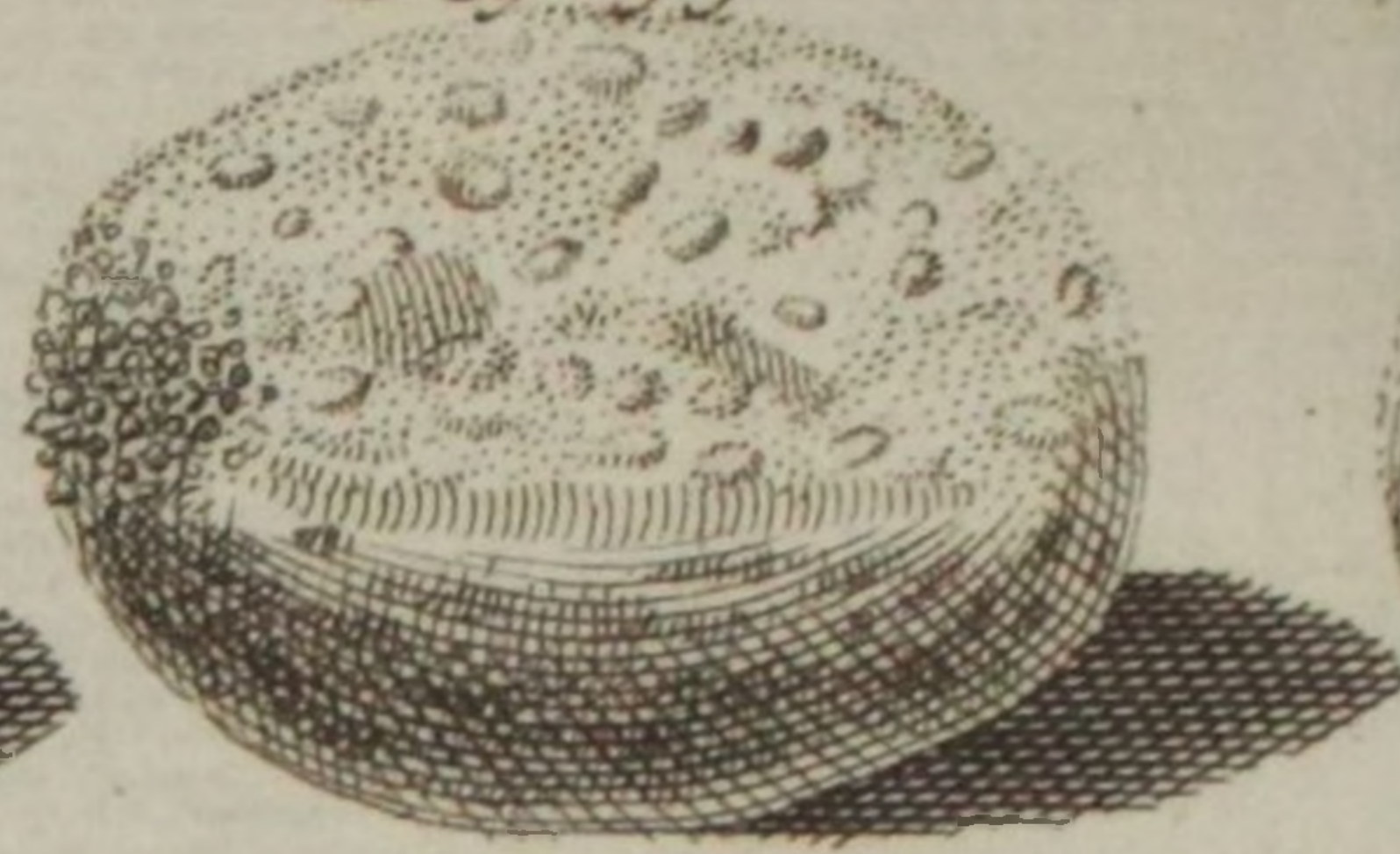


Fig. 100



Calculus Renis dextri

Calculus Renis sinistri

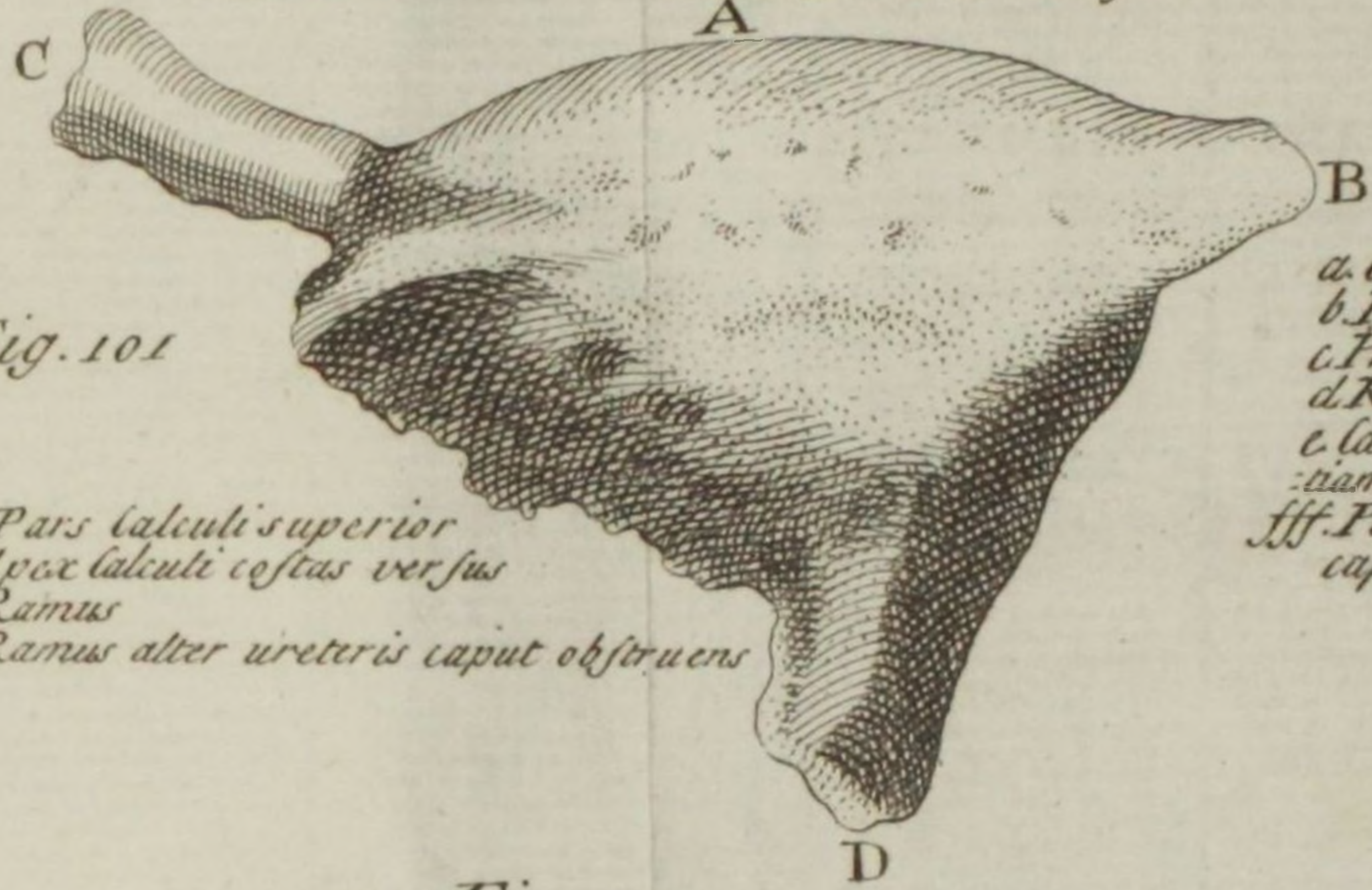


Fig. 101

- A. Pars calculi superior
- B. Apex calculi costus versus
- C. Ramus
- D. Ramus alter ureteris caput obstruens



Fig. 102

- a. Apex calculi costus respiciens
- b. Pars calculi superior
- c. Protuberantia
- d. Ramus locam versus se extendens
- e. Cavitas ubi osiculum protuberantiam sive processum faciens abruptus
- f. Pars calculi inferior ureteris caput occupans

Fig. 103

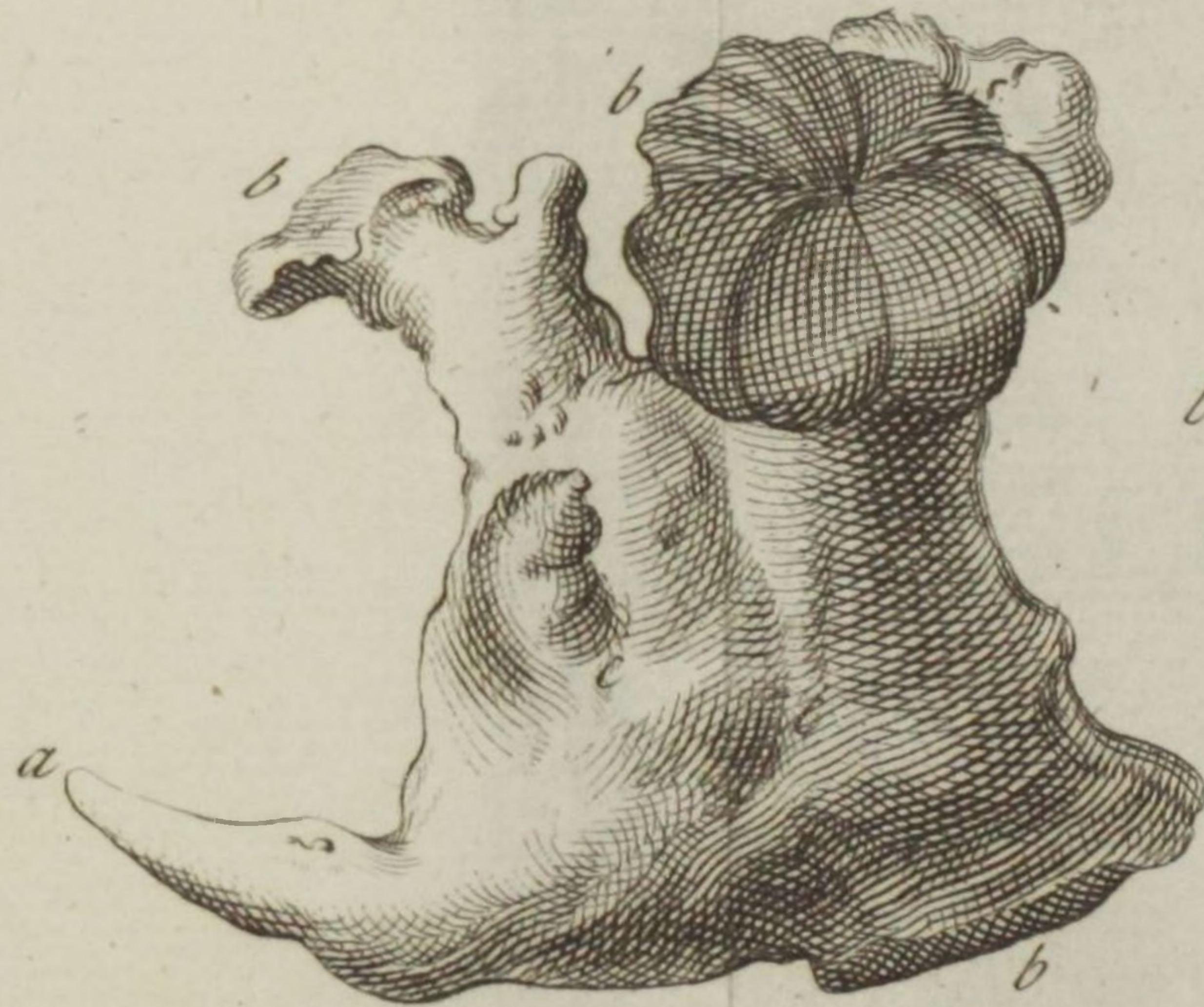


Fig. 104

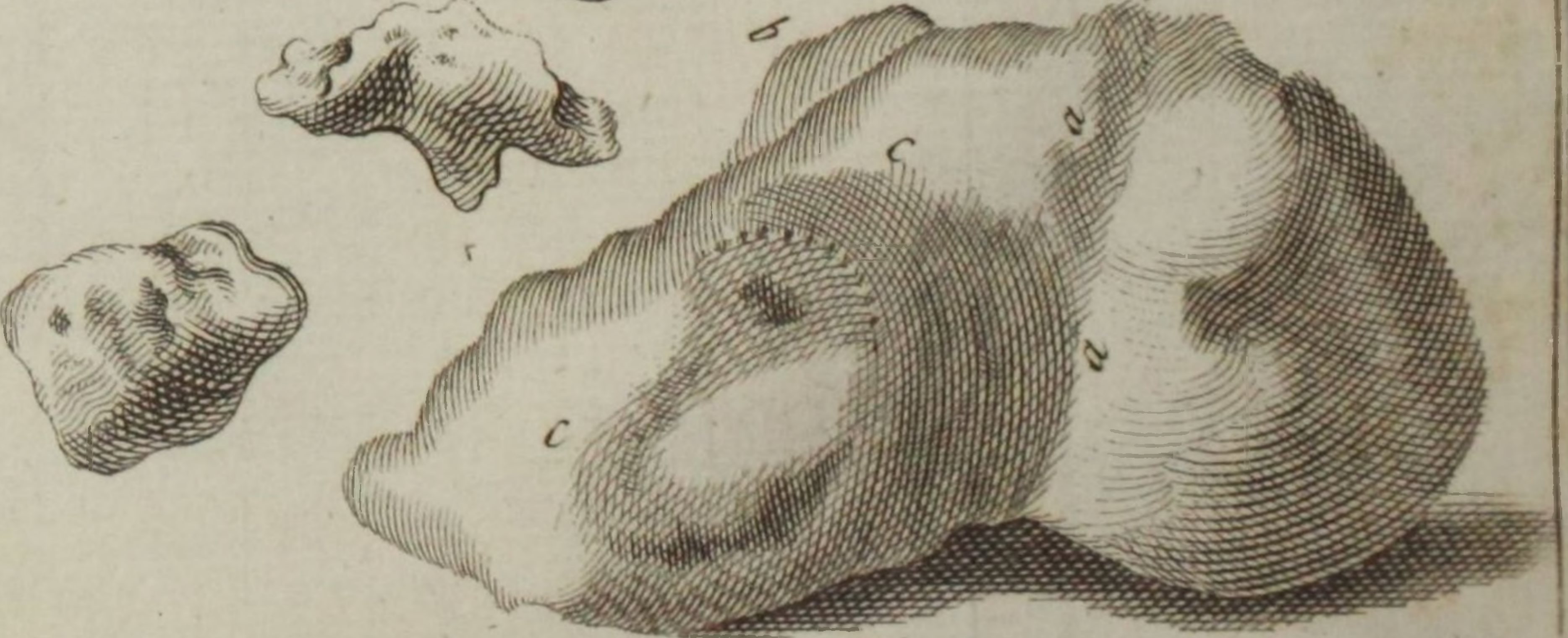
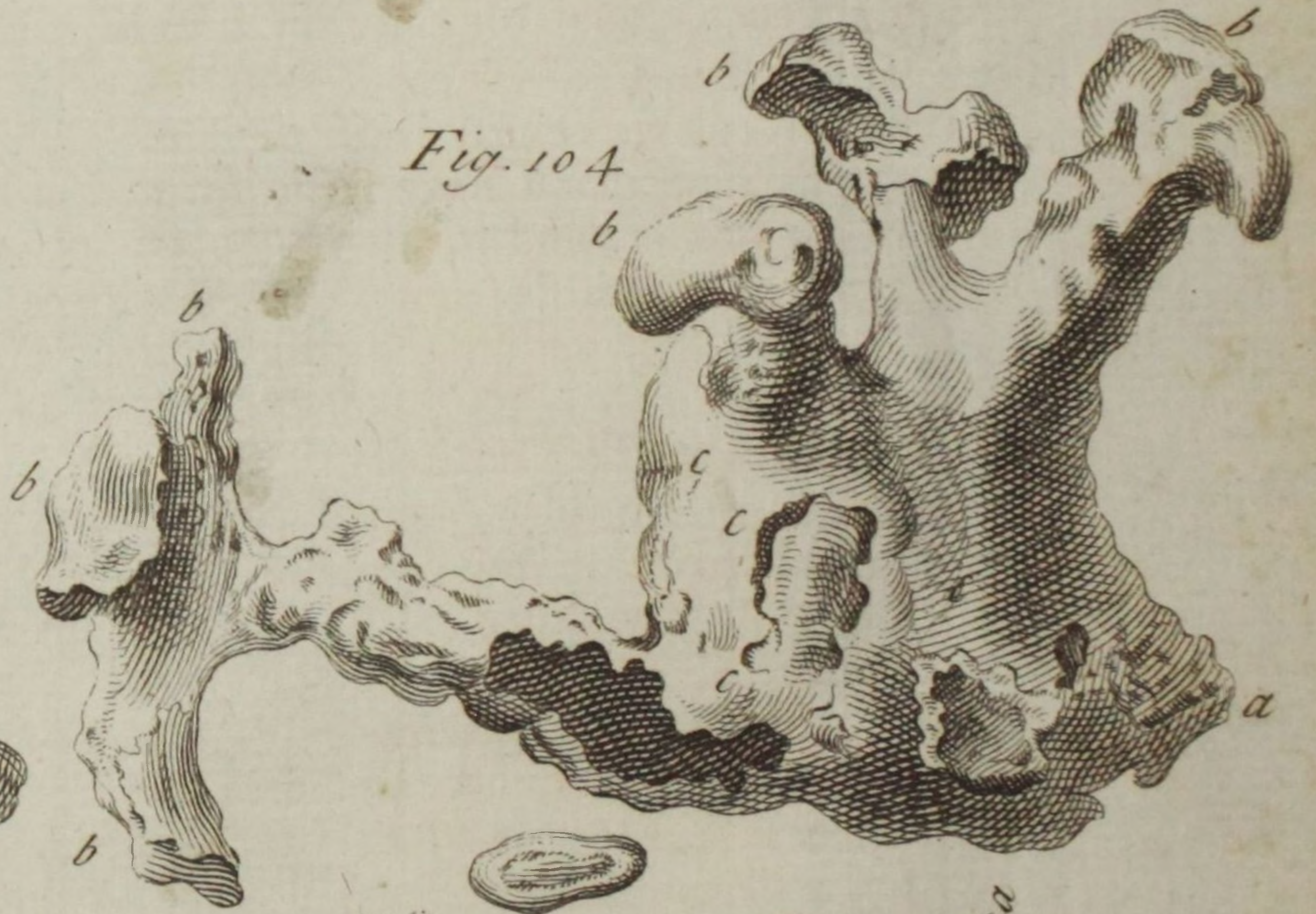


Fig. 105

nia percepit symptomata, ita, ut saepe non nisi maximis cruciatibus in pubis & perinaei regione perceptis urinam excernere voluerit. Tandem vero Anno 1728, postquam aliquamdiu variis, usus erat remediis, & imprimis Tinctura antinephritica, ut vocant Lipsiensi sive Rothiana, atque simul cerevisiam illam his in regionibus contra calculum celeberrimam, quae Regiae Luterae vulgo **Koenigs-Lutter**, oppido Brunsvicensi, coquitur, & quam **Duchstein** appellant, hancque ob causam in loca sive urbes remotissimas devehitur, continuo pro potu ordinario hauserat, aliquando vehementes inter mingendum dolores, nisum & constrictionem in vesica, sensumque eo ipso, ac si calculus, sive calculi in vesica frangerentur ac dissilirent, percepit, eoque ipso mox aliquot frustula calculi fracti cum lotio dejecit, quae deinde per plures dies alia secuta sunt, donec tandem ab eis liberatus bene atque pancreaticae ab omnibus & calculis & calculi doloribus, immunis nunc vivat. Calculos plures una in hoc viro fuisse majores, quam ut integri per urethram transire potuissent, docent primo diversus color diversorum frustulorum, quorum nonnulla fuscum obtinent colorem, alia flavescentem ad sulphuris colorem aliquo modo accedentem, quemadmodum ex his adjectis frustulis perspicere est. Deinde id evincunt diversa horum frustulorum segmenta: quorum alia majoris alia minoris arcus segmenta sunt. Quod ad numerum attinet frustorum, centum circiter ejusmodi mihi dedit, qualia nunc offero, quae ex matula collegit. Sancte vero mihi affirmavit, magnam eorum, imo forte adhuc majorem copiam in terram decidisse & periisse, cum saepe ruri, vel in sylvis, vel in stabulis ad res domesticas curandas degens, mejendi stimulo fuerit correptus, atque sic multa cum urina vel in terram, vel inter herbas aut stramina ejecerit. Nonnulla horum frustulorum dimidium pollicem aequant, plura minora sunt, eorumque superficies externa convexa, interna in plerisque concava, alia nucleum, ut vocant, calculi adhuc exhibent.

Ipse vir est honestus, antiquae & germanae fidei, cui, ut hac in re fallat aut mentiatur, nulla est causa. Notus est morbus olim perpeffus hominibus quamplurimis; nota jam est ejus secunda valetudo omnibus, qui eum norunt. Calculorum fractorum ingens copia & facies, quod revera è vesica sint, rem ulterius confirmat, ita, ut certi esse possimus, haec frusta revera in vesica ejus integros calculos fuisse, qui postea in vesica, nescio utrum medicamentorum, an cerevisiae illius, an naturae beneficio disrupti & expulsi sint. Ex segmentis frustulorum valde convexis, quae hic mitto, & quae adhuc adservo, judicare licet, vix ullum illorum calculorum nucem moschatam superasse plures vero minores fuisse. Interea tamen solutionem calculorum in vesica haud prorsus impossibilem esse, mihi evincere videntur, licet res forte quam rarissime contingat.

*A large Stone
in the Urethra;
by Dr J. Hux-
ham. No. 413.
p. 257.*

XXI. Viginti abhinc Annis Penis cujusdam *Cookworthy* ob *Luem Veneream*, ad modum quasi *Eunuchi Turcici*, resectus fuit: at *Vulnus* nec probe curavit Chirurgus, nec bene sanavit; Cicatrice quippe obducta vix ullum *Urinae Iter*, *Urethra* pene occlusa. *Lotium* exinde exiguissimo Rivulo summoque nisu reddidit; brevique inter mingendum *Cruciatus* magnus accessit; pauloque post in media, at suprema, Parte *Scroti* Tumor parvus, sensim tamen auctus in magnam demum excrevit molem, laevum ad *Inguen* quasi vergens. Hinc *Urinam* ejaculandi impotens prorsus factus *Stillicidio* ejus continuo laboravit. Sed neque hac via, *Urethrae* scilicet, omnem emulxit; enatis enim tribus quatuorve in *Scroto* *Fistulis*, pars forte maxima *Lotii* ex hisce defluxit, *Pure* subinde comitante. At ne sic quidem Tumor, jam durus admodum, vel minime decrefcebat, quinimo increvit usque.

Dira haec inter Tormenta cum per plures jam Annos Miser hic, neglectus omnino, miserrimam pertraxerat *Vitam* ad nostrum *Nosocomium* tandem delatus fuit. Ibi mense *Julio* elapso, quum summo nixu *Urinam*, solito quod dixit ardentiozem, expellere, *Corpus* incurvando maxime, contenderet, ingens hic prolapsus est *Calculus*; qui recens excretus $\text{3v.}\text{\textasciituml}$ *Ponderis* *Avoird.* pependit. Eum mihi prope, quasi monstrum quoddam, mitti curabant *Nosocomii* *Rectores*. Rem certe quod debui plane mirabar *Hominem*que invisebam continuo. *Lacerum* inveni *Scrotum*, jam minime tumidum, *Manum* puerilem facile admittens, & ex *Urethra* *Calculus* elapsus fuisse deprehendi.

Atqui id forsan haud parum *Miraculo* adjiciat, quod magnum hoc lacerumque *Vulnus* *Balsamo* quodam *Terebinthino* tantum oblinendo brevi sanum evasit, ni quod parva adhuc pateat *Urinae* *Fistula* in superiore Parte *Scroti*. Atque *Misellus* Ille, cui ante excretionem. *Calculi* vix ulla se movendi *Potentia*, commode jam satis obambulat.

Non ego quidem hunc *Calculus* in *Urethra* primitus fuisse enatum autumo, ab ibidem *Loci* ex arenosa materia concretum maxime. Cum enim parvus forte *Calculus*, *Semen* quasi hujus enormis, è *Renibus* delapsus erat; & ob *Urethram* fere occlusam, negato ultra *Itinere*, in *Canaliculo* substiterat, *Sabulo* perpetim appellente auctus in immensam hanc *Molem* tandem excrevit.

XXII. Q. 1. Whether it is not possible in some Measure to relieve those Persons (who by reason of their great Age, bad Habit of Body, &c. cannot submit to any of the great Operations for the Stone with tolerable Hopes of Success) by making an artificial *Fistula* in the *Perinæum*?

A. That a great many Patients offer, both young and old, who are afflicted with the Stone in the Bladder, whom we cannot with any tolerable hopes of Success, advise to submit to the great Operations for the Stone, daily Experience shews. It is inhuman to cut them,
and

*Two Chirurgical
Questions,
stated and an-
swered by John
Douglas, Sur-
geon, F. R. S.
No. 399. p.
318.*

and shews very great Imperfection in our Art, to say we can give them no Relief. Is there no *Medium* yet found out between living in extreme Misery and submitting to a desperate Operation? Yes, *Thomas Fienus*, about 125 Years ago, proposed a Palliative Cure for such Patients, where a radlicative Cure could not be expected; an Operation which may be performed with Safety on the most Ancient; the Wound is so small, and the Parts cut of so little Consequence to Life. An Operation by which we can prevent or alleviate the most lamentable Effects of the Stone, *viz.* The total Suppression of Urine and the cutting Pains they endure in, and after, making Water, &c. yet this Operation has been as little minded all this while by the *Hospital-Lithotomists*, as *Rosset's* most excellent Treatise before I introduced the Hypogastric Section in 1719. Tho' I admire *Fienus's* Design in making this *Fistula*, yet I can by no means approve of his Way of doing it.

It ought to be performed thus: Place the Patient as in *Marianus's* Operation; pass a Staff into the Bladder, then cut the Skin and Fat until you lay that Part of the *Urethra* bare, which reaches from the *prostate Gland* to the cavernous *Urethra*; then make a small Incision into it with the Point of your Knife; then withdraw the Staff, and pass a small flexible *Canula* into the Wound of the *Urethra*; then dress the Wound S. A. extract the *Canula*, clean it, and introduce it again every Dressing, that so you may leave a *Fistula* in the room of the Wound.

Through this *Fistula* the Patient himself or any one about him, may easily pass an oiled Probe, and push the Stone back whenever he finds himself attacked with a Suppression of Urine, or when the Stone presses hard against the *Sphincter*, when endeavouring to make Water, which otherwise could not be done without the Ceremony of sending for, or staying in Misery 'till a Surgeon comes to pass the *Catheter*, which in such Cases is not always to be done, without a great deal of Pain, and sometimes Danger. By this *Fistula* we can also very easily inject any Liquor that may be thought proper either to prevent or allay the Inflammation of the Bladder, or cleanse it from the Gravel, or any other sort of Filth that may collect there, by which the Increase of the Stone will be prevented, &c.

In Females all those Advantages are obtained by the natural Straitness and Shortness of the *Urethra*, whence they never suffer the tenth part that Males do; which is an incontestable Evidence, that when the Passage into the Bladders of Males is made as straight and near as short (as is done by the forementioned *Fistula*) they will reap the same Advantages by it.

Therefore artificial *Fistula's* in the *Perinæum* ought to be made for those who by reason of their great Age and bad Habit of Body, &c. cannot undergo any of the great Operations for the Stone, with any Hopes of Success.

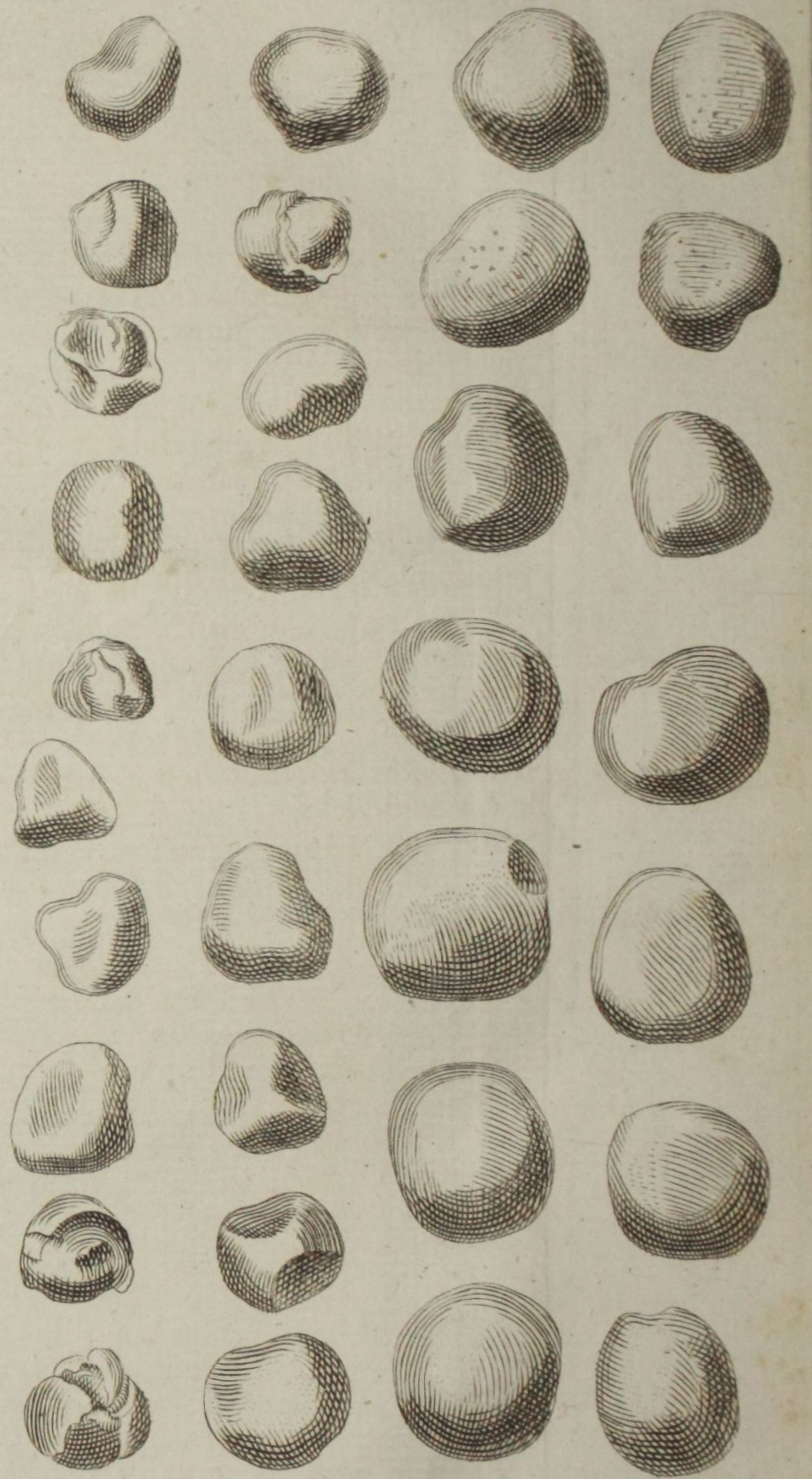
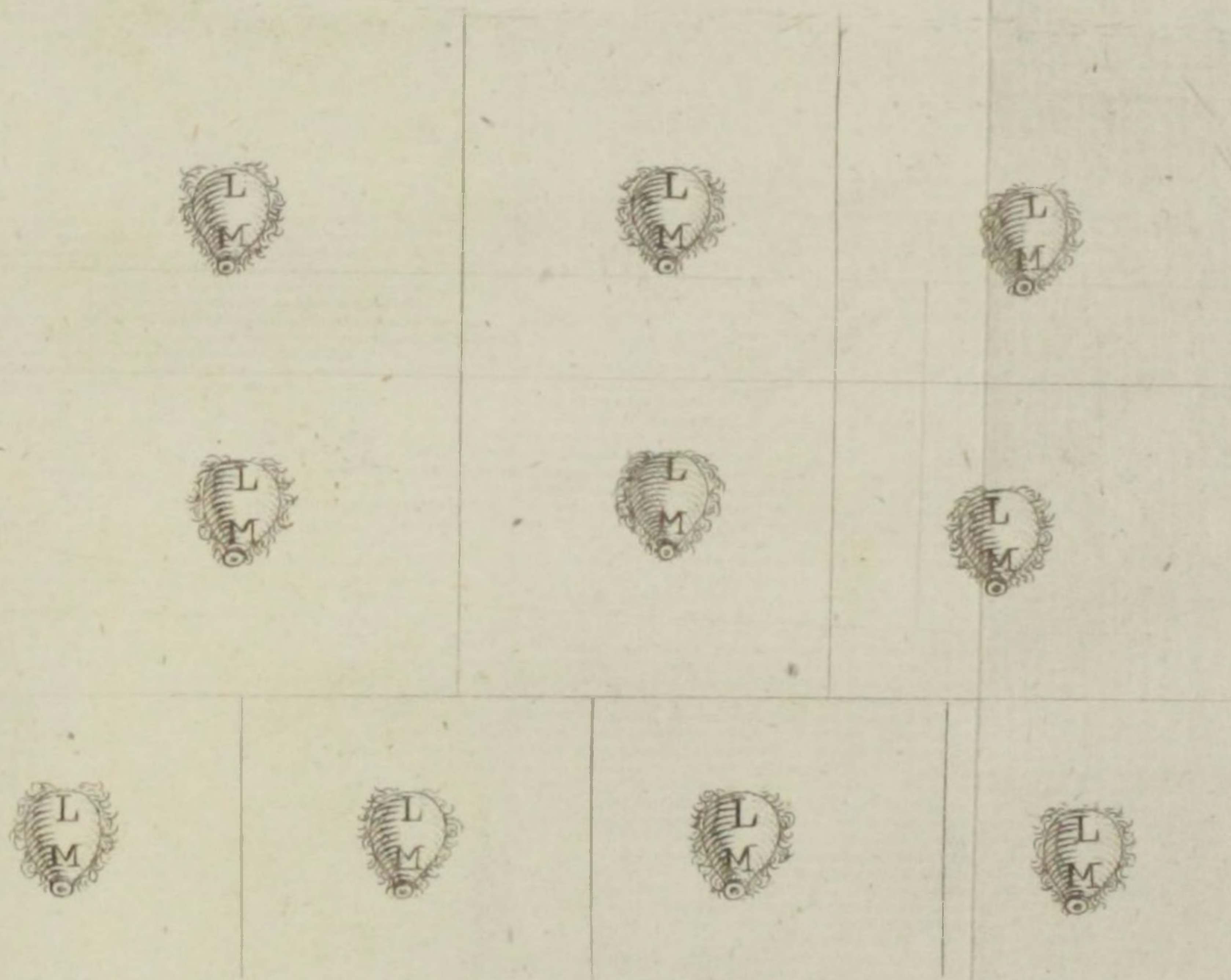
Q. 2. Whether

Q. 2. Whether it is not possible to dilate the artificial *Fistula* in the *Perinæum* of Males, and the *Urethra* of Females, with Sponge or Gentian-Tents gradually increased for some time, to such a width, that we may easily pass a Pair of Forceps into the Bladder, with which the Stone, when small, may be extracted; and when large, or of an irregular Figure, broken, and the Pieces extracted gradually and at different times, when they cannot be extracted at once, without fatiguing the Patient too much.

A. To prove that both these *Fistula's* may be dilated to a sufficient Bigness by the Means proposed, (especially, if the Parts are frequently bathed in a *Semicupium* or otherwise, as the Operator shall think proper, and some warm Oil injected into the *Fistula* every time the Tent is changed, (the better to supple and relax the Parts) I shall only make use of three Arguments, *viz.* One from common Experience in Analogous Cases; another from the Operations of Nature on the same Parts; and the third from Instances of this Operation being performed after the Method I proposed. 1st, Common Experience shews to what a great Width *Fistula's* in all other Parts of the Body, tho' very small at first, may be dilated by Sponge or Gentian-Tents. 2dly, Nature herself, without any Art, has frequently performed this Operation on both Sexes; in Males who have been cut for the Stone, the old Way, and had *Fistula's* remained in *Perinæo*. It is often found, that some considerable time afterwards, Stones of no small Size have appeared, which had made their way thro' the Sphincter of the Bladder into the Membranous *Urethra*, and stuck near the Orifice of the *Fistula*, whence they were easily and safely extracted. I saw a Stone lately as big as a Pullet's Egg that was expelled from the Bladder of a young Woman without any Help, as her Physician assured me, and she had no Inconveniency afterwards, which certainly would have happened if it had been extracted after the common violent Method. Dr *Beard* gives an Account of a yet larger Stone, that passed after the same manner, but she had the common Inconveniency afterwards, *viz.* an Incontinency of Urine, which was owing more to the Roughness than the Bigness of the Stone, which had lacerated the Parts as in the common Operation; which might have been prevented, had she been assisted in time, as above.

3dly, M. *Collet*, in his *Traité de la Taille*, gives an Account of a Gentleman on whom he performed this Operation three different Times, and extracted in all ten Stones. His Words are as follow:

Enfin, Monsieur Usson étant hors de danger & sa playe prête a se cicatriser, prévoyant bien ce qui pourroit arriver dans la Suite, je lui conseillai de tenir sa playe ouverte, pour y entretenir seulement une petite Canule, qui dans l'occasion donneroit une entiere liberté de fair Injection pour nettoyer la Vessie de toutes les Immondices & pour qu'on pût enlever les nouvelles Pierres



33 Stones cut by the lateral operation out of a person of 63 years of age, who perfectly recovered by M^r Cheselden N^o 404. Plate 2.

Pierres qui pourroient se former. Il prit ce parti, & il se trouva bien durant cinq Années, qu'il a Vecu depuis avec assez de Santé Mais a trois différentes reprises, je mi suis vû obligé de lui tirer jusqu'a dix autres pierres qui s'estoient formées dans la Vessie : une petite Tente d'éponge préparée mise pendant quelques heures dans la Fistule à la place de la Canule me facilitoit l'Entrée d'une tres petite tennette. Mons. Usson s'habilloit dans ce Moment & il sortoit pour aller par tout ou ses Affaires l'appelloient.

I know a Gentleman that now keeps a *Fistula in Perinæo* open for the very same Reasons.

Since then it is evident, that *Fistula's* in all Parts of the Body are dilatable to a great Width, since Nature is often able of herself to dilate the very Parts in dispute, to a very extraordinary Degree; and since this very Operation I here propose has been successfully performed three times on the same Person,

Therefore *Artificial Fistula's* in Males and the *Urethra* in Females may be dilated so as to extract any Stone without cutting the Body of the Bladder, or lacerating any of the Parts.

N. B. This Operation will appear less surprizing, if we consider, that it is only dilating the Sphincter of the Bladder, &c. in a different manner from that daily done in *Marianus's* Operation, *i. e.* By this Method the Parts are dilated gently and gradually, after being well bathed and anointed, the better to relax them. Whereas in *Marianus's* Operation they are dilated quickly and violently, and then the Stone, be it of what Largeness or Figure soever, is forcibly drawn out immediately; whence Contusions, Lacerations, Hæmorrhages, Inflammations, Mortifications, &c.

XXIII. *Quadragenarius quidem civis Norvicensis pancreaticæ valens, profluvio sanguinis sinceri per canalem Urethrae correptus est, 30 die Junii, 1716. Idem rediit phaenomenon, 31 Julii. Adhibitis quibusdam medicamentis, & celebrata venæsectione in Brachio, cohibitus est fluxus sanguinis prædictus, usque ad octavum diem Septembris, ac deinceps penitus evanuit. Notatu tamen est dignum hæmorrhagias supra memoratas absque omni prævio dolore, seu postea spirituum dejectione contigisse.*

A Flux of Blood thro' the Penis; By Dr Howman. No. 379. p. 418.

XXIV. *Novemb. 24, 1725, a poor Woman came to crave my Advice for an Infant of about 16 Months old, bringing with her a Worm, which she told me the Apothecary had just then drawn out of the Child's Penis, who had for several Days before laboured under great Uneasiness; which she called Convulsions of the Bowels. It was continually drawing up the lower Limbs, and straining at both Sphincters; the Urine seemed to pass with Difficulty for some Days, till at last there came on a total Suppression, and the Worm advancing, shewed itself at the Extremity of the Urethra. I examined the Insect, and found it measured above four Inches, resembling the Worms usually excerned per Podicem, of the Earth-worm kind, but whiter; which made me think at first they had been mistaken, and that it had been*

Two Cases of Insects voided by the urinary Passage; by Dr Daniel Turner. No. 391. p. 410.



been that way excreted. Having directed what I thought proper, I went to the Apothecary, who has the Worm now in his Custody, to be better informed. He assures me, that, when he came to the Child, he saw a preternatural Body, hanging half an Inch out of the Glans, and lying double in the Passage: Perceiving it farther advancing, he took hold of it, and with little Difficulty drew it forth.

The Summer before last a Woman shewed me a Maggot, with a crusty red *Galea* over the Snout, and a forked Tail, which she had just then voided by the Urinary Passage.

A remarkable
Conformation
of the Urinary
Parts; by Mr
John Budgen.
No. 410. p.
138.

XXV. In *Villâ Com' Surriae*, *Ockley* vulgò dictâ, anno 1711 nata est Infantula, cujus in Tergo, circa vertebrae inferiores, apparuit Tumor indolens, cutis colorem, Ovique columbini majusculi magnitudinem referens, qui cum Puellâ tantoperè concrevit, ut circiter 9, vel 10 aetatis annum, Vesicam vitulinam, aëre distentam, sed sine Cervice, planè repraesentaverit. Anno 1728. Vesicae bubulinae magnitudinem aequabat. Die 29 Jan. proxime elapso in Lecto jacenti disruptus est hic Tumor, à quo multum Liquoris, instar Urinae profluebat. Re perspectâ, invenimus Tunicas (& interiùs Materiam mucosam) Ureteres, Venas, & Arterias, tales omninò, quales Vesica habere consuevit: nec defuit commercium quoddam cum Partibus internis per foramen in vertebrae Digiti hominis minorem in Abdomen admittens, quod Vasa memorata recipiebat. 2^o Die Feb. 1728, horam circiter decimam nocturnam obiit Puella; & si Cadaver aperire per Parentes, huic Rei strenuè reclamantes, licuisset, credo quidè in Abdomine, Vesicae Cervicem, & nullam aliam Vesicam invenissemus; non enim post ruptum Tumorem vel semel minxerat.

An extraordinary
Cause of a
Suppression of
Urine in a Wo-
man; by Clau-
dius Amyand,
Esq; F. R. S.
No. 422. p.
259.

XXVI. I was lately called to a Woman who had a Suppression of Urine, occasioned by the *Menses* collected in the *Vagina*, pressing upon the *Urethra*. She had been delivered eight Months before of two Children; after which the *Carunculæ Myrtiformes* had joined together so closely, that there was no room for any Evacuation of the *Menses*. I made a cross Aperture, whereby near three Quarts of the *Menses* collected were discharged; the Suppression of Urine was immediately removed, and the Patient cured.

An Excretory
Duct from the
Glandula Re-
nalis. Extract-
ed from the
Giornale di
Letterati of Ve-
nice, for the
Year 1719.
No. 385. p.
190.

XXVII. 1. The celebrated Anatomist, Signor *Ant. Maria Val-salva*, already known by his noble Treatise *De Aure humana*, has lately made a considerable Discovery. He has found the excretory Ducts of the *Glandulae Renales*, or, *Renes Succenturiati*, which discharge themselves into the Parts of Generation; that is to say, into the *Epididymides* in Men, and into the *Ovaria* in Women. He has read a learned Dissertation relating to this Discovery, before the Academy of Sciences in *Bologna*, in which he undertakes to prove, that those *Renes Succenturiati* are to be reckoned among the principal Organs of Generation.

2. I lately procured a human Body, in order to search for this Duct, which I did with all the Diligence I was capable of. I was not so happy as to discover any Duct of this kind; but, having injected the *Aorta*, I found the Arteries going to the *Glandulæ Renales* disposed, as in the Figure. Now whether that Branch of the Artery, which from the *Glandulæ Renales* goes down on both Sides towards the Testicles, without supplying any of the neighbouring Parts, might not have been mistaken by the above-mentioned learned Anatomist for an Excretory Duct, all Arteries being generally in dead Bodies free from Blood, and of a whitish Colour, I will not presume at present to determine, for want of farther Experiments.

An Enquiry into this Discovery; by Mr John Ranby, Surgeon, F. R. S. No. 387. P. 270.

A A the right Kidney. B B the left Kidney. C C the descending Trunk of the *Aorta*. D the right emulgent Artery. E the left emulgent Artery. F the right *Glandula Renalis*. G G the right spermatic Artery. H the left *Glandula Renalis*. I I the left spermatic Artery. K K the Ureters. *a a* a small Artery arising out of the descending Trunk of the *Aorta*, a little above the right emulgent Artery. It sends two Branches *b b* upwards to supply the right *Glandula Renalis*. A third Branch *c c* goes downwards towards the right spermatic Artery G G, and then farther in company with the same to the right Testicle. *d d* a small Artery arising out of the left emulgent Artery, near the descending Trunk of the *Aorta*, and going directly upwards to the left *Glandula Renalis* H. *e e* a small Artery arising out of the descending Trunk of the *Aorta*, a little below the left emulgent Artery. It divides into two Branches; one whereof *f f* goes upwards between the emulgent Artery and Vein to the left *Glandula Renalis*; the other *g g* downwards, towards the left spermatic Artery, and in company with it to the left Testicle.

Fig. 106.

3. I have since found the same Arteries in Women, descending in the same common *Capsula* with the spermatic Artery and Vein, to the *Ovaria*. These Arteries, very probably, are what *Valsalva* took for excretory Ducts of the *Glandulæ Renales*; the Disposition and Progress of these being very much alike to what has been ascribed to those supposed Ducts.

Continued by the same. No. 395. P. 459.

XXVIII. 1. In Aug. 1701. *Margaret Millar*, living not far from *Glasgow*, informed me, that her Midwife, in her last Lying-in, at 45 Years old, having violently pulled away the Burthen, she was so very sensibly affected by a Pain, which then seized her in the left Side, between the *Umbilicus* and Groin, that she scarce ever had been free from it after, but that it had troubled her more, or less, during 13 Years together; that for two Years past she had been extremely uneasy, her Belly grew very large, and a Difficulty of breathing increased continually upon her; insomuch, that for the last six Months, she had breathed with the utmost Difficulty. That in all that Space of Time, she had scarce eat so much as would nourish a sucking Child; and that for three

A Dropsy in the left Ovary of a Woman, aged 58; cured by a large Incision made in the Side of the Abdomen, by Dr Robert Houstoun. No. 381. p. 8.

Months together she had now been forced to lie constantly on her Back, not daring to move at all, to one side or other.

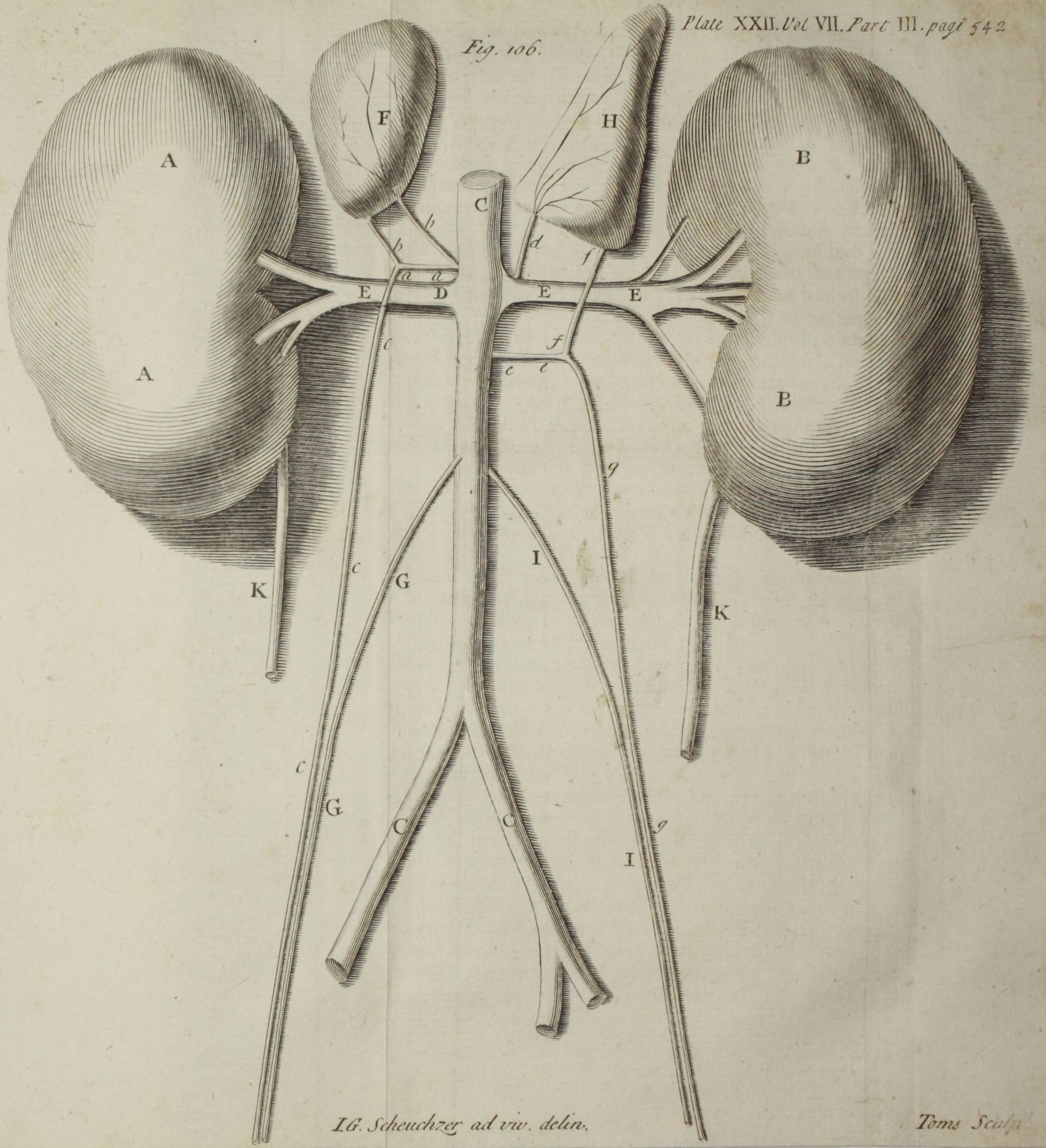
This Tumour was grown to so monstrous a Bulk, that it engrossed the whole left Side, from the *Umbilicus* to the *Pubes*, and stretched the Abdominal Muscles to so unequal a Degree, that I do not remember to have ever seen the like in the whole Course of my Practice. It drew towards a Point. Her being so long confined to lie continually on her Back, having grievously excoriated her, added much to her Sufferings, which, with want of Rest and Appetite, had greatly wasted her.

I told her, that in order effectually to relieve her, I must lay open great part of her Belly, and remove the Cause of all that Swelling: She seemed not frightened, but heard me without Disorder, and pressed me to the Operation.

I drew (I must confess) almost all my Confidence from her unexpected Resolution, so that without loss of Time, I prepared what the Place would allow, and with an Imposthume Lancet, laid open about an Inch; but finding nothing issue, I enlarged it two Inches, and even then nothing came forth but a little thin yellowish Serum; so I ventured to lay it open two Inches more. I was not a little startled, after so large an Aperture, to find it stopped only by a glutinous Substance. All my Difficulty was to remove it; I tried my Probe, I endeavoured with my Fingers, but all was in vain; it was so slippery that it eluded every Touch, and the strongest Hold I could take.

I wanted, in this Place, almost every thing necessary, but be-thought myself of a very odd Instrument, yet as good as the best, because it answered the End proposed. I took a strong Firr-Splinter, wrapped some loose Lint about the End of it, and thrust it into the Wound, and by turning and winding it, I drew out above two Yards in Length of a Substance thicker than any Gelly, or rather like Glue that is fresh made and hung out to dry; the Breadth of it was above ten Inches: This was followed by nine full Quarts of such Matter, as I have met with in Steatomatous and Atheromatous Tumours, with several *Hydatides*, of various Sizes, containing a yellowish *Serum*, the least of them bigger than an Orange, with several large Pieces of Membranes, which seemed to be Parts of the distended Ovary. Then I squeezed out all I could, and stitched up the Wound in three Places, almost equi-distant: I was obliged to make use of *Lucatellus's* Balsam, which was made by her Lady for the Use of the Poor; with this Balsam I covered a Pledget, the whole Length of the Wound, and over that laid several Compresses, dipped in warm *French* Brandy, and because I judged that the Parts might have lost their Spring, by so vast and so long a Distention, I dipt in the same Brandy a large Napkin four times folded, and applied it
over

Fig. 106.



I.G. Scheuchzer ad viv. delin.

Toms Sculp.



over all the Dressings, and with a couple of strong Towels, which were also dipt, I swathed her round the Body, and then gave her about four Ounces of the following Mixture. ℞ *Aq. Menthae* ℥ss. *Aq. Cinnamomi fort.* ℥jss. *Syr. Diacodii* ℥vj. *M.* The Cinnamon-Water was drawn off from Canary and the best Cinnamon; indeed it was the finest and most fragrant Cinnamon-Water I ever tasted: Of this Mixture I ordered her 2 or 3 Spoonfuls 4 times a Day.

Next Morning I found her in a breathing Sweat, and she informed me, with great Tokens of Joy, that she had not slept so much, nor found herself so well refreshed at any time for three Months past. I carefully attended her once every Day, and as constantly dressed her Wound in the same manner as above, for about eight Days together; I kept in the lower Part of the Wound a small Tent, which discharged some Serosities at every Dressing for four or five Days. But Business calling me elsewhere, I left her, having first instructed her two Daughters how to dress her Wound, and told 'em what Diet I thought most proper.

Her chief Food was strong Broth made of an old Cock, in each Porringer of which was one Spoonful of Cinnamon-Water; this was repeated 4 times a Day, and gave her new Life and Spirits.

After three Weeks Absence, I called at her House, and finding it shut up, was a little surprized, but had not gone far before I was much more surprized, when I found her sitting wrapped up in Blankets, giving Directions to some Labourers who were cutting down her Corn.

She mended apace, to the Admiration of every body thereabouts, recovered surprizingly, and lived in perfect Health from that time, till *October* 1714; when she died in ten Days Sickness.

That this Tumour, or rather Dropsy of the *Ovarium*, proceeded from the Midwife's Rashness in pulling away the *Placenta*, not knowing how to separate it from the *Uterus* skilfully, seems to me plain from what the Woman herself told me, and what fell out afterwards. The *Placenta* adhering fast to the *Uterus*, required more Art to bring it away than she was Mistress of, which probably induced her to use Violence; by which she forced down the *Fundus Uteri*; so overstrained the Ligaments, and all that is appended to them; especially the *Ligamentum latum* of the left Side and it's *Ovarium*, which may be reasonably allowed to have been hurt in the Relaxation with the rest. Hence the Elasticity of these injured Parts was not only impaired, but the small Lymphatics ruptured, so that the extravasated *Lympha* rushing out, thickned, and not being able to recirculate, dilated the injured *Ovarium*, and thus increased the Tumour, and the Parts being already excessively distended, and being no longer able to resist the new Influx of fresh Secretions, ruptured also, and by degrees augmented to that huge and enormous Bulk.

A remarkable Case of a Gentlewoman who died of a Hydrops Ovarii, in the Thirty-third Year of her Age, after having been tapped 57 times. By Mr John Belchier, Surgeon. No. 423. p. 729.

2. In the Year 1725, the Wife of Mr. Newberry, a Merchant in this City, complained of a Pain in her left Side, near her Groin, internally, which sensibly increased; and perceiving a Swelling in that Part, she at first thought herself with Child; but having other Symptoms, not very common with gravid Women, she sent for a Physician, who immediately discovered it to be Hydropical, and after following his Prescriptions, for some time, and finding little or no Benefit thereby, she sent for another, and so for a third and fourth; and after between two and three Years fruitless Trial of proper Medicines prescribed by the Physicians, she growing very big and uneasy with her Burden, was advised to be tapped, to which she accordingly submitted: And on *May* the 6th, 1728, sent for Mr *Chefelden*, who took from her between four and five Gallons of Water; but in a Week or ten Days, after the Operation, she perceived herself to fill again, in which State she continued to the first Day of *July* following, when Mr. *Chefelden* tapped her again, and took from her about the same Quantity of Water as before; and in this Manner she continued to fill, and be tapped every third or fourth Week, from the 6th Day of *May*, 1728, to the 3d of *March*, 173 $\frac{1}{2}$, when she died, in the Thirty third Year of her Age.

During the last 37 times of her Tapping, I constantly attended her with Mr *Chefelden*, when she always ('till the two last times) appeared very brisk and lively, the whole time of the Water's running from her, and was not in the least sick or faint, after the Discharge of the Water, as is usual, and though she was a very thin emaciated Woman, she would frequently walk three or four Miles the Day before the Operation, and most commonly went abroad the third Day after it.

The Quantity of Water taken from her each time of Tapping was between 4 and 5 Gallons; and during the whole 57 times Tapping, there never was above a Quart, or two Quarts at most, different in the Quantity, 'till the two last times, at each of which the Quantity did not exceed two Gallons: But in the Intervals of these two last Operations, she was frequently troubled with Reachings to vomit, which burst open the Orifice twice where she was tapped, and at each time discharged about six Quarts. The Quantity of Water which was taken from her each time, was always measured, and upon Computation, the whole amounts to near 250 Gallons. The Water that was taken from her the two last times of Tapping, was much more viscid than the former.

At times she frequently complained of a violent Pain on her right Side, and a heavy aching Pain in the *Pelvis*. She had likewise a *Pro-lapsus Uteri*; and some time before her Death, she could not expel her *Fæces* but with great Difficulty and Pain, and at the same time laboured under an Incontinency of *Urine*.

March 6th, 173 $\frac{1}{2}$, I opened her in the Presence of her Physician, when I found the whole *Viscera*, from the *Diaphragm* to the *Ossa Pubis*, covered with a thick gelatinous Substance, which seemed to be membranous, which at it's first Appearance, I took for the *Omentum* in a putrified State; but after a farther Examination, I found it to be only the more viscid Parts of the extravasated Fluid, which could not be discharged by the Operation: After removing this, I found several Portions of a hard schirrous Substance, arising from the *Fundus* of the Stomach, one large Portion of which was inserted into that Part of the *Colon*, near the right *Kidney*, and in Appearance resembled the *Pancreatic Gland*. Another Portion, which was cylindrical, and about two Thirds of an Inch in Diameter, passed streight over the Intestines, adhering strongly to that Part of the *Colon*, which lies under the Stomach, and was inserted into the *Rectum*, in the *Pelvis*. Another Portion of this Substance passed directly over the Intestines, to the *Pelvis*, but about the Middle of the *Abdomen* it sent out two smaller Portions, the one was inserted into the *Mesentery*, the other reflecting back, was inserted into the *Colon*, on the left Side near the Stomach. As soon as I cut into one of these Portions, I discovered it to be a Part of the *Omentum* twisted up, and contained in a very thick capsular Membrane. The *Diaphragm* was forced up so far by the Contents of the *Abdomen*, that the Cavity of the *Thorax* was decreased to near one-third. The Liver was much larger than in a natural State, and of one intire Substance, and not divided into *Lobes*, the whole convex Surface adhering firmly to the *Diaphragm*. The Stomach was very small, as to it's Cavity, but the Coats of it were increased to six times their natural Thickness (as were likewise all the Coats of the *Intestines* and *Mesentery*) and very much inflamed. Two Thirds of the Stomach adhered to that Part of the *Diaphragm*, which did not cover the Liver, and the other Part adhered to the concave Surface of the Liver; as did likewise the *Duodenum*, whose Cavity was very large. Below the *Duodenum*, the *Colon* adhered to the lower Part of the concave Surface of the Liver, so that the whole Liver was contained in a kind of *Bursa*, composed of the *Diaphragm*, Stomach, *Duodenum* and *Colon*. The *Cæcum*, *Colon* and *Rectum* were much larger than in a natural State, and adhered so very strongly to the Parts over which they passed, that it was with much Difficulty I could separate them. The *Spleen* was not one fourth of it's natural Size, and one Half of it's external Surface was entirely cartilaginous. The *Pancreas* was smaller than usual, as were likewise the *Kidneys*, *Ureters* and *Bladder*; and in the *Pelvis* of each *Kidney*, there were small fabulous Concretions. The left *Ovarium* was distended to so large a Size, as to fill the whole Cavity of the *Pelvis* up to the *Os Pubis*; it's Surface was cartilaginous, like that of the *Spleen*, and in it were contained a great Number of *Hydatides* of different Sizes, whereas the right *Ovary* was no ways diseased in the least. The Difficulty and Pain

Pain complained of in the Expulsion of the *Fæces*, naturally arise from the Pressures on the diseased *Ovarium*, at the same time that it's increased Bulk, by compressing the *Intestinum Rectum* impeded the Egress of the *Fæces*, and brought on the Inflammation of the Intestines which we observed.

The *Prolapsus Uteri*, and the Incapacity of the Bladder's retaining a proper Quantity of *Urine*, were likewise occasioned by the Pressure of this diseased *Ovarium* upon those Parts. But what seems most material in this Case, is the viscid Matter found in the Cavity of the *Abdomen*; as the Waters were originally incysted in the *Ovary*, was properly extravasated from the *Cystus*, into the *Abdomen* in the two last Operations; by which, as well the Quantity drawn off as the customary Relief, were very much diminished; in lieu of which the *Stimulus*, from such a Fluid, might reasonably bring on the Vomiting observed from that time.

Quer. Therefore, if such a Vomiting ensuing the Operation is not a fatal Symptom?

Quer. If any Method can be found to prevent such Extravasations?

The Relations of this Gentlewoman are of Opinion, that her Disease was occasioned by pulling off her Cloaths, when she was very hot, to go into a Bathing-Tub of Water to cool her, when finding the Water excessive cold, she put only her Legs in, the other Part of her Body being out of the Water, and naked at the same time; which happened a few Weeks before she perceived the Swelling and Pain in her *Pelvis*; and probably this might be the Cause. As the Constriction of the lower Parts by the cold Water might, in a great Measure, impede the *Fluids* circulating through the lower Parts, and the Blood being at the same time rarified and expanded by the Heat, might therefore burst through the more tender *Lymphatics*, and produce the Extravasation.

A preternatural Structure of the Parts of Generation in a Woman. By John Huxham, M. D. No. 379. p. 408.

XXIX. 1. Mulier quaedam de parochia *Lanteglass* in Comit. *Cornubiæ*, prope *Fowye* oppidum, annos nata xxiii nupta fuit cuidam *Nautæ* robusto, tandemque prægnans, sibi partium male conformatarum conscia, opem imploravit chirurgicam. Sibi accersitum esse voluit *D. Bonnett* de *Fowye* oppido, & artis chirurgicæ, & obstetricæ peritissimum. Ille vero perspecto denudato corpore sequentia observavit.

Loco umbilici, in medio abdomine, paululum vero inferius, prominet massa quaedam spongiosa, carnis quasi offam præ se ferens, abdomini transverse incumbens, magnitudinis fere ovi gallinacei, longa autem tres digitos: ex hac duo erumpunt meatus urinarii exiles, qui urinam perpetim exstillant, quam neque vel retinere vel ejaculare potest; hinc vesicam, (si quæ adsit) sphinctere caruisse concludendum. Spongiosa hæc mollisque massa, urinae acrimonia corrosa, tactum fere refugit mollissimum, adeo ut incurvata obambulare coacta sit, ad dolorem a vestibibus impressum evitandum, eamque tenuissimis linteis involvere.

volvere. Hanc quidem massam funem fuisse umbilicalem male à partu abscissum, male dein curatum, existimo ; ne vel minima enim umbilici, nisi hic, apparent vestigia ; quid quod & urina per urachum pervium, & in duos forsan tubulos divisum, vel saltem per canales duos proprios, effluit. Priori potius credo opinioni ; quia dantur Historiae urinam per umbilicum in adultis etiam excretam fuisse attestantes. *Vid. Hist. de l'Academie Royale des Sciences, Ann. 1701.*

Hanc infra ossam subintrat Vaginae foramen, ab ossa distans brevissimo spatio : ex hoc effluxere Catamenia, per hoc etiam gravida facta fuit mulier, haud magnum vero tempore coitus percepit voluptatem ; summa etiam Penis glans in hoc orificium vix fuit intromissa, multo minus ipsa virga. In hoc foramen digitum aegre introduxit Chirurgus, eo scilicet animo, ut ipsum uteri collum exploraret, quod tamen ne vel tactu percepit, plane autem deprehendit membranam crassam hocce orificium ab altero inferiore, jam describendo, separantem.

Eo fere ipso loco, superius vero paululum, ubi in mulieribus rite conformatis adest fossa magna, inventum fuit foramen alterum oblongum, ne vel minimi digiti apicem altius admittens, recto intestino, uti post partum observatum fuit, pervium (quod à sectione fortasse accidit) : nullus autem hic occurrit Sphincter : inferius vero rectum intestinum, more solito, cum Sphinctere circumdato terminatur.

Orificium hoc oblongum ab orificio vaginae, abdomine maxime tumente, duos saltem digitos transversos distat, inter quae membrana descripta intervenit ab interiore parte, hujusce vero Fissurae oblongae quasi labiorum coalitio exterius è superiore foraminis parte.

Nulla hic Clitoris, hic nulla ossium Pubis adfuere vestigia, nisi, quasi Apophyses breviores ex utriusque ossis Ilii parte inferiore protuberantes, ossium Pubis rudimenta dixisses. Hic fuit ante partum rerum status.

Die 18 Julii 1722, hora noctis 11 advocatus est *Bonnett* Chirurgus, ut parturienti opem ferret. Perpensis omnibus, Foetum invenit Vaginae orificium infra dilapsum, quem muliere decumbente superiora versus propellere frustra adnixus est, ob fortissimos Foetus motus & gravissimos Matris dolores, cui etiam jam supervenere Convulsiones, Syncope, &c. Vaginae autem orificium vix ac ne vix quidem dilatatum, ita ut illi jam jam moriendum esse fuerit omnium expectatio.

In hoc miserrimo rerum statu, misericordia & humanitate adductus Chirurgus, posthabuit omnino, quid vel ignarum vulgus, vel invidus hic garreret aut hic : anceps experiendum esse remedium potius quam nullum apud se statuit, morte aliter citissimo ingruente pede.

Parentibus periculosissimum rerum statum enarravit, nil nisi à sectione expectandum, ancipitem praedixit eventum. Annuentibus hujus miserrimae matre, & astantibus, in orificium oblongum inferius scalpellum chirurgicum introduxit, & uno ictu coalitionem labiorum
urinam

hujusce orificii & membranam separantem divisit: hinc in unum coire & orificium Vaginae & oblongum inferius. Jam digitis facilis introitus, orificium Uteri internum attractavit; dilatavit paululum, caput inde sensit infantis: quid plura? Foetus ori intruso digito, Puellulam vivam, probe formatam, mirantibus maxime astantibus, demum extraxit, quae & adhuc & viget & valet: uti etiam & ipsa Mater, quanquam post puerperium febre graviter colluctata est.

Jam à partu prolapsu ipsius Uteri divexatur, quo prolabente nec per horas 8, 10^{ve} reducto, eam dein si fortius intrudas, exiliunt è meatibus urinariis descriptis rivuli duo ad pedis saltem distantiam; argumentum sane Cystidis cujusdam urinam excipientis: aliter revera suspicasset meatus istos duos urinarios ipsorum ureterum fuisse orificia, hic terminantia.

Quaerat fortasse curiosior aliquis, quo forte modo gravida facta fuit muliercula nostra. Illi responderem, Penis intrusionem ad prolem concipiendam haud absolute esse necessariam, feminis autem intra vaginam ejaculationem quam maxime. *Vid. Hist. de l'Acad. Royale des Sciences, 1712. Videatur etiam Mauriceau.*

Fig. 107-

A A spongiosam assimulat quasi carnis massam, quam parte in fuisse chordae umbilicalis autumo, magnitudinis fere ovi gallinacei, tres vero digitos longam. Ex hac duo erumpunt Fistulae urinariae *b b*, quae urinam perpetim exstillant, nec ex ullo alio orificio redditur urina. *c*. Orificium Vaginae, cloacae galli gallinacei quam simillimum, spisso quasi septo circumdatum: per hoc effluxere *εμμηνα*, per hoc etiam gravida facta fuit mulier. Hoc orificium, dum perpeffa fuit mulier gravissimos partus dolores, nullo fere modo dilatatum fuit, quanquam anus ipse, ob vehementissimos musculorum abdominis, &c. contractiones, maxime hiaret. *d* Locum indicat, ubi inventum fuit foramen oblongum, minimi digiti apicem vix admittens. In hoc, tempore puerperii, Chirurgus introduxit scalpellum chirurgicum, idque ab hoc in orificium superius adegit: ita ut jam à partu dehiscat monstruosum horrendum informe ingens foramen. Orificium superius transversum ab inferiore oblongo (appropinquante partu) 2 fere digitos distat. Ex hoc magno hiatu ipsius uteri prolapsum saepissime nunc patitur. Ex loco etiam, ubi adfuit olim orificium inferius, jam à puerperio, partim excretae sunt Foeces alvinae: hoc vero ante partum minimè observatum fuit, ita ut à sectione forte acciderit. Orificium hoc oblongum paulo altius quam par est, in Figura designatur. *e* Anum repraesentat paulo magis antrorsum quam in aliis positum: per hunc maxima foecum pars egeritur. Pudendum hoc, quale quale, est non dense crinitum.

Of the same;
by Dr William
Oliver. N^o.
379. P. 413.

2. Mulierem, Comitatus Cornubiae incolam, in hunc modum, quem jam sum descripturus, à cunabulis formatam fuisse, matronae vicinae, & non paucis res & nota & examinata fuit, uno ore consentiunt. Substantia quaedam carnosam, spongiosa, floride rubescens, levissimum tactum, ob atrocissimum dolorem inde oriundum, fugiens umbilici,

bilici, quae non ex Autopsia sed ex Chirugi narratione delineata est, naturalem locum usurpabat, & e cavitate, quae plerumque ibi est, quasi pullulabat. Ex hac excrescentia, quae nec augeri, nec minui, per multos annos sentiebatur, continuo destillabat urina, cui nec alia patuit è corpore via, neque hac potuit vel violentissimis nixibus cum impetu expelli, vel per saltum excerni, adeo ut paulatim exsudans vestes interdiu, substragulaque nocte madafaceret, inquinaret. Paulo infra, ad distantiam paene palmi minoris, orificium quoddam, longitudine unciam unam, latitudine digitum transversum aequans, sese ostendebat, ut indicem admitteret, & tamen perstringeret, satis amplum. Hac via effluebant à pubertate menstrua, unde ad Vaginam & Uterum hunc esse aditum facile patebat. Ad eandem fere distantiam, qua orificium hoc Vaginae ab excrescentia illa distabat, patuit & orificium alterum, superiore minus, digitum minimum vix capiens. Huic autem orificio cum intestino recto communicationem dari, tenuissimae faecum partes, ex eo frequenter protrusae, satis demonstrabant. Ab hoc autem Pseudo-Ano Anus verus, per quem excrementa duriora dejiciuntur, unciis quinque vel sex extitit, & naturalem fere pudendorum situm obtinuit. Pili quidem aderant, sed rari, nec margines alicujus orificii magis quam reliquorum ornantes, sed duas lineas describentes, quae à medio spatio inter excrescentiam illam & commissuras femorum cum abdomine incipiebant, & sibi mutuo appropinquantes angulum, in cuius vertice positus est verus Anus, conficiebant. Hunc in modum conformata, valetudine satis bona fruebatur virgo, & aeterna virginitate ex necessitate laboraturam concluderant omnes, quibus res innotuerat. Advenit tandem Nauta quidam, cui aes triplex circa pectus erat: Illam vidit, amavit, duxit, & non multo post impraegnavit. Gestationis tempore optime se habuit mulier, quo propemodum finito, de difficultate pariendi, non sine ratione, aderat gravis suspicio. Orificium Vaginae à viri congressu non omnino dilatabatur, adeo ut de modo impraegnationis multae inter mulierculas ortae sint disputationes. Immissionem autem Penis in Vaginam ad impraegnationem non esse absolute necessariam non est quod narrem. Exemplis turgent libri Medici. Mulier tamen de sua vita anxia Chirugos aliquos adivit, consilium petiit, opem precata est. Unus tandem apud *Foy*, oppidum non procul à mulieris nostrae habitaculo, casu audito, re perscrutata, ad promovendum partum, si opus fuerit, operam suam navare promisit. Gestationis tempore perfecte finito, dolores aliaque symptomata partum prognosticantia illam tentaverunt. Chirugus advocatus aderat. Refert ille infantem conatus suos ad regionem pubis, illa ipsa autem ad orificium Vaginae fecisse dicit. Quid est agendum? Dixit ille incisione exitum infanti esse aperiendum; ex crudeli misericordia renuunt adstantes, ingravescent dolores, superveniunt convulsiones, vita desperabatur. Tandem cum mortem prae foribus esse omnes judicaverunt, illam paene expirantem in manus & potestatem Chirugi tradiderunt. Ille statim dissectionem istius Isthmi, qui inter orificium Vaginae & Pseudo-Anum erat, & haud improprie Perinaeum

rinaeum possit vocari, instituit. Integumentis exterioribus dissectis, membrana quaedam valida & crassa, transverse locata, sese in conspectum dedit, quae Vaginam à canaliculo illo inferiore dividebat. Hac dissecta iter ad Uterum satis amplum patuit, manum introduxit, os Uteri digitis dilatavit, infantem capite prehenso in lucem tuto eduxit, matrem ad vitam revocavit. Hanc mihi ipse historiam retulit, illa ipsa confirmavit. Rei enim novitate percussus *Foy* adivi, utrum verum esset necne sciendi gratia. Chirurgum de structura partium originali, & operatione sua tantum non Caesarea, solícite interrogavi. Omnia, ut supra narraui, graphice descripsit. A Muliere etiam ut eam inspicerem impetravi. Illa igitur ad examen commode locata, excrescentiam illam umbilici cavitatem usurpantem superiori descriptioni ad amissim respondentem inveni. Illam cum summo digiti levissime tetigerim, misella, non aliter ac si gladio perfossa fuisset, dis-cruciata ejulavit. Mirum sane mihi videtur hanc mulierem cum marito suo posse congre-di; ex situ enim partium nihil aliud cogitare possis quin vir rei Venereae incumbens, excrescentiam illam, aliter prorsus intactilem abdomine suo duriter perfricaret. Rogata quomodo haec perficiebantur, respondit se omnia ob amorem, quo maritum suum prosequeretur, posse pati.

Haec excrescentia ex multis lobulis, propriis membranis obductis, à se mutuo distinctis, conflare videtur. In interstitiis horum lobulorum poruli, per quos stillabat urina, oscula sua ad superficiem aperiebant. Paulo infra hiatus magnus, ex unione chirurgica duorum orificiorum ad partum facilitandum confectus, sese ostendebat. Procidentia Uteri tunc temporis laborabat, qui extra labia, si circumferentia illa mereatur nomen, propendens, longitudinem sex unciarum, magnitudinem ovi anserini aequabat. Tali procidentia se semper à partu usque laborasse narrauit, & quidem mirum esset si aliter accidisset; tanta est enim ad orificium Vaginae apertura, ut nihil possit ab extra uteri prolapsui obstare, & Uteri corpus multo magis, quam in statu vulgari, à vesica premitur. Verisimile enim est urinam ad excrescentiam illam per urachum ascendere, & per illum ab initio fluxisse, quia per meatum urinarium nullum natura praebuit exitum; impossibile tamen est, ut urina per urachum ad umbilicum ascenderet, usque dum vesica sit turgide repleta; ex illa vero plenitudine necesse est, ut semper in Uterum non parvo pondere gravaretur, & illum foras extruderet. Ut conformatio partium melius appareret, reclinata in lectum Muliere, repositionem Uteri tentavi. Non citius illum introducere caepi, quin urina à pressione in vesicam repletam facta, per poros excrescentiae umbilicalis, multis rivulis, pilum crassiore magnitudine non superantibus, cum impetu ad plures pedes prosiliebat, fontem artificialem non injucunde aemulans. Exinanita vesica, Vaginam inversam in naturalem situm facile restitui; restitutis Vagina & Utero, dehiscebat chasma magnum, ex positione corporis circulare, cujus diametrum tres pollices transversos metiri credo, cujus fimbriae, potius quam labia, multis sarcomatis inaequaliter horrebant. In superiore

periore ejus margine interno meatum urinarium frustra quaesivi, in inferiore Pseudo-Anum facile inveni, per quem digitum sub pubem, quae ad cartilagineam mollitiem accedere videtur, ad intestinum rectum immisi, necnon contentis ejus turpiter infectum eduxi, unde credo rectum, ad tres pollices supra sphincterem Ani, esse perforatum. Paulo subtus pubem, situm, quo aliarum sinus ipse pudoris gaudet, verus Anus hujus foeminae obtinet, non consueta caligine & profunditate occultus, utpote non intra clunes positus.

a Excrescentia umbilicalis. b Orificium Vaginae. c Pseudo-Anus. Fig. 108.
d. Anus. e e Pili

a Excrescentia umbilicalis. b Os Uteri. c Anus.

Fig. 109.

3. As there appears to be some Difference in the preceding Accounts, I take the Liberty of giving you a particular Account of what I observed, with respect to this Matter. This I am rather emboldened to do, as I repeatedly observed the wonderful Structure of the Parts, before the Birth approached, and before I was obliged to make the Incision.

Of the same;
by Mr John
Bonnet, Sur-
geon at Foye
in Cornwall.
No. 384. p.
142.

This Woman was about 23 Years old when she was married, and some time after conceived. As she was conscious of the preternatural Structure of the Parts, and her Mother apprehensive of the Danger that would attend the Delivery under such unhappy Circumstances, they applied to me about the 7th Month, in order to engage my Assistance. On viewing the *Abdomen*, I made the following Observations: There was no Sign of the *Umbilicus*; but about 3 Inches lower, than it is regularly placed in Persons naturally formed, there was a spongy, fleshy Extuberance, nearly of the Shape and Bigness of a Hen-egg; not, as is said in Mr O 's Account, composed of many Lobules enveloped by distinct Membranes, but entirely resembling that luxuriant Flesh which is thrown forth in ill-digested Wounds, and is therefore commonly called proud Flesh. This was exceeding tender, and on it she could not bear the least Touch. On the lower Part of this Excrescence, I perceived two small Orifices, the one distant from the other about an Inch. Thro' these the Urine drops continually, nor is she able to contain it, but by violent Efforts can make it spout out near a Foot. What is said in Mr O 's Account of it's being rendered *multis rivulis*, is certainly erroneous: The two Orifices by which it is indeed discharged, being now very evident, and will easily admit a small Probe. About $\frac{1}{4}$ Inch below this Protuberance, was a transverse Orifice, much resembling the *Anus* of a Cock. Thro' this the *Menstrua* regularly flowed: By this she was impregnated. It was with some Difficulty I thrust my Finger into this Orifice, in order to reach the *Os Tincæ*, which, however, I could by no means feel, it lay so deep; but I plainly felt a thick transverse Membrane separating this Passage from an Orifice, which is situated about two Inches below that already described. This lower Orifice seemed to be situated, exactly, where the *Symphysis* of the *Ossa Pubis* is, in Women regularly formed, somewhat above the Place where the natural *Hiatus* should have been. I could but just enter the

tip of my Finger into this. There were a few Hairs scattered up and down irregularly about this Orifice. The *Anus* terminated as usual, with a Sphincter, about two Inches below this lower Orifice, much more forward than usual. So that the upper Orifice, which may be properly called the Orifice of the *Vagina*, was about $\frac{1}{4}$ Inch below the umbilical Excrescence: The lower oblong Orifice (or another Passage to the Womb) was about two Inches below that of the *Vagina*; contrary to what is said in Mr O... 's Account, who makes the superior Orifice to be near four Inches below the Excrescence, and the lower Orifice four Inches from the superior; and then says, the *Anus*, which he (rightly enough) makes to usurp the Place of the *Fossa magna* in Women naturally conformed, was 5 or 6 Inches below this. According to this Proportion, the Woman must be really gigantic; whereas she is a short little Woman: Nor do Mr O... 's Cuts any way represent the Case. This Woman had no *Os*, or *Ossa Pubis*; indeed there was an *Apophysis* jutting out from the lower Part of each *Os Ilium*, but they were far from being joined, as usual, by a *Synchondrosis*.

July 18, 1722, I was sent for late at Night. I found the Woman with true Travail-pains upon her. The Throws were excessive violent, and the continued Agony had almost quite exhausted her Spirits; but the Orifice of the *Vagina* was no way sensibly dilated, tho' the *Anus*, thro' the Violence of the Throws, opened extremely wide. In vain were all Endeavours, by thrusting up the Child, and putting the Mother in a proper Posture. Vain were her own Throws and Agonies. Convulsions now had seized her, and Nature seemed to have denied a longer Life to the Mother, or an Entrance into it to the Child. I was in the utmost Perplexity what to do under these Circumstances. On the one hand I considered, that if there was not a Passage made for the Child, and that by Incision, both Mother and Child must speedily perish. On the other hand I foresaw the Danger and Hazard of an Incision, and the unavoidable Censure of having killed the Woman, if she should die under the Operation. At last Humanity so far prevailed with me, as to try a doubtful Method of preserving Life, rather than none. I told her Mother, and the other Persons in the Room, that Death was inevitable, without making the Passage wider by Incision, and so attempting a Delivery; withal apprizing them of the Uncertainty of the Event of the Operation. When they saw her (as they thought) just expiring, they delivered her into my Hands, to do with her what I thought fit. I immediately thrust my Scalpel into the inferior oblong Orifice of the *Vagina*; so brought them into one. Then presently with my Scissors, I snipped the transverse Membrane. This being done, I easily introduced my Hand, felt the Head of the Child, and with my Finger thrust into it's Mouth, drew forth a female Infant, living and well formed, to my own Surprize and Admiration of all. Ever since she was delivered, in the manner recited, she has suffered a *Prolapsus uteri*, upon the least standing or walking.

walking. I proposed to remedy this by a Suture, as is practised in the Case of the *Vulva* breaking into the *Anus*; but she would by no means admit of it. So that she almost continually labours under a *Procidencia uteri*, and the Body of the Womb and *Vagina* are so corroded by the Acrimony of the Urine, that there are four or five Ulcers formed upon them. Besides this Inconvenience, some of the thinner Parts of the Excrement are discharged at the Bottom of this large Cleft, and by introducing my Finger at the bottom of the Cleft, I can easily thrust the top of it thro' the *Anus*; which is an Argument that there could not be 5 or 6 Inches between the oblong Orifice and the *Anus*, as is asserted by Mr O , the Distance being scarce above 2 Inches.

Fig. 110. A Epigastrium. B. Regio Umbilicalis. C. Hypogastrium. D. Regio pubis. E E. Spongiosa ossa. F F. Meatus urinarii, a partu satis visu faciles. G. Orificium transversale. H. Oblongum orificium. II. Cicatrices duae, ex Urinae, ut videtur, acrimonia. K. Anus, paululum anteriùs locatus.

Fig. 111. P P. Fissura magna quatuor pollices oblonga. L. Procidencia uteri. M. Os Tincae.

XXX. In 1723, being at *Paris*, I light on a female Subject, where the *Anastomoses* of the Spermatic Arteries and Veins were as large as the spermatic Vessels themselves; so that the Arteries being injected with a gross Mixture of Wax, Tallow, and Vermillion, and the Veins with the same, only tinged with Smalt, the Injection ran out of the Artery into the Vein, and on the other Hand out of the Vein into the Artery, so that where one Vessel entered the other, the Matter injected was tinged purple. You must observe, the Arteries were first injected with the red, and the Veins afterward with the blue Matter.

Uncommon
Anastomoses
of the Spermatic
Vessels in a
Woman; by
Cromwell
Mortimer,
M. D. R. S.
Secr. No. 415.
p. 373.

In this Subject, what appeared most remarkable, was, that on the right Side, were two spermatic Arteries A and B. One, A, arose from the very Angle made by the Emulgent and the Trunk of the *Aorta descendens* C, which, contrary to the common Course, ran under the *Vena Cava*, and soon after it was got beyond it, sent out a lateral Branch, or *Anastomosis*, descending obliquely E F into the Spermatic Vein G, through which the red Matter penetrated into the Vein; which afterwards filled with Blue, became Purple all about the Orifice of this Vessel at F, which seems to confirm *Eustachius's* Delineations, and shew they are no Fictions. This Artery, A, then descended as usual to the right Ovary H.

The other right Spermatic Artery, B, arose as usual out of the Trunk of the *Aorta*; but at about half an Inch from it's Rise, it sent out an *Anastomosis* I K, ascending obliquely into the Body of the *Vena Cava* D, through which a large Quantity of the red Matter passed, so as to tinge a very broad Place at K in the *Vena Cava* purple. About an Inch below this Orifice was another *Anastomosis* L M, through which the

the blue Matter penetrated out of the Vein, and made the Contents of the Artery purple at L. The right spermatic Vein had only this one *Anastomosis* M L, in all other Respects as usual.

On the left Side was but one spermatic Artery N, and one spermatic Vein O, which, as usual, inclosed in a common *Involucrum*, made their Way to the left Ovary P. Only the Artery N took it's Rise out of the Body of the Aorta near the Angle made by it, and the left emulgent Artery, then ascending between the emulgent Vein and Artery, turned in an Arch at Q, over the left emulgent Vein, and so joined the left spermatic Vein as usual, which rose out of the left emulgent Vein, as it often happens.

There was on this Side one Thing very uncommon, and not taken Notice of by *Eustachius* himself, which was a short *Anastomosis* R S (about a quarter of an Inch in Length) from the left emulgent Artery S, which making an Arch under the left emulgent Vein, was inserted into the anterior Part of it at R.

Fig. 112

AB, Two spermatic Arteries on the right Side. CCC, The *Aorta* descending, and the two Iliac Arteries. D D D, The *Vena Cava* ascending, and the two Iliac Veins. E F, L M, *Anastomoses* of the spermatic Veins and Arteries. G G, The right spermatic Vein. H, The right Ovary. I K, An *Anastomosis* of the spermatic Artery and *Vena Cava*. N Q N, The left spermatic Artery. O O, The left spermatic Vein. P, The left Ovary. R, S, An *Anastomosis* of the emulgent Vein and Artery. T T, V, V, V, Arteries and Veins dispersed on the Fat and Membranes enclosing the Kidneys.

A Foetus that continued 46 Years in the Mother's Body. Communicated by Dr Steigertahl. No. 367. p. 126.

XXXI. 1. *Anna Mullern*, of the Village of *Leinzelle*, near *Gemund* in *Suabia*, of a dry and lean Constitution, but otherwise healthful and robust, died at the Age of 94, after she had lived a Widow 40 Years.

Six and forty Years before her Death, she declared her self to be with Child, and had all the usual Tokens of Pregnancy. At the end of reckoning the Waters came away, and she was taken with the Pains of Labour, which continued upon her about seven Weeks, and then went off upon the Use of some Medicines given her by a Surgeon. Some time after this she recovered her perfect Health, except only that her Belly continued swelled, and that now and then, upon any Exercise, she felt a little Pain in the lower part of it. She was after this twice brought to Bed; the first time of a Son, who is now a Huntsman at *Bischoffsheim*, and afterwards of a Daughter, who is married to a Soldier. But notwithstanding this, she was firmly persuaded, that she was not yet delivered of what she first went with, and desired Dr *Wobnlise* the Physician of *Gemund*, and one *Knaussen* a Surgeon at *Heubach*, to open her Body after her Death. Accordingly after her Death, which happened on the 11th of *March* 1720, after four days Illness, her Body was opened by the Surgeon, the Physician before-mentioned being then dead. He found within her a hard

Mafs

Fig. 107.

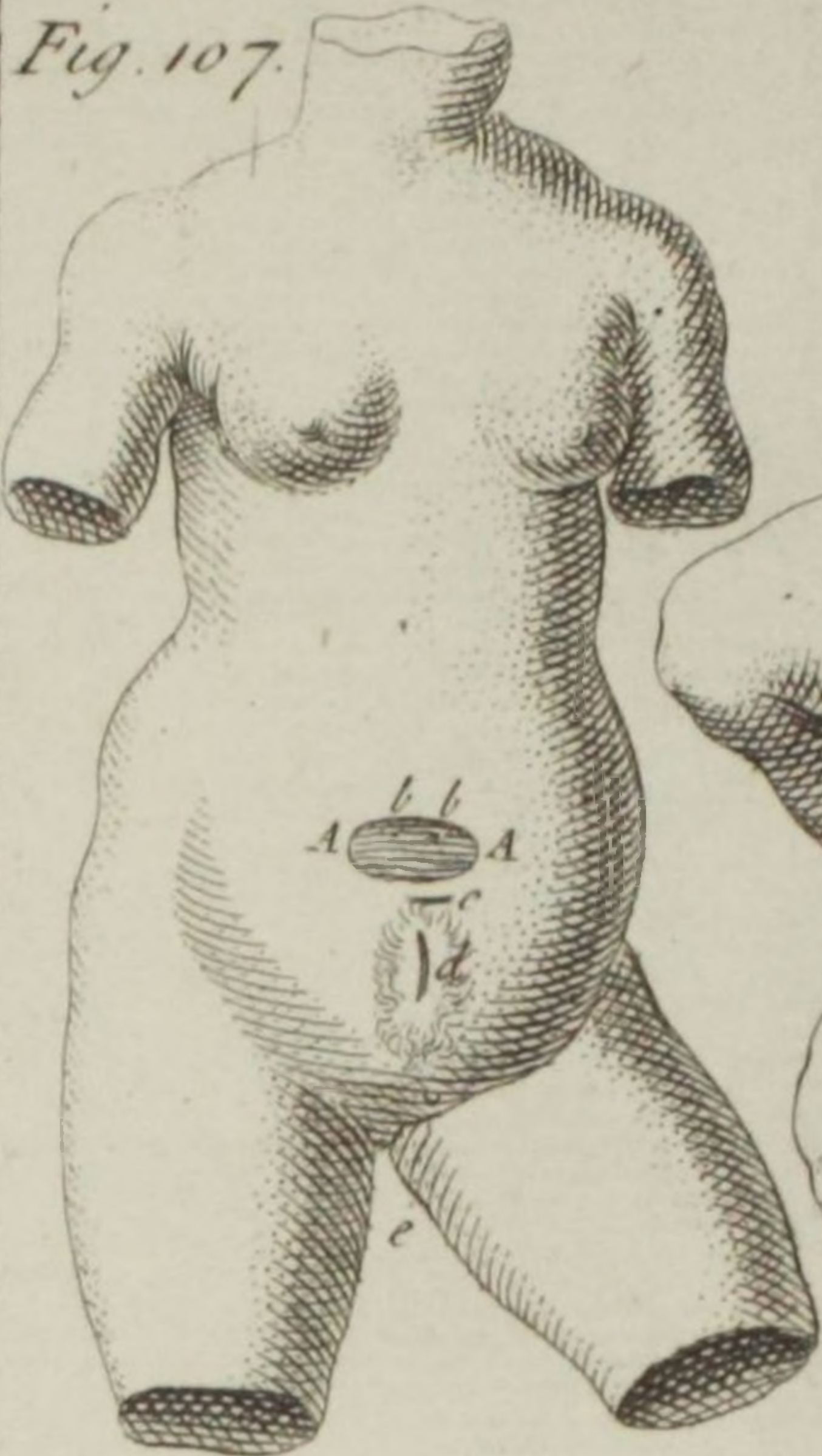


Fig. 108.



Fig. 109.



Fig. 110.

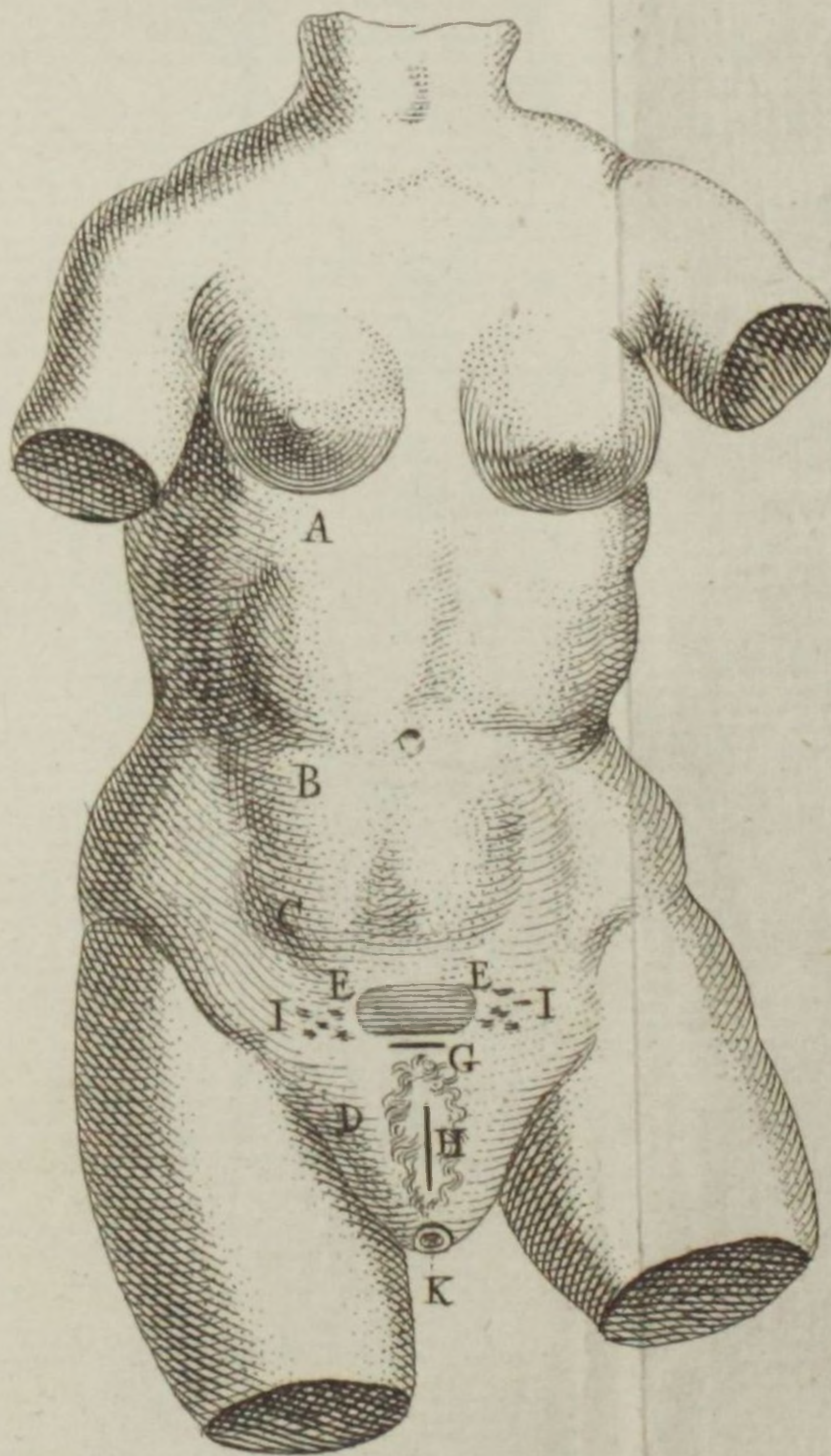
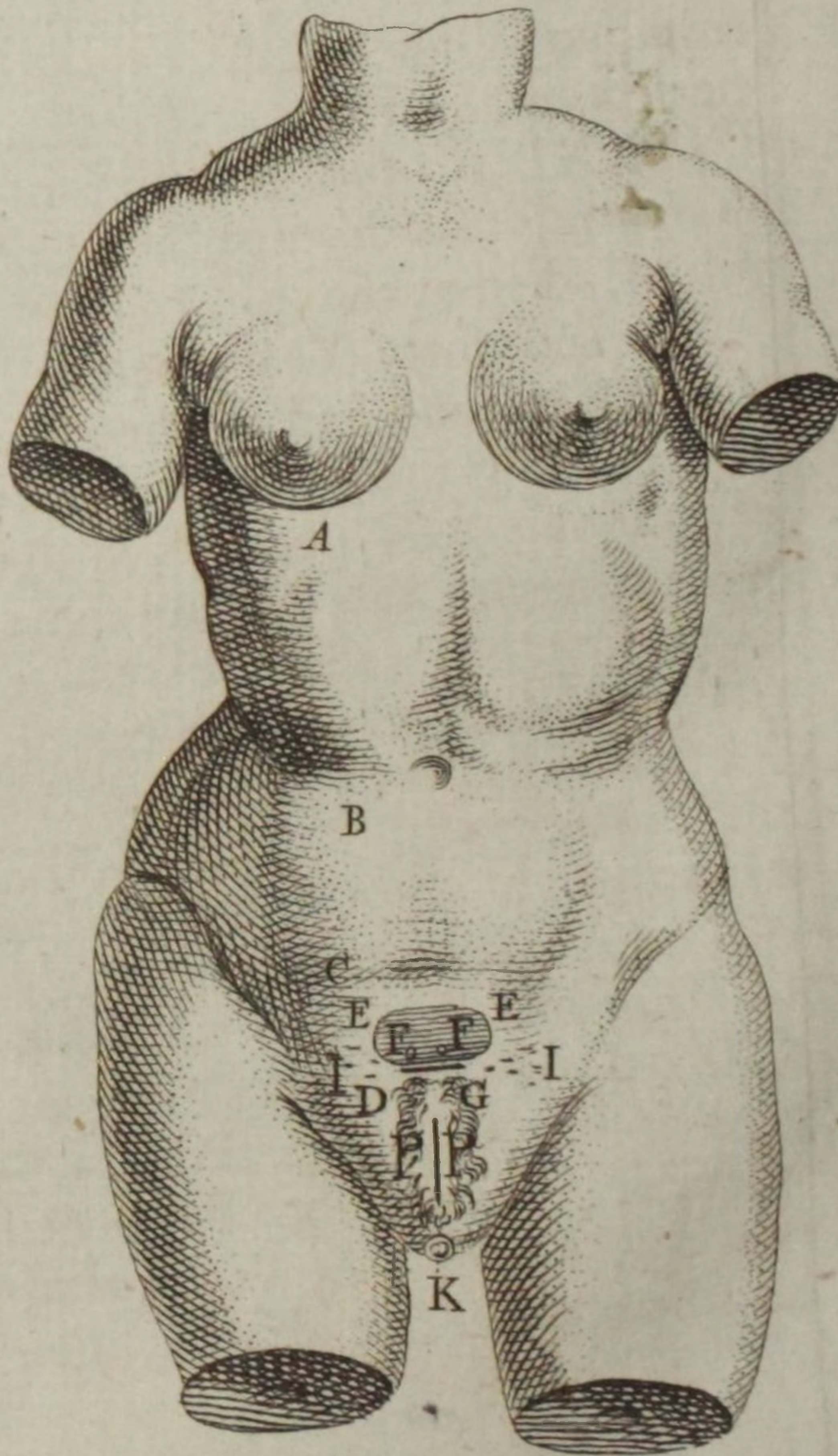


Fig. 111.



Fine

Mass of the Form and Size of a large Nine-pin Bowl, but had not the precaution to observe, whether it lay in the *Uterus*, or without it, and for want of better Instruments broke it open with a blow of a Hatchet. This Ball, with the Contents of it, are expressed in the following Figures.

A, A Part of the Tegument, which had adhered to a spongy, fleshy Substance. This at first seemed to be a Mass of Cartilage, but was afterwards found to be entirely bony. B, B, B, C, C, C, Shews the membranous Part, which was bloody. D, D, D, D, The Opening made by the Hatchet. E, E, E, E, E, Another Part of the Tegument appearing entirely bony, with several Prominences. F. A Contusion occasioned by the rude Manner of opening it, where there appeared some putrified Membranes. Fig. 113.

A, A, A, The Tegument, or Substance enclosing the *Fœtus*. B, Fig. 114.
The *Fœtus*. C, A Depression, or Hollowness, on the right Cheek. α , The Nose turning up. β , The Mouth flatted, but not so wide, as it is here represented. γ , The Eye closed up. δ , The Ear. D, D, The Arms, of which the Right was the larger, and the two Joints of that Thumb were plainly to be seen. E, The Protuberance of the Knee. F, Part of the *Funiculus Umbilicalis* torn, but still adhering to the Navel. G, G, Part of the same *Funiculus*, fastened to the bony Part of the Tegument. H, The Breast. I, The Mark of an Incision into the left Side, where the Flesh appeared red, but was dry, and looked like smoaked Beef.

Fig. 115. Represents two Ribs, from the left Side, of their natural Substance, Colour and Bigness. A, A, The Part joining to the *Vertebrae*. B, B, to the *Sternum*. Fig. 115.

This Piece is preserved in the Cabinet of Rarities of the Duke of *Wirtemberg*.

Dr *Camerarius*, Professor at *Tubingen*, in a Letter upon this Subject, takes Notice, that the Surgeon found this Mass in a Cavity on the Woman's left Side, and that it adhered to the Membranes of that Cavity, by the intervention of a spongy, fleshy Substance. From which Particular, and the Woman's having had two Children, during the time that this large Mass lay in her, that learned Professor conjectures, that it was not lodged in the Womb, but in the left *Fallopian Tube*, which by this Means had been very much dilated and thickened in it's Substance.

2. I was sent for in *August* 1717, to a Woman near *Newport-Market*, who had been married eighteen Years to a Native of the *East-Indies*, by whom she had eight Children, besides two Miscarriages. At my visiting her, she was with Child in a second Marriage, and her Husband a vigorous young Man.

She was near her full Time, and had felt Pains for several Days, which, returning by Intervals, she concluded, would, as usual, bring on

An Extra-Uterine Fœtus, that had continued 5½ Years in the Body.
By Robert Houston, M. D. No. 378. p. 387.

on

on her Delivery. Her Mother, and her Midwife, apprehending no Difficulty, assured those about her, that only Time was wanting.

But I found, on Examination, that her Womb was of no Bulk to contain a Child near it's Time; and that it's Neck, of an uncommon Hardness, was also closed so straitly, as to refuse the Admission, even of a small Probe or knitting Needle.

I declared upon this, that her Delivery was impossible, because the Child was not within the Womb, but between the Womb and the Guts, that it might be removed by a Passage to be made for it, without any great Pain, and with Safety to the Mother. I offered to undertake it, and assured them, that this was the only Opportunity; and that if she neglected it, it would hereafter be out of the Power of Art to give her the Relief, she must languish for till Death, unless favoured by some unlikely and extraordinary Accident.

However confidently I affirmed it; they listened with a Mixture of Disbelief and Amazement, and rejected my Assistance. At that time, in probability, it would have been successful; for she was a slender well-shaped Woman, in good Habit of Body, and of a sprightly Disposition.

It was a Year after this, when I was desired again to visit her. I found her much disordered by a growing Imposthumation in her Belly: I ordered her some Cordial Stomachics, *Cassia*, and such gentle Lenitives; and they met a Success beyond my Expectation: So that, by Aid of a regular Diet, and the watchful Exactness of a very tender Mother (a Nurse of above thirty Years Experience about this City) I restored her to such Strength, that she went chearfully abroad, and re-applied herself to Business.

But about fifteen Months from the Time when I visited her first, her Mother came from her to entreat my Assistance: She complained of great Pain in the lower Part of her *Abdomen*; and I found a Tumour of a conic Form, projecting about an Inch beneath the *Umbilicus*: It's Inflammation, with Tension, and a Feverishness attending it, so plainly indicated Suppuratives, that I was not surprized to hear, in a few Days, that it had broke, as I wished. I proposed to lay it open, both to give a free Emission, and prevent it's being become fistulous; but she was apprehensive, that I would, as she called it, cut open her Belly: So that not being able to prevail with her, I ordered a Pot of Unguent, and some Plaisters. The Ulcer soon grew fistulous, and so continued till she died, which was on the 23d of *March* 1723, it the 41st Year of her Age.

For above five Months before her Death, she voided her Excrements by this Vent, and all the soft Parts of the *Fœtus*, with some small Bones of it's Fingers. But the rest of the *Skeleton* remaining entire, I took it out of her Body, together with the *Vagina*, *Uterus*, *Rectum*, &c. wherein it had involved itself; as may be seen more particularly in the Figure annexed.

A The

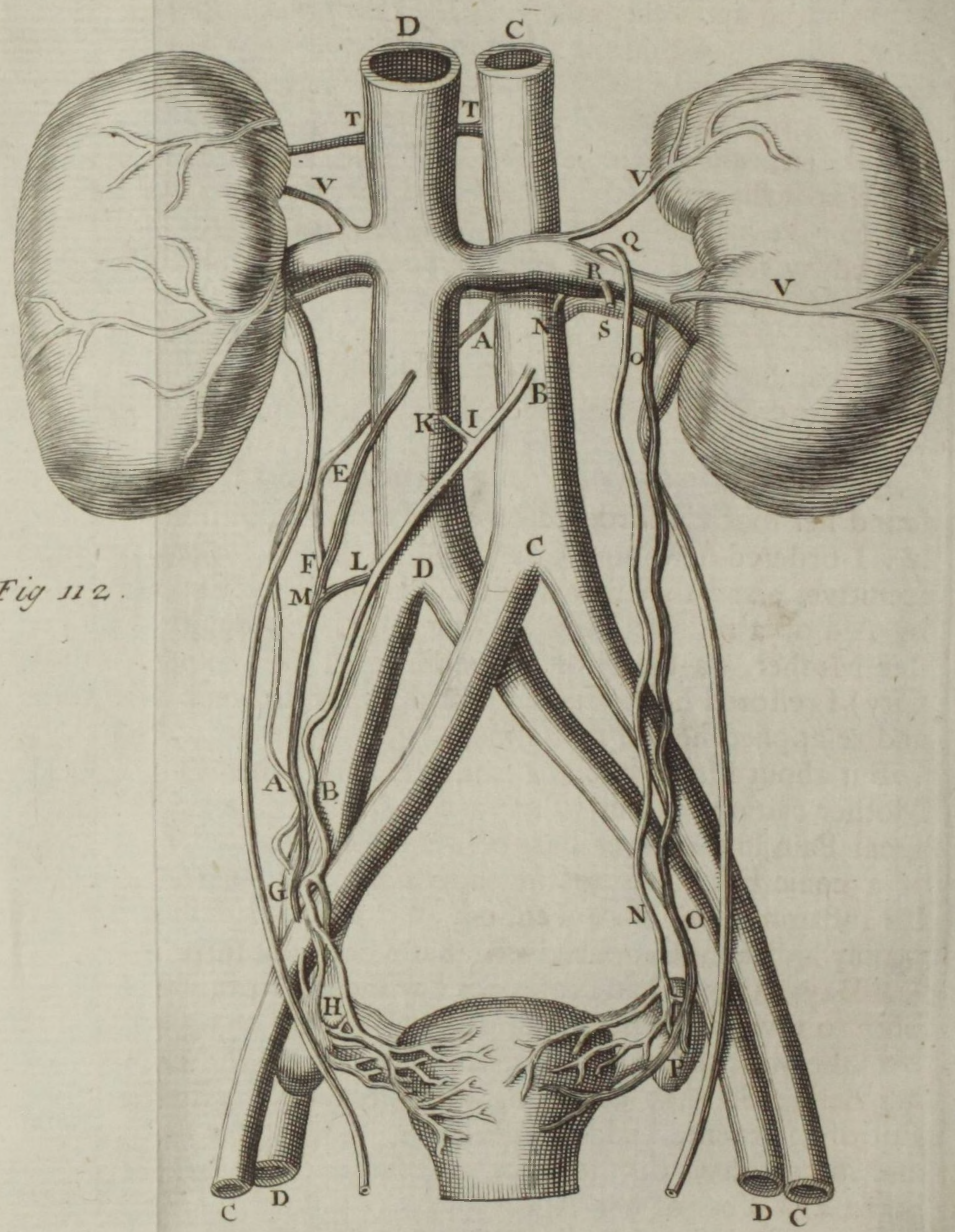


Fig 112.

Tom. sculp.

Fig. 113

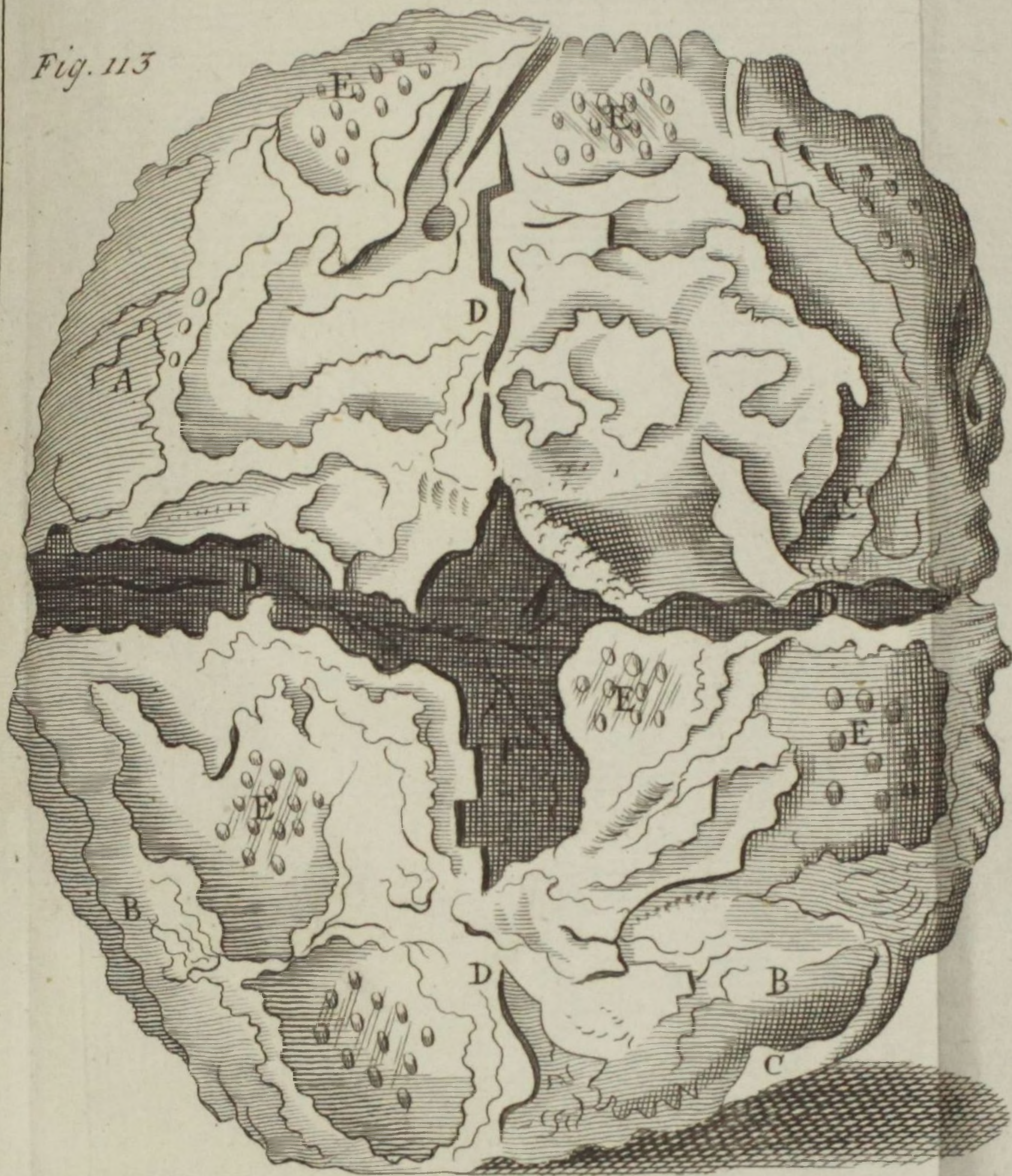
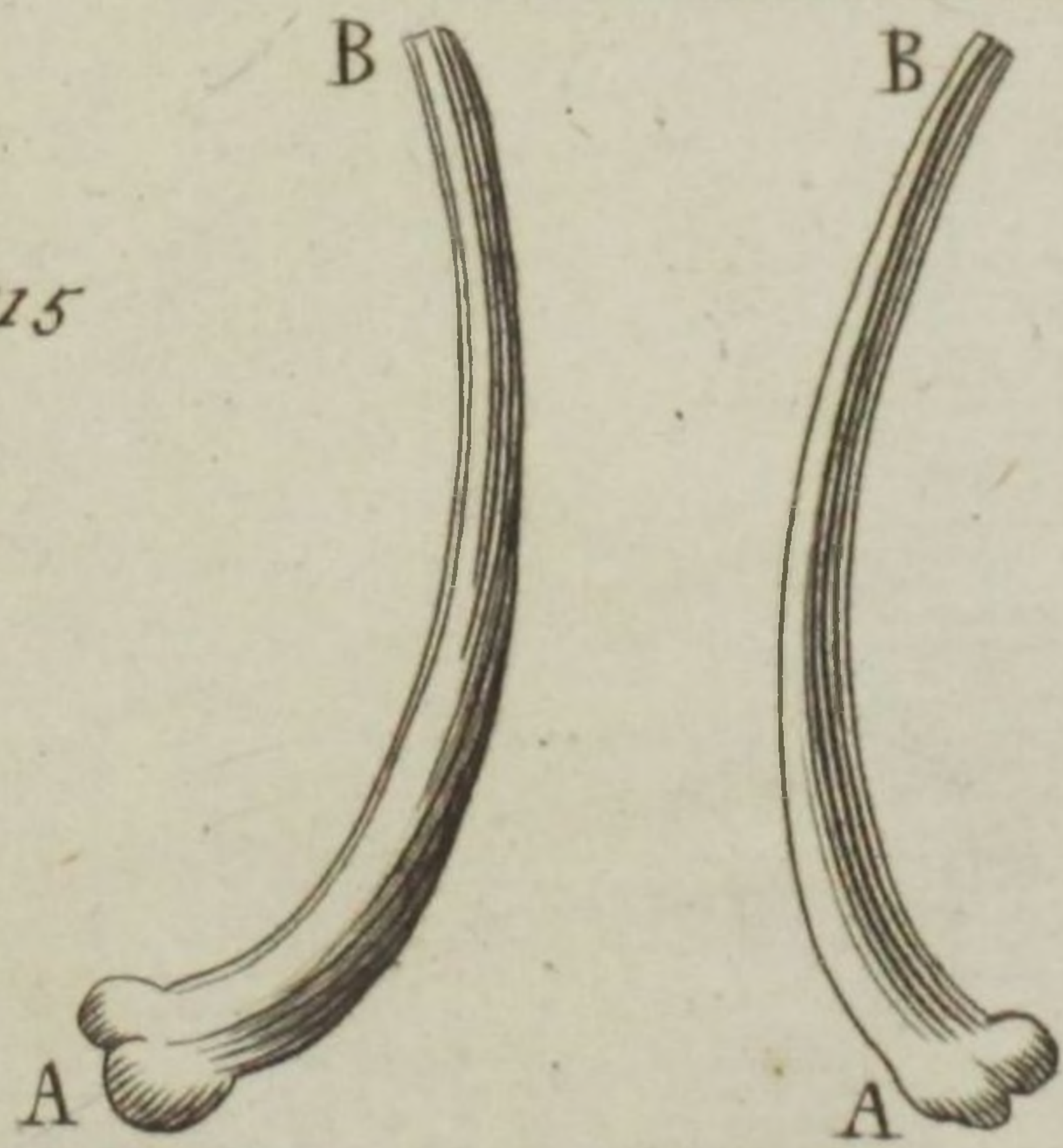


Fig. 114



Fig 115





A The Clitoris. BB the Nymphæ. C the Rima, or Entry into the *Vagina*. D the Bladder. EE the Uterus cut off. F the Uterus sound and entire. G the left Ovarium. HH the Tubes. I part of the Colon cut off. K part of the Peritonæum. L part of the Ileum cut off. M. part of the Cæcum. O part of the Cranium that plainly appears. P. the Ulcer, thro' which the Excrements passed, with some small Bones. QQQQ the bulky Mass, wherein the Skeleton is contained, between the Uterus, part of the *Vagina* and *Rectum*. RR part of the *Cutis*.

A Orificium *Vaginae*. B Anus. C. *Intestinum Rectum*. DDD the Mass wherein the Skeleton is contained. E the *Costæ* plainly appearing. F. the Bladder laid aside. G the Ureter cut off. H the Uterus. I the Ovary. K the Tube. L part of the Colon. M the Ulcer, thro' which the Excrements passed, about one Inch beneath the Navel. N Bones in the Orifice of the Ulcer.

Fig. 116.

Fig. 117.
A Lateral View.

3. Uxor Laurentii Skallroth, Pastoris in O'Estad, Territorii Able dicti, ditionis Elfsburgensis, aetatis 41, quatuor annos nupta, A. 1720, mense Julio, ingravidatur, fructumque fert per septem menses, visis tamen interdum paucis menstruis, sed sperans, justo demum tempore & post decimi mensis fastidia, pulcra prole parentem se futuram. Præterlapso hoc tempore, evanescere tumorem sentit, remanente solummodo pressione quadam in latere dextro. Post mensem rursus fit gravida, peperitque filiam, sed mortuam justae magnitudinis, in Decembri An. 1721. Ex quo tempore lecto adfigitur in mensem usque Junii hujus anni. Mense vero Maii, cum alvum levaret aliquando, anus ipsi tam dolere, ut ipsum intestinum rectum omnino excidere crederet: duobus ergo digitis praetentans & se juvare volens, extrahit cranii partem, magnitudine nummi Coronae Svehicae (vulgo *dubble Carolin*); repertis deinde in sella duabus costis, & post 14 dies abeuntibus eadem via reliquis ossibus, colore excrementitio, quae & ipse vidi, & manu mea contrectavi. Maritus, uxor ipsa, & ejus soror, alia non via exiisse haec ossa mihi sancte adfirmarunt, incredulo licet, & contra ordinem naturae haec fieri non posse, strenue defendenti. Bene nunc valet, domesticis apta curis, triumque mater liberorum, qui adhuc in vivis sunt: menstruis quoque naturaliter se habentibus.

The Bones of a Fœtus voided by Stool. By Mr Bernard Shiever. No. 385. p. 172.

4. I was sent for about the middle of August last, to a Woman who then judged herself to be between three and four Months gone with Child; she had all the Symptoms preceding a Miscarriage, and upon touching, I found the *Os Tincæ* somewhat dilated and spread, from whence I concluded a Miscarriage would ensue, and therefore ordered what I thought proper to promote it; but I was some time after informed by her Husband, that although she before believed that she had miscarried, yet that she now thought herself Quick; as feeling somewhat to move within her Belly, agreeable to what she had perceived after former Quickenings. Thus it passed on for about six or seven Weeks; in which Time she grew much bigger, and the Motion more perceptible; so that there remained no Doubt of her being

The preternatural Delivery of a Fœtus at the Anus. By Mr Giffard, Surgeon. No. 416. p. 435.

with Child. About the third of *October*, she was seized with violent Pains in her Belly and Back; which daily increasing, her Sister, by her Desire, came to me on the sixth, when I went to her, and found her labouring under very great Pains, and other Complaints like those preceding a Miscarriage or Delivery: But to be better satisfied, and to strengthen my Opinion, I passed up two Fingers into the *Vagina*, to examine by the Touch, whether the *Os Tincæ* began to open and spread. I there felt a large and unusual Fullness and Tension, which I then judged to be the Body of the *Uterus* sunk low into the *Vagina*, and much distending it, and extending backwards, and pressing against the *Rectum*, so that the Excrements could not readily pass, neither could she, from it's Pressure upon the Neck of the Bladder, freely make Water. I could not find the *Os Tincæ*, although I very carefully examined all about with the Ends of my Fingers; wherefore I then judged that the *Fundus Uteri* must have receded from it's natural Position, and be bent backwards towards the *Rectum*: In which Opinion, I was the more strengthened from the Fullness I before observed, stretching backwards; and therefore concluded that the *Os Tincæ* must be very forward: Wherefore I endeavoured to pass my Fingers between the *Os Pubis*, and the Fullness which pressed against the upper Edge of the said Bone. This, with some Difficulty I effected, and at length, about two or three Inches above the said Bone, I felt the *Os Tincæ* with the Ends of my Fingers. The Cause of this Situation, will more clearly appear in the Pursuit of this Account, I ordered her Anodyne, and quieting Medicines to relieve her Pains, which she was obliged to repeat at least every twelve Hours, with proper Cordials to support Nature; and sometimes Clysters. Thus Matters continued to the 20th of the said Month, only that for some Days before, a Water, tinged with Blood, came away, as she imagined, through the *Anus*, and which she believed proceeded from the Piles, with which she was sometimes troubled.

On the 20th, her Husband came to me about six of the Clock in the Morning, telling me that the Midwife had brought away a *Fœtus*, but could not compleat her Business; whereupon I immediately went to the Midwife, who upon my coming, told me that a *Fœtus* was protruded through the *Anus*; and to confirm it, desired me to examine, which I did immediately, and found the *Funis Umbilicalis* hanging out about two or three Inches beyond the *Anus*, and passing up through the same: I therefore passed my two fore Fingers by the String into the *Anus*; when I found about three Inches up, an Opening, as I then judged, into the *Uterus*, wide enough to admit the Ends of three or four Fingers, and the *Funis Umbilicalis* passing into it; from hence I was assured, that the *Fœtus* came out that Way. I endeavoured, with my Fingers passed into the Opening, to bring away the *Placenta*; but as it was very rotten, it tore away between my Fingers, so that I was forced to bring it in small Pieces, and was at last obliged to leave a large Part of it. The *Septum*, or Partition between the

Anus

Fig. 116.

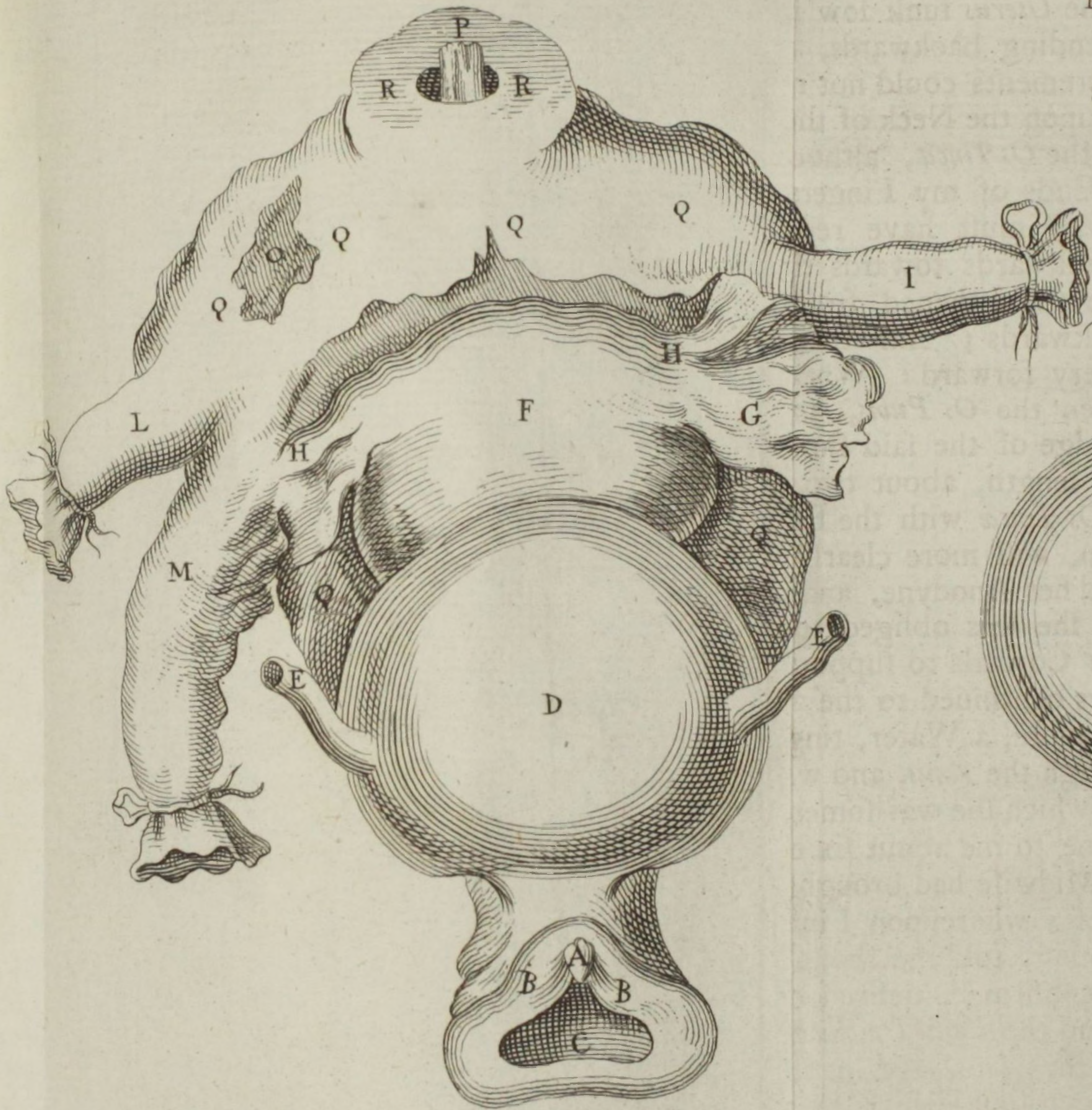
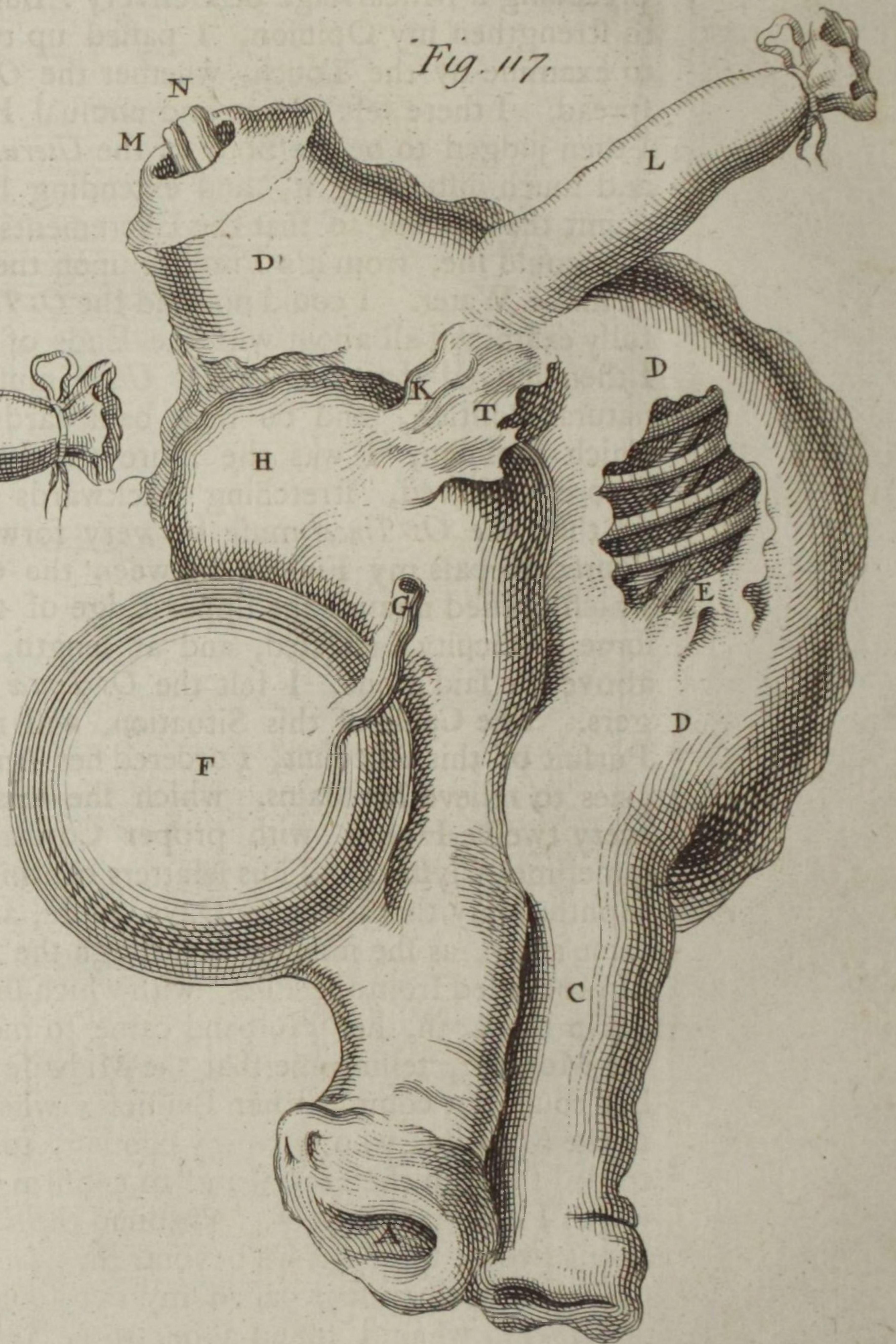


Fig. 117.



Toms sculp.

Anus and *Vagina* was entirely whole, and no Perforation through it. From these Appearances, I then concluded, that a Mortification must have begun in the *Uterus*, and so from it's Contiguity be communicated to the *Rectum*; so that Nature endeavouring to expel what was contained, and forcing it against this Part already mortified, and consequently ready to give way and separate upon any Pressure made against it, produced this Opening, and the Protrusion of the *Foetus* through it into the *Rectum*, and so on thro' the *Anus*.

There was a large Discharge of grumous Blood, and other Substances through the *Anus*, which continued coming away until the 26th of the aforesaid Month, when the Woman died about three of the Clock in the Afternoon.

I should have observed, that there was a Fullness and Hardness very perceptible, to be felt outwardly in the fore-part of the Belly, some distance below the Navel, from the time that the *Foetus* came away to her Death; which upon opening the Body, I was well assured, was the *Uterus* forced upwards and forwards by a *Sacculus*, which being large and distended, filled up the *Pelvis*; and by it's Bulk pressed the *Uterus* forwards. The *Foetus* was perfect in all it's Parts, but much wasted and shrunk from it's being some time dead, and consequently putrified.

5. The *Vagina*, *Uterus*, *Ligamenta Rotunda*, left *Ovary*, *Fallopian Tube*, and *Ligamentum Latum* on that side, together with the *Hypogastric*, and *Spermatic Vessels* on the same Side, were in a natural State. The *Fallopian Tube* on the right Side, we traced from the *Fundus Uteri* almost to the *Morsus Diaboli*; where it was confusedly united with, and opened into the *Sacculus* hereafter to be described. The *Ovary* on this side, with the *Ligamentum Latum*, was dilated into a large *Sacculus* of an irregular Form, extending itself behind the *Uterus* (to the posterior Paries of which it adhered) and passing on towards the left, was connected to that Part of the *Colon* that terminates in the *Rectum*, and the *Rectum*. In this *Sacculus* we found great Part of the *Placenta*, and the Remains of lacerated Membranes, besides the Aperture of the *Fallopian Tube* mentioned before, and another about 4 Inches in Diameter into the Middle of the *Rectum*: That Part of the *Ureter* on the right Side, which lies between the *Ovary* and the *Kidneys* was dilated, and so was that Part of the *Rectum* between the Aperture into it, and the End of the *Colon*; both which were caused from the Contents of these Canals, being obstructed in their Passage.

Fig. 113. Shews the *Uterus*, with the *Sacculus* behind it, Part of the *Colon* and the *Rectum*; the *Fallopian Tubes*, *Ovary* on the left Side; *Ligamenta Rotunda*, and the *Vagina* laid open to the *Os Tincæ*. A, The *Uterus*. B, The *Fallopian Tube* on the left Side. C, The *Ovary* on the same Side. D, The *Ligamenta Rotunda*. E, The *Vagina* laid open. F, That Part of the *Colon* that terminates in the *Rectum*. G, The *Rectum* continued to the *Anus* under the *Vagina*. H, The *Fal-*

An Examination of the Parts. By Mr Edw. Nourse, F. R. S. Demonstrator of Anatomy at Surgeons-Hall. No. 416. p. 438.

lopian Tube on the right Side, whose Extremity opens into the *Sacculus* formed from the *Ovary*. I. The *Sacculus* extending itself behind the *Uterus*; wherein we found the *Placenta* and several lacerated Membranes; and from whence there was a large Opening into the *Rectum*.

Fig. 119.

Fig. 119. Shews the Inside of the *Sacculus* and it's Aperture into the *Rectum*. A the Intestine. B the *Sacculus* adhering to it. C the Opening from the *Sacculus* into the *Rectum*. D the Membranes found within the *Sacculus*. E the *Vagina* turned to the Right.

A Child born with a remarkable Tumour on the Loins; by John Huxham, M. D. No. 413. P. 258.

XXXII. Peperit nuperrime Domina quaedam puellulam rite eleganter satis conformatam, ni quod in regione Lumborum infima emi-
nerit Tumor, sive Sacculus, Magnitudinis quasi Pugni puerilis; cujus insuper Pedes ad nates usque retracti Posituram Sartoris in-
coxantis exhibuerunt; nec eos movere ullo modo, aut extendere, potuit. Tumorem hunc perlustrando eum ejusdem esse Generis cum il-
lis, quos Tulpius, Cap. xxix, & xxx. lib. III. observat. Descripsit sus-
picabar: istum ideo Fomento aromatico & adstringente foveri jussi. Intra Triduum autem sero summe adeo distentus evasit, ut jam extima
Tumoris membrana disrupta fuisset; metusque esset, ne rupto con-
festim Tumore, Serum semel & simul cum ipsa vita efflueret. Puncti-
unculam ergo suasi, ut Lympha fensim emitteretur, edito nihilomi-
nus Prognostico, sive aperietur Tumor sive non, eum fore lethalem. Infans interea insomnis & ejulans parum dormivit, ad Pulticalem vero
satis apta. Quarto adeo Die Tumorem aperuit Chirurgus, facto lar-
gore paululum quam consulissem Orificio, ita ut omnis intra Horas
viginti effluerit Humor. Hinc Languor summus & frequens Deli-
quium ad Biduum saltem; at nutrice sana & Julap. Cardiaco, Cepha-
lic. refecta viceessimum ad usque Diem Vitam perduxit, quo frigidi
Sudores & Tremores aborti tremulam hanc Lucem extinxere. Inciso
Corpore observavimus Dorsalem Medullam ad ultimam Lumborum
vertebram, nec ultra, pertigisse; sed hanc inter & os sacrum (si ma-
vis primum os sacrum) exiens per Tumoris sive Sacculi membranas
dispertita fuit. Os sacrum porro fuit solidum penitus, nec Propagines
nervosas Medullae spinalis (quibus apud Anatomicos Cauda Equina
Vocabulum est) ad Crura Pedesque transmisit; quinimo ne quidem
perforatum fuit omnino.

In quibusdam saltem à Tulpianis Historiis supra citatis differt haec
nostra: neque enim aliquid matri praegnantem negatum neque vel se
Ictu aut Foetum Imaginatione laeserat unquam, neque Spina hujus
Infantis bifida aut lacera: quinetiam nec os sacrum solidum, nec Pedes
contractos & immotos meminit Tulpius.

A large Spleen and small Bladder; by Mr John Ranby, F. R. S. No. 401. P. 414.

XXXIII. A Boy aged 10 Years, was killed by a Blow on the Skull; his Spleen weighed 2 Pounds, and possessed almost all the left Side of the abdominal Cavity. The Bladder, when distended to it's great-
est Capacity, would not contain an Ounce.

XXXIV. A

Fig. 118

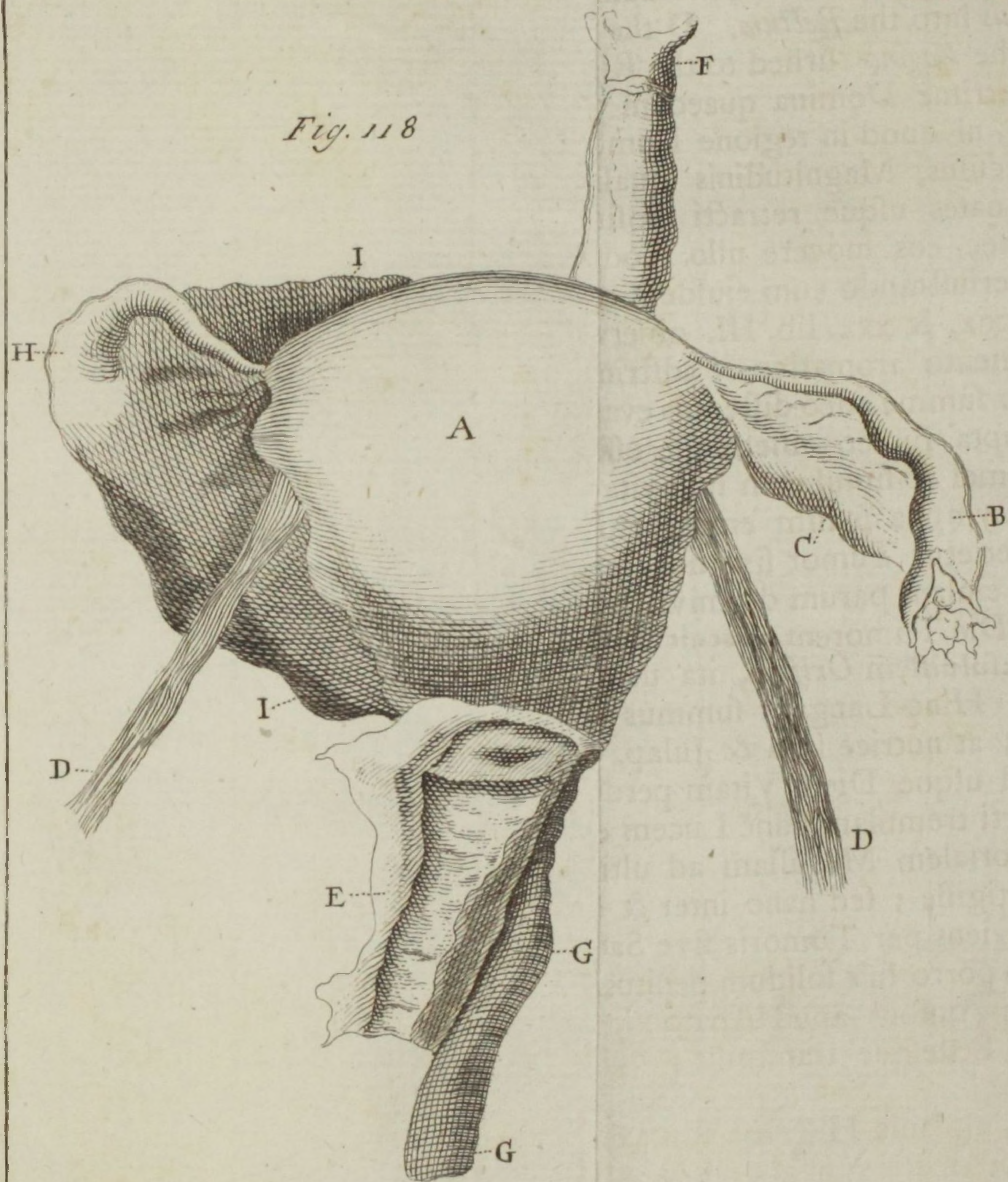
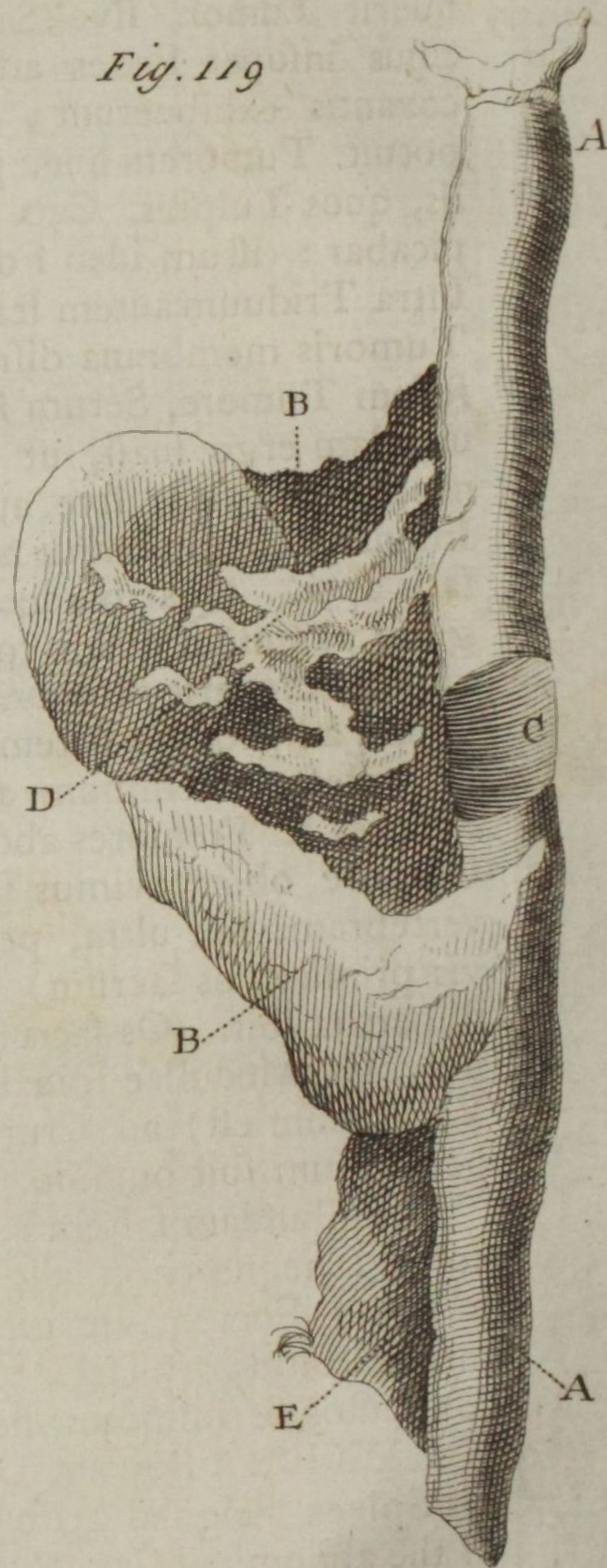


Fig. 119



... was entirely whole, and no Perforation thro' the
... I then concluded, that a Membrane
... the Ovary, and it fell in a longish
... to the Ovary, to that Nature endeavouring to expel
... and forcing it against the Part already mentioned
... ready to give way and separate upon any Pressure
... this Opening, and the Perforation of the
... the Ovary, and in on this the Ovary
... large Quantity of purulent Blood, and other
... which contained coagula and
... when the Vagina was about three
... in the Afternoon

... have observed, that there was a
... to be felt exactly in the fore-part of the
... below the level, that is, that the
... which upon opening the Vagina was well
... and towards the Ovary, which
... and extended in the Ovary; and by its bulk
... the Part was perforated in all its Parts, but
... from its base towards the head, and

... the Ovary, and it fell in a longish
... the Ovary, and it fell in a longish
... the Ovary, and it fell in a longish
... the Ovary, and it fell in a longish

... the Ovary, and it fell in a longish
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... the Ovary, and it fell in a longish

XXXIV. A Man aged 25, who died of a pocky Hectic, complained some Days before of a painful Swelling in the Testicles, which he said came the Night before. I examined it, and finding it to be a *Hernia Aquosa*, would have punctured it, if I had not felt (besides the Water) a hard Body, which I could by no means reduce. In a few Days he died, which gave me an Opportunity of being satisfied. Opening the *Scrotum*, and separating the common Membranes to the *Processus Vaginalis*, I found it contained about 4 Ounces of Water, besides a great part of the *Omentum*; some Portion of which adhered to the bottom of the Cavity, and the *Albuginea* that immediately covers the Testicle.

A Hernia Aquosa; by the same. No. 401. p. 414.

XXXV. In § IV he gives us a pretty Observation of the *Cicatrix*, as commonly called, in the *Ovaria* of Females, whence the impregnated Egg is dropt into the *Fallopian* Tubes. He shews, that in reality it is a *Calyx*, or natural Aperture, which enlarges itself for that purpose by degrees, and after Exclusion closes again, as the *Os Uteri* afterwards; so that the Egg truly drops from it, as an Acorn when ripe from it's Cup; and the Trace of it soon becomes imperceptible. He says farther, he has frequently seen the thick part of the Male Sperm carried up even into the *Fallopian* Tubes upon Impregnation.

Account of a Book, entitled, Adversario-rum Anatomico-Medico-Chirurgico-rum Decas tertia. Auctore Fred. Ruysch, M. D. Anat. & Bot. Prof. Amstel. R. S. S. No. 379. p. 428.

In § V he speaks of an Obstruction, that has sometimes happened in the Intestines of new-born Infants, so that they have had no manner of Passage by Stools, and that gentle Lenitives have not been able to relieve them: In this case, he advises strong Purgers, adapted to their tender Age.

In § X he considers the *Papillæ* of the nervose Tunic in the inside of the Stomach, and finds that the Figure of them is roundish, in that part of the Stomach over which the Spleen is fixed; but longish in other Parts thereof, and in the inside of the *Jejunum*. He takes notice, that the Fabric of the Womb is made of much the same sort of thick muscular Fibres as the Bladder, both to facilitate their proper Exclusion; particularly these Fibres are more remarkable upon the *Fundus Uteri*, to which Part the *Placenta* most generally fastens itself, and most evidently for this Reason.

C H A P. VI.

*The Humours and general Affections of
the Body.*

*Of the Globules
of Blood; by
Mr Anthony
a Lewenhoeck,
F. R. S. N^o.
377. P. 341.*

I. I. **E**X tuis litteris intellexi inventam tibi rationem esse, qua diametros globulorum sanguineorum, aliarumque minutissimarum rerum, certo cognoscere possis, adeo quidem ut deprehenderis diametrum globuli sanguinei cum parte $\frac{1}{1940}$ lati pollicis magnitudine convenire.

Hoc ego inventum cum legerem, summa voluptate affectus sum; statimque sic mecum ratiocinabar: si 1940 globulorum sanguineorum diametri lato pollicis longitudine respondent; adhaec si corpora instar globi rotunda eam ad invicem proportionem habent, quam habet numerus cubicus ad suum axem, sicut à Geometris traditur; sequitur corpus, quod ex 7301384000 globulorum conjunctione componitur, haud majus esse corpore globoso, cujus axis latum pollicem longitudine adaequet.

Et quia de examinando denuo sanguine me rogaveras; meum ipsius & duarum praeterea personarum sanguinem visu exploravi: planeque comperi 4 diametros globulorum sanguineorum, uti scripsisti, convenire cum diametro (a) fili argentei, quod mihi mittere dignatus es. Id solum dicere habeo, quod globulos quosdam sanguineos, sed perpaucos, visu perceperim; quorum quaternae diametri diametrum fili argentei longitudine aliquatenus excedebant. Verum conjiciebam globulos illos, quos ex pollice per acus punctiōnem eduxeram, & adhuc calentes vitro imponebam, à rotunditate figurae nonnihil descivisse ad figuram planam.

*Continued by
the same. No.
380. P. 436.*

2. Dicis, hanc explorationem non esse indifferentem, seu inutilem, quoniam non impossibile est, quin illa observatio de globulorum sanguineorum magnitudine in variis animalibus, una cum suis parvulis vasculis, ductura sit nos aliquando ad detectionem ubi, & quibus mediis hi globuli formentur, & inde determinatam crassitudinem in eodem animali conservent.

Ad haec mihi assumo tibi, objicere, me ad imaginationem eam adduci, nos nunquam ad explorationem illam perventuros, quomodo

(a) Hujus fili argentei diametri 485 pollicem, sive duodecimam pedis Londinensis partem, consciebant; quod compertum fuerat per Methodum in Aëris Philosoph. expositam. N^o. 355. pag. 761.

scilicet

scilicet hi globuli ex materia fluida ad magnitudinis determinatae globulos sint coagulaturi.

Multis abhinc annis ad me asportari jussi vinum fermentans, quia hoc Vinum globulos producit fere sanguineis aequales, quos vini foeces vocamus: & quamvis tale vinum microscopio apponerem, tamen nil aliud videbam, quam innumerabilem multitudinem parvissimorum globulorum aëreorum, sursum ad superficiem vini adscendentium, & fecum illos globulos, quos vini foeces nominamus, ducentium. Cum jam in superficiem vini venerant, separabantur vini foeces à globulis aëris, & fundum repetebant, mihi non apparente, quomodo globuli, quos dicimus vini foeces, formabantur: & simulac, ni fallit memoria, globuli illi inferius descendissent, exhibat ex globulo quoque iterum globulus aëreus, & ita denuo ad superficiem Vini devehebatur.

Imagino mihi, coagulationem illam, ac determinatam globulorum sanguineorum magnitudinem à rerum primordiis esse creatas; nam si unus globulus altero major erat, suspicamur exinde inordinatam circulationem fore secuturam, quoniam sanguinem per varia vascula sanguinea rapidè transluentem vidi, quae adeo exilia erant, ut simplex saltem globulus transire potuerit.

II. The Method of curing fresh Wounds in a few Days, without Suppuration, where neither Nerves, large Vessels, Bones, or any of the *Viscera* were concerned, has been long ago observed. *Purman*, a famous Surgeon of *Breslaw*, in his *Chirurgia Curiosa*, tells us of a Mountebank, who gave himself 13 Wounds, by Incision, in the upper part of his left Arm, and thereupon applied his *Nostrum*, and with the help of a good Roller, was cured in two Days time.

Observations upon Dr Eaton's Stiptic; by Dr Sprengell, F. R. S. No. 383. p. 108.

Next he mentions a martial Stiptic, which stopped bleeding incomparably, and healed fresh Wounds (as he says) in two Days, especially if the Patient took withal a few Drops inwardly. This has likewise been mentioned by *Blegny* near 30 Years ago.

When I came into *France*, I found that many little Trials were made there also, with a Stiptic Ball, mixed with *French Brandy*, by striking a Cock thro' the Head, opening the crural Artery of a Dog, or chopping off a Dog's Leg, &c. But I found that it did not amount to any thing of consequence; yet I have still a Ball, made above 20 Years ago, of filings of Iron, and an equal Quantity of Tartar, mixed well with *French Brandy* upon a Marble; this, with some Alteration, was afterwards published by the famous *Helvetius*, Physician to *Lewis XIV* of *France*, in a Book called, *Recueil des Methodes pour la Guérison des diverses Maladies*; which was reprinted in *Holland* in the Year 1710. This Preparation was then sold by *Pierre Rottermond*, Apothecary at the *Hague* in *Holland*.

The *Recipe* for his Medicinal Ball I have translated, and it is as follows: Take 4 ℥ of the Filings of Steel, and 8 ℥ of Tartar, well powdered; mix these well together, and put them in a new earthen

Pot, and pour thereupon as much *French Brandy* as will make it into a Poultefs. Let this stand fermenting in a Cellar for 4 Days, and stir it between whiles. Then put it in *Balneo Mariæ*, and distil it s. a. with a moderate Fire, to draw off the Brandy. When you find that nothing but the Phlegm comes over, take it from the Fire, and take out the Mass, stamp it very fine, that not the least Lump may remain; then mix it again as before with a sufficient Quantity of Brandy, and put into the Cellar to ferment, as before, and then distil it a second time. This Operation may be reiterated 7 or 8 times, but the last time mix your Mass well upon a Marble, and form it into two Ounce Balls. One of these Balls is steeped in a Pint of good *French Brandy*, a little warmed, and hung only in it by a Wire, 'till the Brandy has received the Colour of the Ball. But if you are in haste, then grate a sufficient Quantity of the Ball in some Brandy, stir it well, and you may use it that very Instant.

No doubt but the Author thought by often grinding, fermenting, and distilling this Mass, to comminute and subtilize it's Particles, so as to make it more fit to contract the Fibres and Vessels of a Wound, and to prevent Stagnations of the Fluids, both within and without, upon Contusions; but the Success did not answer, and therefore it was laid aside. Neither did *Helvetius* ever recommend it as an universal Stiptic, astringent, or consolidating Medicine, but merely in fresh Wounds, and that only for a first Dressing, and where People lived at a distance, and could not get immediately Assistance from a Surgeon. Besides he makes several Exceptions where it should not be used; and, in general, advises where Chalybeat Medicines may be made use of according to Experience.

But last Year a Balsamic Stiptic was published by one *Dr Eaton*, good to stop all manner of Bleeding without or within, and that without any manner of Exceptions. This made me desirous to see it, and soon after I had an Opportunity to examine it: I found presently that this was the same old Medicine, which was got hither also, after other Countries had discarded it. But I neglected it at that time, as not worth my Notice, till I saw lately a Treatise of Consumptions, published by *Sir Richard Blackmore*, giving it the greatest *Encomium*, that ever was given to any Invention whatsoever. For, says he, *Dr Eaton's Balsamic Stiptic bids fair for the Credit of a certain Remedy in stopping of Blood outwardly or inwardly, where the Crasis of the Blood is not entirely ruined, and will be of more Service to Mankind, than all the Discoveries made by Galenical Compounders of Drugs and systematical Methodists.*

Finding this Remedy recommended in so extraordinary a manner, by so eminent a Physician, I began now to think, that possibly I might have been mistaken, and therefore desired *Mr Winterbottom*, an Apothecary in *Bow-lane*, immediately to prepare the *Recipe*, as described by *Mr Helvetius*. When this was ready, I sent for a Bottle of

Dr Eaton's