

two Fore Teeth, lying almost by the Gullet, and continually grating upon it, occasion'd an intolerable Pain, and preventing him from swallowing any thing but Liquids, it brought him so low, that his Life being despair'd of, to make a final Trial, his Tongue was drawn out as far as it could be, and one of the Chirurgeons feeling the Ball with his Probe, which he then took to be a Piece of a Tooth, (several Pieces of Teeth having been beat into his Tongue by the Bullet) and endeavouring to extract it, he took hold of the Ledge with his Forceps, and pulled the Ball out, after which he recover'd in a few Weeks.

The Marks of the Fore Teeth are to be seen on the Bullet, and where it flatted upon the Jaw-bone.

N. B. A very extraordinary Narrative of a Gun-shot Wound, is to be seen in N^o 320. of these *Transactions*: It is the Case of one Dr. *Feilding*, who was shot in near the Eye, and after 29 Years the Bullet was cut out near the *Pomum Adami*.

VII. *Of an Obstruction of the Biliary Ducts, and an Impostumation of the Gall-Bladder, discharging upwards of 18 Quarts of bilious Matter in 25 Days, without any apparent Defect in the Animal Functions. By Claudius Amyand, Esq; Serjeant Surgeon to His Majesty, and F. R. S.*

MR. *La Grange*, aged about 50, of a fallow bilious Complexion, died of an Abscess in the *Vesica Fellis*, the 29th of May 1733. Dr. *Vatas*, his
S f Phy-

Physician in Ordinary, reports, That about 14 Years before, this Gentleman was afflicted with a Tertian Ague, which was cured by the Bark, and from that Time had complain'd of a Sense of Weight, and some Uneasiness and Hardness in the Region of the Liver and *Borborygmi*, which were reliev'd by frequent Purgations; notwithstanding which, he had enjoy'd all the Appearances of Health, till about four Months before his Death, when some Symptoms of the Jaundice first began to appear on him, which had greatly increas'd five or six Weeks before he died, when he began to complain of shooting Pains on the Right Hypochonder, which was soon follow'd with a hard inflammatory Tumour there, tending to Suppuration. The 4th of *May*, I met Dr. *Vatas*, and Mr. *Fiquel*, his Surgeon, in order to open a large Abscess pointing below the Cartilages of the second and third spurious Ribs on the Right Side. 'Twas determin'd to open it immediately with a Lancet, whereupon a Pint of a purulent fetid Matter was discharg'd. The Aperture being large, and the Dressings easy, by the next Day we found, that a very large Quantity of *Sanies*, and some *Pus* left in the Bag, had found a Vent; and this was so great, that 'twas thought proper to renew the Dressings twice a Day. This had the desired Effect so far, that from this Time the Matter daily decreas'd till the 12th of *May*, when we were inform'd, that during the Night the Wound had discharg'd near two Quarts of Matter of a saffron Colour, intermix'd with large Flakes and thick Lumps of a coagulated Lymph or Jelly, tinged of a deep Yellow; and what surpriz'd us no less, was, that upon Dressing we made way for the Discharge of about a Quart more of the same, as we
inlarg'd

inlarg'd the Orifice of the bursted Bag, to favour the coming out of the large Flakes and Lumps of Jelly ob- turating at times this Orifice. During this Day the Discharge was exceeding great, and at Night was emptied about a Pint more of the same Matter. From this Time a short and thick *Canula* was left in the Opening of the bursted Bag, this causing a more easy and constant Discharge, and a vulnerary Injection, strongly saturated with Spirit of Wine, had the good Effect to diminish it very considerably; but yet it continued so very great, that we had just Reason to apprehend our Patient would soon sink under so great a Flux of this bilious Matter, and the rather that his Stomach and his Rest fail'd him; but the Discharge daily lessening, and his Appetite and Rest returning in Proportion, he recover'd Strength enough to be able to walk. All this while the Appearances of the Jaundice were wearing of, the Urine was return'd to its natural Colour, and the Patient had regularly a natural Stool every Day, till about eight Days before his Death, when his Body becoming costive, the Physician found it necessary to discharge the *Feces*, by Clysters and lenient Purges. Whilst I attended him, his Belly was always free from Fulness or Tension, being soft and lank, and he less troubled with Wind, than he had been for many Years before. Two Days before he died, he went to air himself in another Room, and caught Cold: This is presum'd to have occasion'd a Fever follow'd with a Lethargy, in which he continued till the 29th of *May*, when he died.

Dr. *Stuart* and Dr. *Vatas*, Mr. *Fiquel*, myself, and several more, attended the Dissection, when 'twas observ'd, that our Patient was not nearly so exte-

nuated as might have been expected, after so great a Discharge of Bile and Lymph during 25 Days; for much Fat was yet observ'd under the Skin and elsewhere, and his Flesh not much sunk from the natural State, but the Blood-Vessels were found extremely empty. The *Abdomen* being open'd, the Caul or *Omentum* was shrivel'd up, and adhered to a great Bag or *Cystis*, affixed to the Inside of the great Lobe of the Liver, and stretching from thence along the Right Flank, over one half of the Kidney on that Side. The Left Lobe of the Liver was remov'd from the Left Side to the Right, not reaching farther than the Right Edge of the *Cartilago Ensiformis*, and the *Pylorus*: The *Ligamentum latum Suspensorium hepatis*, was drawn backwards into the Right Hypochonder. The Liver was of a natural Colour, but very small, and more decay'd and wasted in Proportion than the other *Viscera*, but as free as they from any preternatural Adhesion, Obstruction, or Induration, and the Bag or *Cystis* arising from it, strongly adhering by its Outside only, to the *Peritoneum*, down to the Right Kidney.

Upon passing my Finger through the Wound in the Integuments, it enter'd first into a Cavity made between the *Peritoneum* and the Outside of the *Cystis*, in which the Matter of the Abscess had been lodged, and then through a Hole in the *Cystis*, or grand Bag, through which the great Collection of Bile in this *Saccus* had afterwards made its way; and 'twas observ'd, that the strong Coalition of this Bag to the *Peritoneum* round that Part where the *Pus* had been collected, had shut up all Communication with the Cavity of the Belly, and thereby prevented any Extravasation into the *Abdomen*.

Now

Now the Bag or Cystis being separated from the *Peritoneum*, and this and the Liver spread on a Board, 'twas observ'd that the Matter had been collected in the Gall-Bladder, without affecting the Liver itself. The *Vesica Fellis* was become a very large Bladder, and extended so as then to appear capable of containing three Pints, or more; 'twas nearly as broad as long: It arose very broad from the inner Surface of the Right Lobe of the Liver, which it occupied about 10 Inches in Circumference, or more: Its Bulk had remov'd the Stomach and *Pylorus* from their natural Situations, and press'd them far under the Left Hypochonder, and that Part of the *Colon* placed naturally on the Right Kidney, forwards upon the Spine: Its Surfaces were rugged and unequal, as that of a *Potato*, and its Coats thick and horny, forming several Tumours, Elongations or Expansions, of different Sizes and Figures; one of which, as large as a Hen's Egg, was full of a cretaceous Matter, intermix'd with hard white Stones. This cretaceous Bag was made in the Duplication of the *Vesica Fellis*, but had no Communication with nor Opening into it, which several other Tumours appearing of the same Kind, had; whence 'twas presum'd that some very small Pieces of *Creta*, found in the great Bag, might have dropt from them into it, but 'tis more likely we had dropt them there, because nothing like them had been discharg'd through the Wound. The outward Opening in this Bag answer'd in the Cavity of the Abscess, wherein Incision had been made, as this latter was form'd between it and the *Peritoneum*. In the Bag were found about two Ounces of the same bilious Matter which had all along been discharg'd; which being computed, must be equal to, if not exceed, the

the Quantity of 18 or 20 Quarts, during the 25 Days the Patient lived, from and after the opening of the Tumour.

It has been observ'd, that the Liver was in a natural State, and that the Matter collected in the *Vesica Fellis* had not in the least wounded or affected the Liver itself; so that the great Quantity of Bile and Lymph daily discharg'd through the Incision, must have proceeded from the internal Surface of the distended Gall-Bladder. This put us upon inquiring for the *Radices Cysticæ* and *Hepati-cystic* Ducts; I mean for those very Ducts which *Giovanni Caldesi* has so carefully traced in several Animals, and delineated in his *Observatione Anatomiche ad illustrissimo Sig. Francisco Redi* 1687. and which *Verheyen* has discover'd in the *Bullock* Kind, but could not trace in Man; These Ducts, I say, whereby so great a Quantity of Gall had been deposited in the *Vesica Fellis*, for as much that the Cystick Duct was obturated, whereby some Anatomists have suppos'd the Gall to flow back from the Hepatick Ducts; and upon Dissection, we traced a Trunk like unto that, which *Bidloo* and *Winslow* observed in Man; and resembling that form'd by several Branches in the Liver, and discharging itself into the *Vesica*. We would gladly have traced this further, but the Time allow'd for Dissection did not permit us to pursue this Inquiry.

The *Ductus Communis Choledochus* was found empty, and opening, as usual, into the Cavity of the *Duodenum*; but the Cystick Duct was so compress'd by the Bag, that nothing could pass through it. The Spleen, *Pancreas*, and all the other *Viscera*, were in a natural State, saving (as hath been already observed) that

that some of them had changed and altered their natural Situations.

Upon the whole it appears, *1st*, That the animal Functions have been in no-wise vitiated by some of the *Viscera* having been displaced; and notwithstanding that for 25 Days, the Discharge of the Bile through the Wound had been so great, that little was left to pass into the *Duodenum*, nevertheless he digested his Food well. The Stools continued regular, till within a few Days before Death, and even to the last the *Feces* all along retain'd their natural Colour. *2dly*, It may be observ'd, that the Jaundice in our Patient was not occasion'd by the Obstruction of the Cystick Duct, though that is apprehended as a common Cause of this Malady; for this Obstruction must have been of many Years standing, and our Patient's Jaundice was of a very late Date. Nor was his Jaundice owing to any Retention of the Bile in the *Porus Biliaris*, from the Tumour continually pressing that Duct, and thereby obstructing the free Discharge of the Bile from the Glands of the Liver into the *Duodenum* and Gall-Bladder; nor even to the strong Compression and total Obstruction of some, yea almost all the Biliary Ducts, *viz.* The *Porii Biliarii*, the *Ductus Hepaticus*, the *Hepati-cystici*, and the *Ductus-cysticus*, and *Communis Choledochus*; the principal of which are seated in the Concavity of the great Lobe of the Liver, under the Pressure of this great and hard Tumour, and under its Increase for near 14 Years together, Obstructions and Compressions generally accounted as primary and idiopathick Causes of the Jaundice, because no Distemper like the Jaundice had appear'd in our Patient till within a few Months before his Death, and no true
Jaundice

Jaundice till within a few Weeks, and only then as the Abscess form'd in the Neighbourhood of the Liver had brought an Inflammation there; but as all the Symptoms of his Jaundice began to wear off, soon after the *Pus* had got a Vent, *viz.* as the Inflammation of the Liver brought on occasionally by a Suppuration in the Neighbourhood wore off, and some Days before the bursting of the *Vesica Fellis*, it does not appear unlikely, this Inflammation of the Liver was the Pathognomonick Cause of the Jaundice here; which Inflammation of the Liver, as it was accidental, so the Jaundice occasion'd thereby was actually remov'd soon after a Vent was made for the purulent Matter which had occasion'd this Inflammation.

The Draughts hereunto annex'd were done by Memory, we not being permitted to take the Liver out of the Body.

Explanation of the Figures in TAB. II.

FIG. I.

- A.* The external Surface of the Right Lobe of the Liver.
- B. B.* Parts of the same.
- C. C.* The Ligament which suspends the Liver to the *Diaphragm*.
- D. D.* The Ligament which suspends it to the *Cartilago Ensiformis*.
- E.* Part of the *Vesica fellis* below the Liver in its Fore Part, emptied of its Contents, arising from the Concavity of the Right Lobe, 10 to 12 Inches in Circumference.

F. F. F. F. Its

F. F. F. F. Its Adhesions to the *Peritoneum*.

G. An Opening into the External Bag or *Abscess*, or Incision into it.

H. H. H. H. H. Elongations and Inequalities in it.

O. O. O. O. The Angles of the *Cystis* open'd, shewing in its back Parts an Elongation opening into it at *P*.

FIG. II.

A. A. A. The concave Side of the Liver.

B. The *Vena umbilicalis*.

C. The *Vesica biliaria* emptied, which when full cover'd almost all the Inside of the Right Lobe on its back Part.

D. D. D. D. D. D. Several Elongations or Expansions of the *Vesica* opening into the Gall-Bladder.

E. The cretaceous Bag in its Duplication full of Chalk, intermix'd with hard white irregular Stones.

VIII. *Some Observations on the Case of Mr. Le Grange, by Alexander Stuart, M. D. F. R. S. &c.*

THE Symptoms during Life, recited by Mr. *Amyand* in the foregoing Paper, and the Appearances in the Body open'd, which I was Witness to, therein likewise fully narrated, I hope it may not be unacceptable to point out what appears to me to be the mechanical and necessary Connexion between these apparent Causes and their Effects, in this uncommon Case.

Fig. 1.

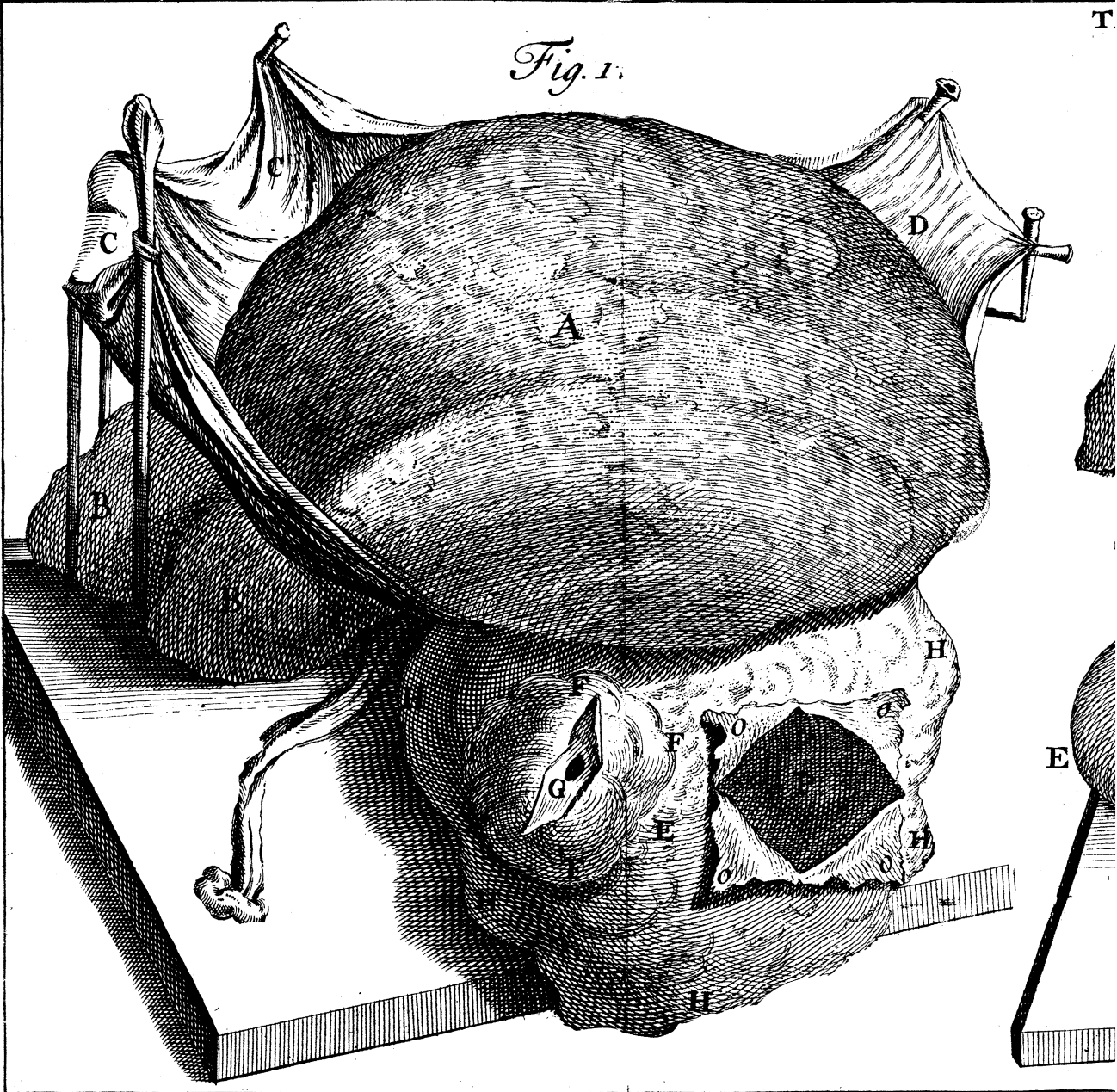
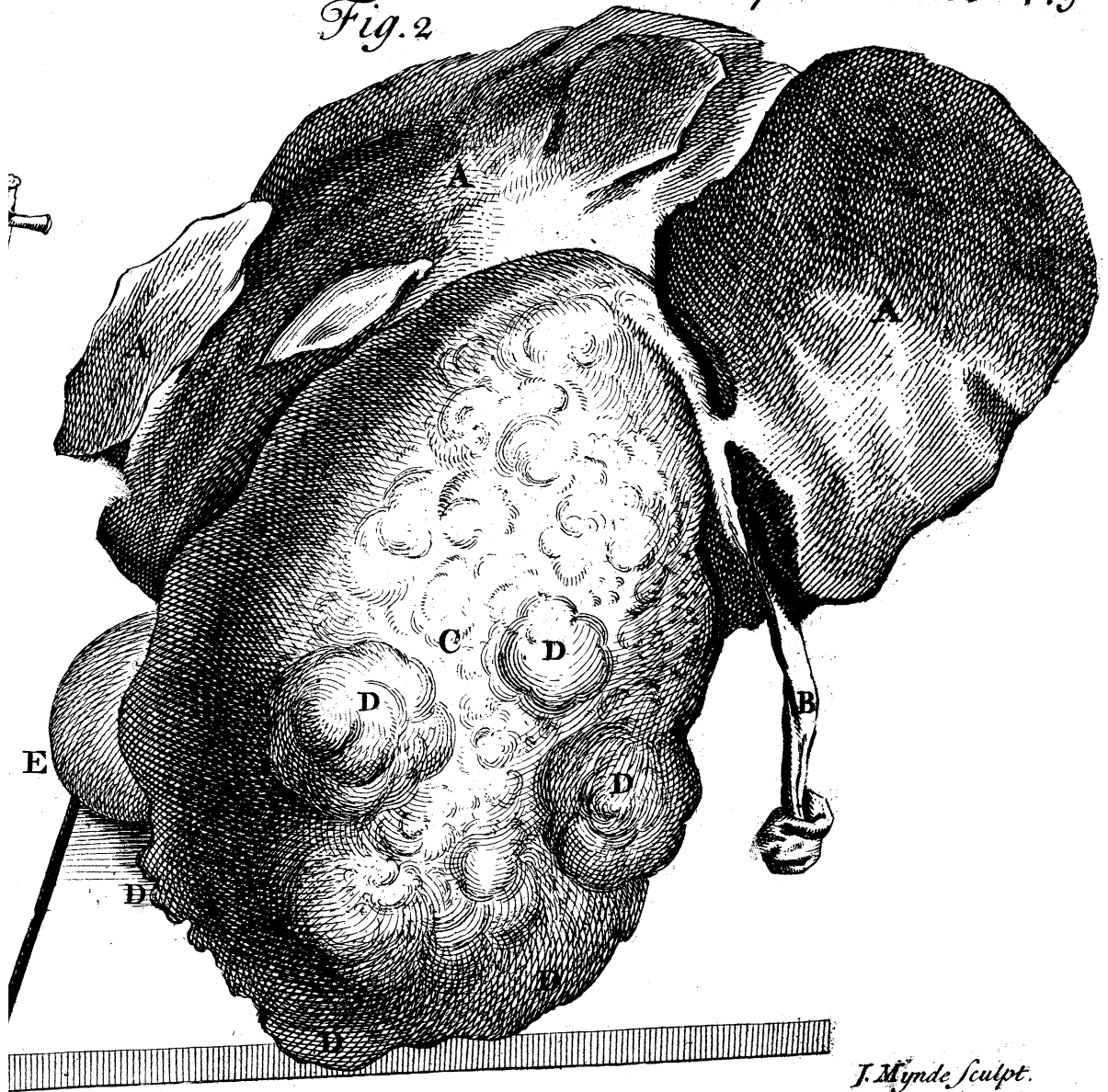


Fig. 2



J. Mynde sculpt.

Fig. 1.

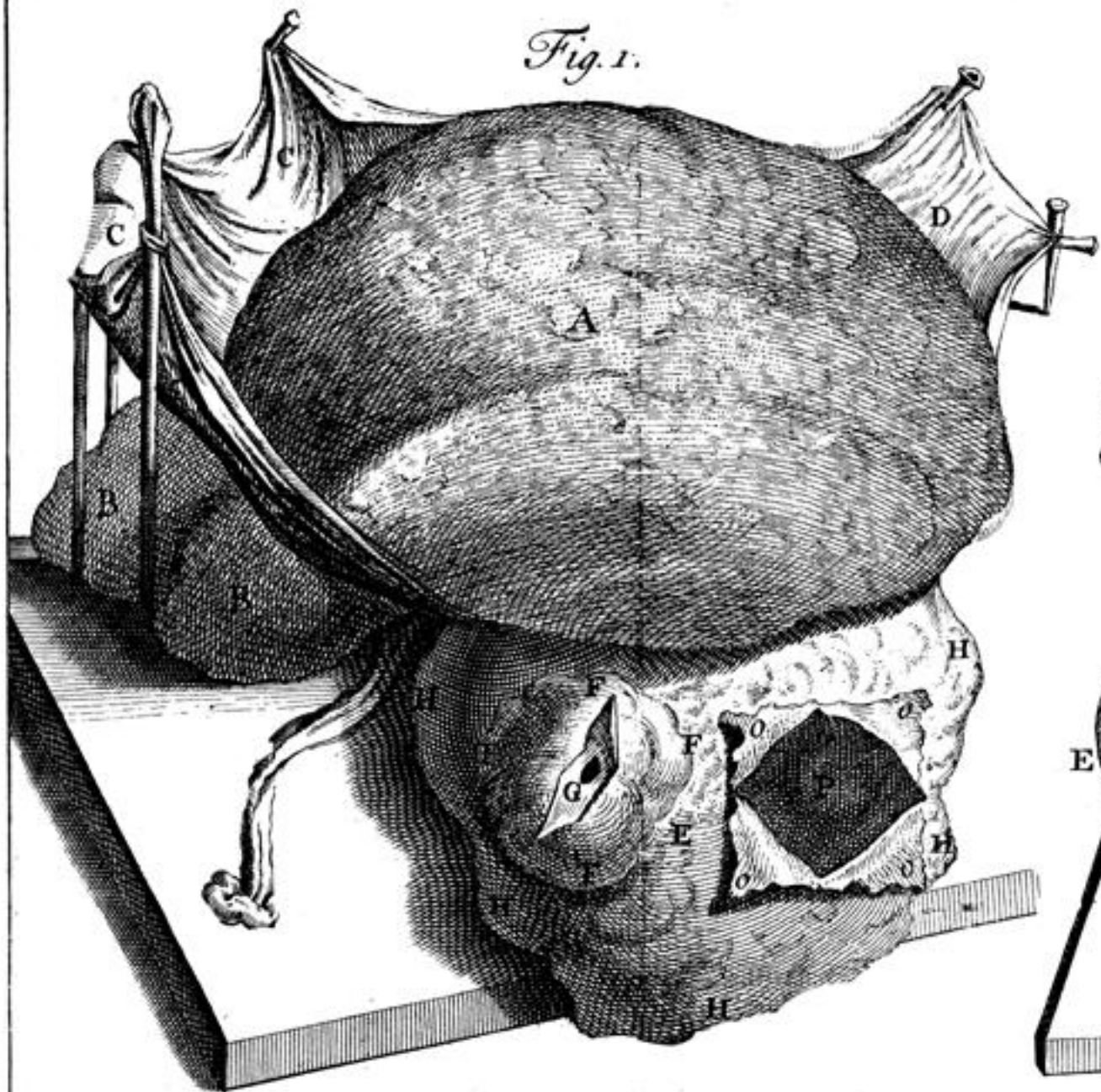
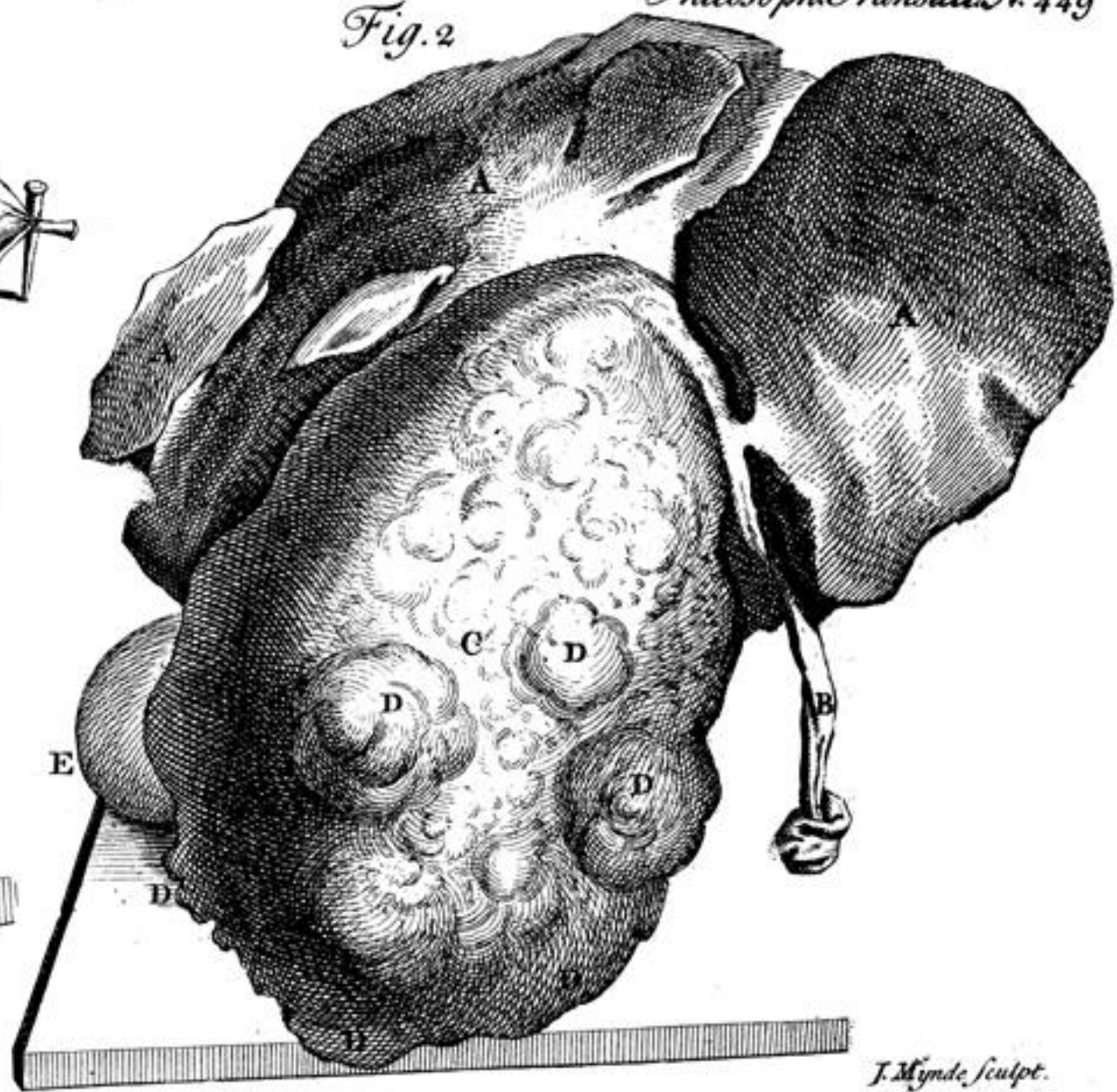


Fig. 2.



J. Mynde. sculpt.