Animadversions on a late pompous book, intituled, Osteographia; or, The anatomy of the bones by William Cheselden ... / [John Douglas].

Contributors

Douglas, John, approximately 1680-1743.

Publication/Creation

London: [The author], 1735.

Persistent URL

https://wellcomecollection.org/works/fes3n9rp

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org 20820/1 41001

ANIMADVERSIONS

ON

A late Pompous Book,

INTITULED,

OSTEOGRAPHIA:

OR,

The Anatomy of the Bones.

By WILLIAM CHESELDEN Efq;

Surgeon to HER MAJESTY.

F. R. S.

Surgeon to St. Thomas's Hospital;

And Member of the

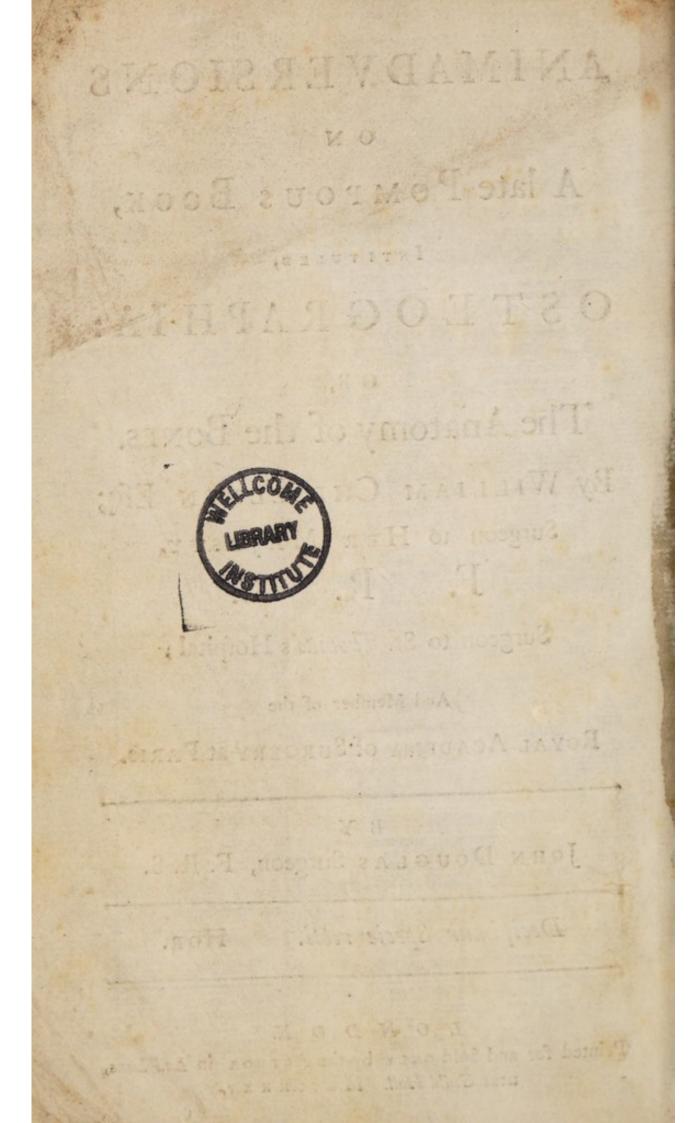
ROYAL ACADEMY of SURGERY at PARIS.

BY

JOHN DOUGLAS Surgeon, F. R. S.

Decipimur Specie recti. Hor.

LONDON. Printed for and Sold ONLY by the AUTHOR in Lad-Lane, near Guild-Hall. M.DCC.XXXV.





ANIMADVERSIONS

ON

Mr. Cheselden's Bones, &c.



HE chief end of Offeography, as I take it, is to enable practitioners to cure the difeases to which the bones are liable, with more ease, dexterity, and certainty, than otherwise they could be capable of. But how little Mr. Cheselden has had this

truly laudable design in view, through the whole of this large and most expensive work, will appear to the INCORRUPT!

JUDICES from the following observations.

In the title he calls his book, "The Anatomy of the Bones:"
but whether of the bones of a Man, a Man-Tyger, a Bat, a
Rat, or what else, he leaves the reader to guess.

It consists of a Preface to the reader, an Introduction and eight little Chapters: (above three parts of which had been published four times before in 8vo.) They may be all read in less than two hours, yet the subscription price was four guineas; and those which were not subscribed for, viz. above three parts of the whole, as I have been informed, are not to be sold (as our author assures us) under six guineas, and will cost a guinea binding, which is in all Seven Guineas for a book on the Bones.

Quere 1. How much this work would have cost, if, according to his first design *, he had gone through, in the same pompous manner (i.e. every part being as big as the life, which would have come within a large solio leaf, and the Frontice-pieces, Head-pieces, and Tail-pieces, taken from the muscles, viscera, &c. of other animals) with the Myo-logy, Entero-logy, Angeio-logy, Neuro-logy, Adeno-logy, &c.? I guess, not less than Fifty Guineas; and if so, pray who would have bought it? A. Very sew, if any. Therefore he must have given them away, as, he says, he has done above twenty per Cent. of the real cost of the present work †.

Quere 2. When might we have expected this great work, in case he had gone on with that noble design? A. If we may judge of this by the time he was about the bones, we could not with any reason have expected it in less than Half a Century: for he was seven years a finishing them, after they were Nearly sinished; as appears by his proposals, dated January 9, 1726-7, and his presace ‡: yet it was not published 'till March 1734.

Quare 3. How long must this work have been begun, that was Seven Years a finishing, after being Nearly finished?

" To the READER."

Parag. 1. lin. 1. " Every bone in the human body being here delineated, as large as the life."

Notwithstanding this solemn declaration at first setting out, yet I don't find he has so much as mentioned, much less de-

^{*} PREFACE, parag. last. "When I began this work I in-"tended a whole system of anatomy, adorned with the compara-"tive, in three volumes, &c."

[†] PREFACE, parag. 6. "This volume is made above twenty per Cent. (which I always intended) better than the subscription proposals."

[‡] PREFACE, parag. 6. "This volume being nearly finished, it was offered by subscription (without solicitations) at four guineas."

lineated, the Os Hyoides, (a bone he has both described and delineated, tho' after a very paultry manner in sour Svo editions, viz. in 1713, 1722, 1726, and 1730. a bone of as much consequence to health, nay life itself, as any in the body) but two of the Ossa Sesamoidea, and none of the Triticea *. Is not this a fine Exordium? In one of his anatomical syllabus's he places the Os Hyoides after the bones of the Toes; in his four Svo editions, he places it after the bones of the Trunk, and gives the following reason for it, viz.

" I chuse to mention it in this place, because I know none more proper among the bones."

Tho' He did not know a More proper place for it, yet if he had consulted almost any other author †, they would have shewn him a More proper place, viz. immediately after the bones of the head, where they have placed it, because it's always attached by two ligaments to the Processus Styloides of the temporal bones. Pray by what means is the Os Hyoides attached to the Toes, Os Sacrum, or Coccigis? Might he not with as much reason, have described it amongst the small bones of the Ear? But to make amends for omitting the Os Hyoides, &c. he delineates, tab. 1. fig. 5. a bone taken out of a man's heart, a bone which does not naturally belong to the human body, but is a disease; yea, a disease which very sew are ever troubled with; old-age being its principal cause: nay, it's a disease which neither Mr. Cheselden, nor his most excellent anatomist, could ever once cure.

Quare. Whether the Os Hyoides, or the Bone in a man's heart, are of most consequence to be delineated and well deficibed to practitioners?

Parag. 1. "I thought it useless to make long descriptions, one view of Such prints shewing more than the fullest and best description can possibly do; and for this reason in the

^{*} Mr. Belchier, however, in his account of this work, is so far from observing this Blunder, that he afferts the same thing. Phil. Transactions, No 430. 1734.

[†] Columbus, Heifter, &c.

" feveral chapters, the Mechanical Contrivances of the Bones are rather treated of than their shapes."

In chapter 6. parag. last, he says, "This work being principally design'd for the description of the bones."

Thus you fee in one place, he afferts, that the principal defign of his work was for the description of the bones; in another, that in the several chapters, the mechanical contrivances of the bones are rather treated of than their shapes, i. e. their descriptions.

Quere. Are these two designs consistent with one another? If his principal design was the description of the bones, how can full and exact descriptions be useless? Is it not the only way to answer his principal and main design? To which he answereth and sayeth, that one view of Such prints shews more than the fullest and best descriptions can possibly do. If so, he had no occasion to have given us any descriptions at all. But in my opinion, the best prints will be of little use to most readers, unless they are not only well contrived, but also fully, correctly, and judiciously explained, as many of these are not.

If his principal design was to describe the mechanical contrivances of the bones; why did he not keep to his text? and demonstrate that it was not only the most rational, but also the most instructive way of treating them, and explaining their diseases and cures?

"The Introduction." alias of the bones in general.

This is one of the longest chapters in this work, viz. two leaves. The best way to make it appear a florid, meaning-less harangue, and that all that's useful in it might be written in six lines, would be to quote it at length; but that being more cost than worship, I shall refer the curious to the original.

" CHAPTER I.

" Sutures and bones of the Cranium."

In the first six paragraphs, he gives a short and pertinent account of the sutures, and in the seventh draws several good practical deductions from thence. Oh! had he done so through the whole!

In his last three 8vo editions, he begins this very seventh paragraph, as follows. "The scull being Thus (i.e. as he has just described the sutures) divided into many bones, &c. But in this large volume, he says, "The scull being divided into many bones, &c.

Quere. Whether this can be called improving backwards or forwards?

Parag. 9. Is a tedious and _____ description of the Os Frontis, in the end of which he says, "These sinus's, and "the spine in this bone, make it very dangerous, if not im-"practicable, to apply a trephine on the middle and lower part of the forehead."

This is certainly true, and would have been a very useful observation, if he had explained how and after what manner they make it dangerous to trepan on the middle or lower part of the forehead; instead of barely afferting it.

Parag. 11. He spends a whole page in describing the Os Sphenoides, which is of no use in practice.

Parag. 12 and 13. He describes the situation and processes of the Os Temporis, viz. Mamillaris, Jugalis, and Styloides (parts necessary to be well understood.) Then he takes notice of some holes and processes in both inside and outside, which are of no use in practice; but does not so much as mention the Meatus Auditorius, situation of the Membrana Tympani, the Ridge on which it is bent, the Four small bones, Barell, Eustachian tube, &c. parts which ought to be well understood by every practitioner.

Parag. 16. "A girl nine years of age, had a fracture of the scull, which extended across the Os Bregmatis, from

the fagittal future to the temporal bone, part of the bone was depressed, and a great deal of blood extravasated. I made two perforations with the trephine, close to the fracture, that I might raise it up steadily through both, and have more room for the extravasated blood to discharge: and ten days after the former operation, the Apertures being almost filled up with the Callous, I was obliged to make another perforation to discharge the matter more freely."

Mr. CHESELDEN has published this case in his three last 8vo editions. In all which he says,

"But, nevertheless, ten days after the former operation, I was obliged to make another perforation, to discharge the matter more freely."

Very good! But in this folio edition (twelve years after his first account of it) he adds a new clause, not mentioned before, and gives it as a reason for his making a third persoration, viz.

"The Apertures being almost filled up with the Callous." But pray, how is it possible the apertures could be filled up with a callus in ten days? Don't every body know, who ever saw the scull perforated, that the edges of these holes must exsoliate before ever the callus can shoot out? and also that an exsoliation cannot be expected, in the most healthy constitution, under three times ten days, and often longer? If such a speedy exsoliation had happened in a popish country, it would certainly have been deemed a miracle performed by some w— or r— of a saint, for nature could not do it.

" CHAPTER II.

" Of the bones of the face," &c.

Parag. 1. "Offa Nasi, make the upper part of the nose; they form that kind of Arch which is fittest to sustain such injuries as the nose is most exposed to."

Pray what kind of an arch is that? A. That fort of an arch which nature thought most proper. Great news indeed!

Parag. 5. "Maxilla Superior, is always described single, "tho' it is manifestly divided by a suture, which is scarce ever obliterated."

This affertion would make any man believe, that Mr. CHESELDEN had never read any books on the bones, but his own; for the first three books I turn'd to, to examine the truth of it, viz. Heister, Drake, and Monro, all describe it as two bones. With what grace then, can he affert that its always described single? and continue it through five different editions: nay, its so far from being always described single, as he afferts, that I don't remember I ever met with one author, ignorant enough to do so.

Quere. Whether this smells most of H——n labour, or supine negligence?

Parag. 5. "Between the posterior grinding teeth and the orbits of the eyes are two great sinus's, called Antra Maxillæ Superioris, which open into the upper part of the nose. Part of the sides of these cavities, that lie next the nose, are only membranes which make the cavities like drums, perhaps to give a grave sound to the voice when we let part of it through the nose; but brutes not needing such variety of sounds, have these cavities open to the nose, and filled with lamellæ, which are covered with membranes, in which the olfactory nerves terminate, for a more exquisite sense of smelling than is ne-

What a digression is here! from a description of the Antra of the jaw, to the sounds of the voice in men, and the sense of smelling in brutes? What connexion, what analogy, what relation is there between these subjects and a description of the human bones and the diseases to which they are liable? Many other places might be produced, where he rambles from his subject, without any proper or useful occasion, and jumbles together the Sceletons of Quadrupeds, Fowls, Fishes, Insects, &c. and then very gravely tells us, that if they had not All been contrived by nature, just as they are, they would not have answered their several purposes so well. Is there a man living, who do's not know that?

But to return to the Antra: He says, "Imposhumations fometimes happen in these cavities: the signs of this dis-

"ease are great pain about the part, matter in the nose on the side diseased, stinking breath and rotten teeth. Mr. "Cowper first described this case, and the cure; which is performed by drawing out the last tooth but one, or two, or more, if rotten, (or not rotten) and through their sockets making a perforation into the Antrum; or if drawing a tooth makes a perforation, which sometimes happens, and perhaps gave the first hint of this cure, then that opening must be enlarged, if it is not sufficient to discharge the matter.

Dr. HIGHMORE* mentions a Lady, who after having a tooth drawn, took her filver bodkin and thrust it into the socket, the tooth was drawn from; but was exceedingly frighted to find it pass, as it did, almost to her eyes: she afterwards took a feather, stript off its plumes, and thrust it up an hand's breadth, by which (imagining it had gone into her very brain) she was so terrify'd, that she ran immediately to confult the Dr. &c.

Mr. Cowper himself says, it was merely the structure of the parts which led him to this operation.

Whence it is evident, that the hole made by drawing of a tooth, gave no hint of this operation to Dr. HIGHMORE, &coand that Mr. Cowper did not take the hint from the drawing of a tooth, as Mr. Cheselden —— infinuates; but from His thorough knowledge of the structure of the parts, and the use to be made of them in practice.

Parag. 9. "Maxilla inferior, is articulated with loofe cartilages to the temporal bones."

The Maxilla Inferior is not articulated to the Os Temporis with loofe cartilages, but with strong bursal ligaments, and two intervening cartilages; as will appear to any one who pleases to consult nature.

^{*} Disquisitio Anatom. lib. 3.

" CHAPTER III. " Of the bones of the Trunk"

He spends near three pages in describing the mechanism of the Vertebræ mechanically; the purport of all which, is, that if they had not been contrived just as they are, they would not have been of so much use as they are at present. A notable discovery indeed!

Parag. 11. "In two children, which I have diffected, I found the ribs broke inwards, and on the outside a very plain print of a thumb and fingers, which had been done by their nurses hoisting them up on one hand, taking hold of their breasts, and being often repeated, had broke the ribs inwards like a green stick, without separating the broken ends of them. I have also very frequently seen the shape of childrens breasts quite spoil'd by such tricks, which have occasioned weakness of body, crookedness, and other diseases."

This is a most useful observation; an observation of far more consequence to mankind than all the rest of the book; an observation which shews what a mean, despicable, nay, contemptible sigure, all his jargonico-mechanical reasonings on the shapes and mechanism of the bones, or all the specious, sine-drawn, slorid Theories and Hypotheses, which have hitherto been spun, on digestion, nutrition, generation, muscular motion, the animal spirits, &c. make, when compared with one good practical observation, the use of Which appears at sight to every reader, and the use of Those to none but their hatchers.

" CHAPTER IV.

" Bones of the upper limb."

Parag. 1. "Clavicula is connected at one end to the Sternum with a loofe cartilage,"

The Clavicula is attached to the Sternum, by a strong bursal ligament, but is hindered from touching it by a thick glib intervening cartilage, as in the joints of the lower jaw. Whence it is evident, that the Clavicula is not connected to the Sternum by a loose cartilage, but by a strong ligament.

- "And the other to the Processus Acromion of the Scapula."
 But whether connected also by a loose cartilage, longitudinal or burfal ligaments, the Herculean labourer sayeth not.
- "It's chief use is to keep the Scapula a sufficient distance from the breast, by which means the shoulders are hindered
- " from coming near together, as they do in those Quadru-
- " peds, who use their fore Limbs only to walk on, and not

" as Men do their Hands."

The chief use of the Clavicula is undoubtedly to keep the Scapula at an equal and sufficient distance from the Sternum, which contributes very much to the strength, beauty, and agility of the body. But when the Claviculæ have been broke, they are seldom so well reduced and kept in their places, but the ends ride a little when cured; whence the Scapula comes nearer the Sternum than before, by which means, the strength, beauty, and agility of the body are impaired.

But who ever faw a quadruped who used it's fore limbs Only to walk on? or, that walked Only on it's fore limbs to fave it's hind limbs?

Who ever faw a quadruped who used, or could use, it's fore limbs as men do their hands?

If our y—g H—s had given us the Sceletons of these two monsters, they would have pleased more, than all the frightful creatures he has pick'd up, and at so vast and needless an expence engrav'd.

Parag. 2. Scapula is fixed to the Sternum by the Clavicula."

I have already, pag. 9. proved that the Clavicula do's not touch the Sternum at all: in what sense then can it be said to fix the Scapula to the Sternum?

Might he not as well have faid, it fixed the Scapula to the Teeth?

Parag. Iast. " Carpus is composed of eight bones of very irregular forms, undoubtedly the properest that can be;

yet why in these forms, rather than any other, no one has been able to shew."

Here our author is forced to own, that his mechanicks are at a stand: for he, nor no body else, can account for the mechanical contrivance of the bones of the Carpus. A great concession indeed! But who ever doubted that the forms of all the bones, as well as those of the Carpus, were the properest that can be? Who, besides our author, ever pretended to account for nature's particular views in making the bones of this or that form? It is the business of an Anatomist, in my opinion, to describe to his hearers or readers, what forms nature has given to the parts, which compose the human body, and their obvious uses; but they who suppose Anatomists can dive so far into the secrets of nature, as also to account for their being made of This or That figure, colour, substance, &c. rather than any other, must be satisfied with very weak, idle, uncertain, nay often very impertinent conjectures, instead of folid reasons and clear demonstrations.

> Quicunque Vult! Si Populus Vult!

« CHAPTER V.

" Bones of the lower limb."

Parag. 2. "Patella is seated at the fore part of the knee; it's first appearance is in the center of the tendon, through which it soon extends, until the tendinous sibres are lost, and appear to be converted into bone; however, when this bone is broke, the original tendinous sibres seem to prevail, seeing the broken parts, unlike all other bones when fractured, unite with a tendon-like substance, which is rarely converted into a bone, and especially in those cases, where the joint recovers with most motion; it's use is to secure the extensors of the Tibia, lest passing over the joint, they might be too much exposed to external injuries; it also encreases the advantage of removing the common Axis of the extensors of the Tibia farther from the center of motion, and is a most convenient medium for those muscles to unite in, to perform one common action."

Pray who can cure a fracture of the Patella the better for reading this jargonico-mechanical account of it?

The observations I have made on this paragraph are so very long, that they would not suit with the intended brevity of these remarks, but they, with many others, here omitted, shall be fully treated of in my own work.*

Parag. 4. "The Fibula being fo small, would have been not strong enough, if it had been made for more motion."

If I had been to use these words, I should have said, Would not have been strong enough: but if his way of placing them is good English, I'm sure it is bad Scotch.

"It would not have been strong enough, if it had been made for more motion." But as it is made for no motion, it is full strong enough to answer all the ends it was made for. He might as well have said, if it had been to support the whole weight of the body, as the Tibia does, it would not have been strong enough: Or, if it had been only to have supported the weight of a pigeon, it would have been too strong. But there's no end of If's & And's, why then won't he be content with the parts as nature has made them?

Parag. 4. " It is doubtful to me, whether or not this bone, contributes to the support of the body?"

If any person I had no knowledge of, had afferted this, I should have concluded that he had never diffected the leg, nor ever seen a fracture of the Fibula, when the Tibia was whole. If he had diffected those parts, he must have perceived that the thigh bone is so far from bearing upon the Fibula, that it do's not so much as touch it; but bears wholly on the Tibia.

And if he had ever feen the Fibula broke, and the Tibia whole, he might have perceived that the whole weight of the body was supported just as before.

How then is it possible for the Fibula to bear any part in supporting the body? Where is there any room for doubt-

ing?

But if he had been at the pains to turn back to his first account of the bones published in 1713, he would have had his doubt solved; for there, pag. 22. he sayeth, "Fibula has no share in supporting the body, &c." In his second edition 1722, &c. he says, "The upper end of the Fibula is articulated to the outside of the Tibia, an inch below it's joint." How then is it possible for the thigh bone to bear upon't?

In pag. 7. I accused him of reading no books on the bones but his own; but from these passages I think it is evident, he reads his Own as little as other People's works.

" CHAPTER VI.

" Cartilages, Ligaments, &c."

He has cram'd this chapter so full of mechanicks, that there's hardly room for any anatomy.

Parag. 10. "From the edge of the Ilium to that of the Os Pubis, runs a ligament which is contiguous to, and appears to be a part of the tendons of the muscles of the Abdomen; it's use is to cover the iliack vessels as they descend to the thigh: Under this ligament, together with the vessels, I have often seen a rupture of matter, and, I think, sometimes of the gut, from the Abdomen into the anterior part of the thigh, immediately below the groin; however, I dare affirm this to be a possible case."

From the edge of the Ilium to that of the Os Pubis, runs a ligament which is contiguous to, and appears to be a part of, the tendons of the muscles of the Abdomen."

This is also called Ligamentum Paupertii, Fallopii, Ilii & Pubis, &c. But Mr. Cowper, Heister, Morgagnius, &c. say it is not a ligament, but only the tendinous border of the oblique muscles; and Mr. Cheselden (to be sure to be on the right side) first calls it a ligament, and then a tendon. But call it what you please, it certainly answers all the intents and purposes of a strong ligament.

" It's use is to cover the iliack vessels as they descend to the thigh."

Pray what occasion was there for a ligament several inches long to cover the Iliack Vessels, which all lie in less than the space of one inch? Where is the mechanical contrivance here? But if Mr. Cheselden had spent as much time in considering the situation and mechanism of this ligament, and the strong Fascia which braces it down to the Thigh, &c. as he did in contemplating the unaccountable sigures of the bones of the Carpus before mentioned, he would have discovered, that it was not only of use to cover the Iliack Vessels, but was also the greatest preservative in nature against both Inguinal and Femoral Hernia's, &c. such troublesome, tormenting, nay, dangerous diseases.

"Under this ligament, I have often seen a rupture of

A Rupture of Matter! this I take to be a Rupture of Mr. Cheselden's own invention: because I never met with it amongst all the ridiculous Names of Hernia's mentioned by Authors, e. g. Hernia Aquosa, Carnosa, Ventosa, Humoralis, &c.

A few years ago I had a patient, who shew'd me a large tumour on the inside of his Thigh, about four inches below this ligament. I found matter fluctuate in it; but the largeness of the swelling, and the strong impulse it made against my hand, when I desired him to cough, made me suspect, that the gut also made part of the tumour: therefore, next day I consulted the late Learned and Experienced Surgeon Mr. Edward Green; who after a very strict examination, could not clearly determine whether the gut was there or no. However, we met again two days after, and opened it; upon which there issued above a quart of laudable well-digested Pus, and neither gut nor caul appeared, but an infathomable Sinus which ran under the forementioned ligament.

Quere. Whether according to Mr. GREEN, &c. this disease ought to be called an Imposthume, (which began

within the cavity, and the matter afterwards infinuated itself under that ligament, and appeared on the fore part of the Thigh) or a Rupture of Matter, according to Mr. CHE-SELDEN?

"And, I think, sometimes of the gut, from the Abdomen into the fore part of the thigh, immediately below
the groin; however, I dare affirm this to be a possible
case."

So you see Mr. CHESELDEN says, he thinks he has seen the gut pass under this ligament, into the anterior part of the Thigh: but he's not fure of it, nevertheless, he dares affirm (a bold Briton indeed!) that tho' he has never feen it, yet it is possible such a case may happen. I profess I have fuch an opinion of Mr. Cheselden, that if any person of the best credit had told me he had heard him express himfelf in the manner he has now given under his hand, I could not have believed it; especially since this very case has been fo lately and fo fully treated of by Monf. GARENGEOT *, and the late learned Dr. FRIEND; † of both which accounts I shall make a short abstract, and then leave the reader in a fit of amazement, that this most remarkable case, which was the Topick of all discourse, seven or eight years before the publication of this great work, should never have been minded, or examined into by Mr. CHESELDEN.

Pray was not this dangerous, this uncommon case, of much more consequence to be enquired after, than the Sceletons of a Buck, or a Bear; a Hog, or a Dog; a Cat, or a Rat; a Sparrow, or a Bat, &c.?

Mr. Garengeor gives us several instances, not only of this case, but of it's being cured by the operation.

Hift. 1. "In May 1718. I faw a woman, on whom the operation had been made for a Femoral Hernia, by Mr.

^{*} Traite des operations de Chirurgie, 1723, &c.

[†] History of Physick, 1725;

"PETIT, and tho' advanced in years, she was cured in eighteen days, without any accident."

Hift. 2. " A Button-maker's Wife had carried about a " Femoral Hernia, by the affiftance of a truss, about seven " years; but at last, the Pad not pressing precisely on the opening, suffered part of the gut to slip down; after which she was every now and then troubled with pains in her stomach, colick, vomitings, &c. In February 1728, " the strangulation encreased so considerably, that she was taken all of a sudden with the Hick-up, Vomiting, &c. upon which He was fent for to confult with three others, who all concluded on the operation; which He performed thus: He made a large incision on the skin, then divided "the Ligamentum Transversum, or Paupertii, &c. and " about two inches of the oblique and transverse muscles, then endeavoured to replace the gut, but found it adhere " fo close to the Iliack Vessels, by being so long down &c, "that he could not separate them, without either opening "the gut, or the artery: therefore was obliged to dress her " up, and she dy'd next night." Yet notwithstanding the bad fuccefs, which was not his fault, you fee he gives a fair and honest account of the case. Would to God! our Hospital Surgeons, nay, and every Private Surgeon, were obliged by a law to give the publick a fair and just account of all the operations they make, be the fuccess good or bad.

Hist. 3. "A woman about fixty four, had been troubled with a Femoral Hernia above twenty years, which she used to put up with her hands, and kept it so with a truss; but at last, neglecting one morning to put on her truss, she made a salse step, or stumbled, which made her Hernia burst out on a sudden: she sent immediately for a surgeon, who endeavoured to replace it, but to no purpose. He bled her, apply'd a pultise, &c. but these remedies having no essect, the Hick-up, and Vomiting soon seiz'd her, so he was sent for again. Then, considering her great age and violent symptoms, he thought if he attempted to cut her, she might die in his hands, therefore advised them to let her die in peace. Then she was confessed, and exhorted to die quietly, nevertheless, she held out much

would have farther advice; and accordingly sent for Mr. GARENGEOT, who opened the Teguments as before, then the Bag, which contain'd the Gut, (which, notwithstanding it had been down so long, and made the poor woman suffer so much, appeared perfectly sound) then he cut the ligament, and part of the muscles, and the Gut return'd, as it were, of itself; and she was cured in four months, and lived in perfect health some years afterwards."

He that bath Ears to hear, let him hear. He that bath Eyes to see, let him read.

The late Eminent Dr. FREIND, foon afterwards, treated this Subject very learnedly, but (as he himself says of others*) "without knowing much of the subject he wrote upon, or indeed, of what he wrote upon the subject."

* "Accordingly all Anatomists, as well as Surgeons, have agreed, that in a Bubonocele the Gut comes down thro' the Rings or Perforations of the Abdominal Muscles. But tho' no doubt this be often the case, yet perhaps, if we examine the matter a little more nicely, we shall find, that the Gut may take another course, bitherto unobserv'd, to produce a Bubonocele."

Tho' the generally received opinion of the Surgeons is not always true; yet, daily experience proves it is infallibly so in the present case, where they agree, that in a Bubonecele the Gut, &c. comes down through the Rings or Perforations of the Abdominal Muscles, and can come no other way, to produce a Bubonocele. But without being over nice in our examination, we may easily perceive that the Gut takes frequently another course, viz. sometimes through the Navel, sometimes through other parts of the Abdomen, and sometimes it falls down upon the Thigh, as the Dr. would have it: but when it takes any of these routs, it cannot form a Bubonocele, as the Dr. imagines, but an Umbilical, Ventral, or Femoral Hernia. Tho' no man understood the Greek language better than He, and no man spent more time and labour in reading the ancient Greek writers of Surgery:

yet, it is evident from the foregoing passage, that he was so far from being master of the subject he undertook to write upon, that he even misapprehends the meaning of the common Term of Art he makes use of, viz. Bubonocele, (a Term every little barber in France understands) which, according to all the Greek writers, he study'd, and recommended so much, signifies only, a preternatural Tumour in the Groin, formed by the descent of the Intestin, &c. thro' the Rings of the Abdominal Muscles: as the very derivation of the word imports, viz. from below Inguen, and khan Tumor, i. e. a tumour in the Groin. With what propriety then, can the Dr. call a tumour on the Thigh a Bubonocele?

"The cavity in the Thigh between the Muscles Pectinæus and Sartorius, where the Crural Vessels descend, is very remarkable: and the Tendons of the Abdominal Muscles lie so loose, that there's nothing but a little sat, and some membranous Fibres, which separate it from the Abdomen: so that we see, how easy it is for the Peritonæum to be forced down by any pressure, thro' this interstice into the cavity we have described."

This paragraph shews, that the Dr. was a perfect stranger to the real structure of these parts, and builds only upon groundless suppositions.

"* And if we compare the accounts of those very authors, who think that a Bubonocele is always formed in the Processes of the Peritonæum, we shall find them often agree to this place only."

It is not what Authors think, or are for, but what really is, that's to be minded, for nature cannot be altered by what they think or are for; e.g. All Authors, except the Dr. are agreed, that a Bubonocele is always formed in the Processes that contain the spermatick vessels, which is found by daily experience to be true; but whether they proceed from the Peritonæum as the Dr. asserts, or not, is very little to the present purpose. Yet the Dr. thinks, and endeavours by wresting their meaning to make us think, that they have often described His cavity on the Thigh (tho' there's no such

cavity in nature) instead of the Groin. But supposing His cavity to have a being, which it has not, a Femoral Hernia, and not a Bubonocele would be produced.

He afterwards tortures and racks some dark passages in Celsus, Aquapendente, and Hildanus, in order to bring them over to his side, but without success. Then he takes as much pains to darken the plain words of Barbette, who has describ'd the Hernia Femoralis, most accurately: doubtless because he takes away the Honour, the Dr. pretends to, of being the first, who takes notice of this new Hernia.

"And BARBETTE seems to imply this way, tho' he has express'd it with the same obscurity as other writers do, when he says, Experimur etiam processum Peritonæi ita posse disrumpi, ut intestina non in Scrotum, sed inter cutim & Musculos, versus semur, sese urgeant.— Where, by the words Processum Peritonæi, If he means the Productions, which arise from the vaginal coat, we have seen that the Gut cannot get into the situation he describes."

In the preface to the reader, he fays, "The sheets, which treat of an Inguinal Hernia, were printed off, before I had seen Mr. Garengeor's Surgery; who is the only Author I know of, that has taken notice of a Crural Rupture: however, the substance of what is here said upon that subject, was explained in a publick auditory sourteen years ago."

Thus, by this fetch, fourteen years backwards, viz. in 1709. when he was lecturer at Surgeons Hall, or the College of Physicians, he cuts off Mr. Garengeot's title, to the discovery of this new Hernia. But Barbette wrote long before the time the Dr. setts; therefore, to cut off his title also, he endeavours to persuade us, that he expresses himself with great obscurity, &c. When he says, "Barbette seems to imply this way," He not only seems to imply this way, but actually does imply this way, and can imply no other; as will fully appear below.

"Tho" he has expressed it with the same obscurity as other authors do."

He is so far, in my opinion, from being so obscure, as the authors before him, that he has given a fuller and clearer description of this disease in three lines, than the Dr. has done in twice three pages: nay, they can hardly be altered for the better. His words are,

"But we find by experience, that the process of the Peritonzum, may be broke or dilated in such a manner, that
the intestines will not be forced down into the Scrotum,
but between the muscles and skin upon the Thigh."

But the Dr. to make nonsense of this excellent description, says, *" Where, by the words Processum Peritonzi, if he means the productions which arise from the Vaginal Coat, the Gut cannot get into the situation he describes."

What the Dr. means by the productions which arife from the Vaginal Coat (I profess I don't understand) but it's evident, that BARBETTE does not mean the Natural Processes, which contain the spermatick vessels, but the Preternatural Process the Peritonæum always makes in Hernia's of the Navel, fides of the Belly, or when they fall down upon the Thigh: and that these words the Dr. carps at, and would make a handle of, to destroy the whole, are more proper to express what the author defign'd, than any he could have put in their room : whence it is evident, that the Hernia Femoralis was first clearly described by BARBETTE: and that Dr. FREIND either did not, or would not understand him. Then, after all this wrangling, he gives only one instance of this case (tho' you see Mr. GARENGEOT has given several, both of the Case and Cure) viz. "The late Mr. SERIEANT BARNARD was concerned in a case, where the Gut reached under the skin down to the middle of the THIGH."

Pay did Mr. SERJEANT BARNARD call this case a Bubolocele? as the Dr. would have him, or did he call it a Fenoral Hernia?

^{*} History of Physick.

Pray what did Mr. SERJEANT BARNARD, &c. do in this case? did they cure it radically (like Mr. Petit, and Mr. Garengeot) by the operation, or palliatively by a truss? A. These are trisles, only fit for dull practitioners to enquire after, but below the dignity of the Medici Honorati & Nobiles! as Dr. Freind affects to call them.

A little lower, he says, "To form a right notion of the structure of these parts, one ought to see the curious preparations of that diligent and accurate Anatomist Dr.
Douglas."

Had Dr. Freind view'd these truly excellent and MATCH-LESS collection of USEFULL preparations with an eye of a practitioner, he never would have afferted, that a Bubonocele and a Hernia Femoralis were synonimous terms; that there was naturally a remarkable cavity in the Thigh, between the Pectinæus and Sartorius; that there is nothing but a little sat, and some membranous fibres, which separate His imaginary cavity from the Abdomen; that the Ligamentum Rotundum Uteri, is strongly inserted into the Os Pubis; * &c. &c.

But here I might be asked, how comes it, that the ancient Greek and Roman Physicians wrote so intelligeably, and pointedly on Surgery, and one of the top Modern physicians, so indifferently? A. The ancient physicians practiced Surgery, (and esteemed it the Most Honourable, as well as the Most Useful part of their Profession;) but most of the Moderns only read Surgery: therefore, cannot possibly understand it, so as to write pertinently about it, as is justly observed by the most eminent of all the chirurgical writers, Rosset, the Exmutis duntaxat magistris, Nemo Auriga, Nauta, Imperator, Chirurgus, Ora-

Quam quisque novit Artem-

^{*} Hiftory of Phyfick.

[†] Nil majus generatur ipso Nec viget quicquam simile!

" CHAPTER VII. " Of diseased bones."

Parag. 1. "It is not the defign of this chapter to enter minutely into all the diseases of the bones mentioned by authors, but in a general manner so far only as relates to their cure."

Mr. Cheselden is fo far from entering minutely, in this chapter, into all the diseases of the bones, and what relates to their cure, that he mentions none but the Caries; which he says, is sometimes cured by an exsoliation, sometimes by an Anchylosis, (a disease almost as bad) and sometimes by no means, as in all these rotten bones he has made prints of.*

Nevertheless, in the last line, except two, of this chapter, he says, "These are the most common diseases of the bones."

Quere. Are all the diseases of the bones then to be reduced to a Caries? Are Fractures, Luxations, Rickets, Nodes, &c. such minute and trisling diseases, that they were not worth his mentioning, much less explaining, even in a general manner, what relates to their cure, as he promises above, in a set discourse on the diseases of the bones? and in such a large, pompous, and expensive work?

Quare. Would not His book have been vastly more valuable, if in this chapter, He had given us a short and clear account, how to prevent the shortening or riding of the Clavicula, Thigh, Neck of the Thigh-Bone, &c. when broke; the pain, satigue and lameness, which too often attend, or follow the fractures of the Patella, Os Calcis, Olecranon, Acromion, &c. the difficulties we often meet with, in reducing luxations, the deformity often caused by the Rickets, &c. which have not hitherto been sufficiently explained: for all which omissions, he makes a very remarkable and uncommon excuse, viz. "Others (i. e. Other Diseases) "would have been treated of more largely in this chapter, "if there had been room."

Brevis esse laboro, Obscurus fio! Hor.

^{*} Tab. 41. 42. 46. 47. 48. 49. 51. 52. 53. 54. 55. &c.

Pray had the Stationer no more of the same fort of paper? or was he asraid the Hedge-Hog at the Tail of this Chapter, would not have had room to unfold himself, in case he had lengthened his discourse? Was want of room ever BEFORE pleaded for curtailing a useful and instructive Chapter?

In what fense then, pray! can this be called treating of the diseases of the bones?

But upon the whole, I cannot but remark, that it is vaffly surprizing, that he could not be at the pains, to adorn such a magnificent work, with practical deductions from both the natural and preternatural structure of the bones: instead of transcribing the short and incorrect descriptions, he had published four times before in about two or three sheets of an octavo, with very little or no material alterations? nay, there are feveral good things in them, which are left out, and others made worse, in this expensive Edition; e.g. Edition 2. pag. 22. there's a very remarkable case, viz. the extirpation of a tumour from a woman's cheek: Id. pag. 50. a remarkable Caries of the Os Calcis, &c. and the case before mentioned pag. 5. of the fracture in the girl's fcull, is altered very much for the worfe, &c. &c. And alfo, that (notwithstanding the beauty and largeness of the characters, and the shortness of the text) we should find several typographical errors in it, (Faults which would have been eafily excused in any one, who did not assume the honour of being a fecond Hercules *;) e. g. chapter i. paragraph last, for callous, r. callus. chapter ii. paragraph vii. for upper jaw, r. lower jaw. chapter iii. paragraph 3. he fays, (" fee chapter x.") and yet there are but eight chapters in the book: Where then can we look for't? chapter v. paragraph 4. for, externa lancle, r. external ancle. chapter vii. paragraph 5. for, the subricating, glands, r. lubricating glands, &c. &c.

Some Doctors have been so blindly bigotted to GALEN, &c. that they thought it more laudable to kill according to them, than to cure by any other method. But our author

^{*} Vid. Paragraph laft.

differs so far from those gentry, that he had rather err in his own way, than do right after others: for, ever fince printing was invented, the most judicious and learned men, have always numbered the pages, or made use of catch-words, or both, whereby the readers may, with little trouble judge, whether their books are compleat, the sheets placed in their proper order, and they may be quoted afterwards with eafe and exactness, &c. But the our author could not rack his Genius fo much as to produce any better method; yet because he would be particular even in doing-he scratches them both out at once: for which counter improvement he alledges, (as I have been informed) that they lessen'd the beauty of a well printed page, (as His indisputably is.) But pray who will agree with him, that his supposed beauty is of more consequence, than these defects? Whereas, if he had lest out only the catch words, and numbered the pages, as ufual; in my opinion, it would have been an addition to the beauty, without lessening the value of the work. But to leave them both out at once, for fuch a trifling reason- without putting us in a better method! fmells, I think, more of L-y, than of an H-n labour.

Having thus made a few short observations upon his text, I shall next examine his account of the Prints, as also the Tables themselves, with the same impartiality and freedom.

In his speech to the reader, he has given us a short account of the parts his Painter, Gravers, and He himself acted in this work, as follows:

" To the READER.

Parag. 2. "The first drawing We made, was a front view of the scull,"

Mr. Cheselden gave the Painter a scull, and desired he would draw a front view of it, which he did accordingly. Then Mr. Cheselden sat to a Painter for a side view of his Face: and being asked afterwards, who painted that Picture; for it is very well done, and very like. A. We painted it about a month ago in this very house.

Quere. Whether Mr. CHESELDEN had the greatest hand in drawing the scull, or in painting his picture?

Parag. 2. "In the same attitude, with a most excellent one in Vesalius, whose sigures were drawn and engraved by Giovanni Calker, as Giorgio Vasari informs us in his book of the lives of the Painters; they are performed in so exquisite a taste that they have usually been taken for Titians, and always considered as a study for Painters;" (so far just, fair, and honourable; but pray mark the winding up, the sting in the tail.) "Yet it must be confessed, that most of them are far short of just represent sentences of the things they were drawn after."

They are performed in so exquisite a taste that they have usually been taken for Titian's, and always considered as a study for Painters; yet most of them are far short of just representations of the things they were drawn from. Pray, is it possible for both these affertions to be true? usual borum! Is it possible, that unjust representations of things should, or should always be, considered as a study for Painters? Are Painters then to study, or draw after, unjust representations of things? Is this the way to improve either their judgments or hands?

Parag. 2. "Then We proceeded to others, measuring every part as exactly as we could, but We soon found it impossible to execute the difficult parts of such a work in this way; upon which I contrived (what I had long before meditated) a convenient Camera obscura to draw in, with which We corrected some of the sew designs already made, throwing away others, which We had before approved of."

Thus you see, Mr. Cheselden constantly talks of himfelf as a Painter, and an Engraver. Had the late Mr. Cowper we'd it away after this manner, there would have been some reason for't; because every body knows He was a good draught's-man himself: but for Mr. Cheselden to do so!

The rest of this paragraph is a sneer on the Painters and

Engravers, and an Encomium on himself, as being their Director.

Parag. 3. and 4. He has given us a very just and pertinent character of his two Engravers, but has not so much as mentioned his Painter, who certainly deserved it as well; because if he had not made good draughts first, they could not have made such good prints afterwards.

Supposing any other person had a mind to employ the same excellent hand, how could he find him out by Mr. Cheselden's account of him?

Parag. 5. "The actions of all the Sceletons both human and comparative, as well as the attitudes of every bone, were my own Choice:"

Who's choice would he have them be? don't every one who employs a Painter, tell him whether he would have him paint a Busto, a half length, or a whole length, or in what posture he would choose to be drawn? does not every man, who has a Sign to be painted, do the same?

Parag. 5. "And where particular parts needed to be more distinctly expressed on account of the Anatomy, there I always directed; sometimes in the drawings with the pencil, and often with the needle upon the copper-plate, and where the Anatomist does not take this care, he will scarce have His work well performed."

What an harangue is here, as if he had done something extraordinary, which never was done before! there I always directed! i. e. when he set the scull down before the Painter, he took his probe, and pointed out the Sutura Transversalis, Os Unguis, Septum Nasi, &c. and said, be sure, Sir, to delineate these little parts fairly, &c. Did not Bidloo do so? Did not Ruisch do so? Did not Cowper do so? Have not all the Anatomists upon earth done so? What then is there New in Mr. Cheselden's method? But what pains so ever Mr. Cheselden may have taken in directing, or correcting the pencil and needle, he has been supinely

negligent, in the lettering, and explanations of his plates, after they were done, as well as in the contrivance of many of them; as will appear below.

Parag. 5. "The expressing the smoothness of the ends of the bones, by engraving only with single lines, while the other parts were all etched, was also my contriving;"

This method, if there's any thing very extraordinary in it, was first contrived by the Engraver of Dr. Bidloo's Os Humeri (as was justly observed by Dr. Douglas, and communicated to me before ever I was possessed of Mr. Cheselden's bones) which was printed at Amsterdam before Mr. Cheselden was born. Yet, I must own, it has not been observed in any of the rest of the cartilages, as Mr. Cheselden has done through the whole.

Parag. 5. "And what advantage this has been to the work, will be seen by comparing the smooth part of the Acetabulum of the Os Innominatum in the beginning of the book, with the heads and sockets of other bones."

In the fecond table (if he means that, by the beginning of the book) fig. 4. letter B points that part of the Acetabulum, which is covered with a cartilage: yet it is performed only with fingle lines, as all the rest of the heads and sockets. To what purpose then were we referred to it? What can we learn by doing it? A. Not the advantage that his supposed New contrivance, has been to this work, as he promises.

Parag. 6. "This volume is made above twenty per Cent." (which I always intended) better than the subscription pro"posals. There are no more printed in English than three
hundred, and one hundred prints are taken off designed
for a Latin or French edition, which being finished, the
plates shall be destroyed that the price of the book may
never sink in the possession of the subscribers."

This is a most generous proposal; 400 books at four guineas per book (supposing they had all been subscribed for) amounts to 1600 guineas; then, above twenty per Cent.

being added to it's value, by the Author, amounts to about 2000 guineas; whence it is evident, our Author must have been about 400 guineas out of pocket, besides so many years Herculean labour.

Frigus quo duramque famem depellere possit. Hor.

I take this scheme to be an incontestable proof of the famous and learned Dr. MANDEVILL'S doctrine, viz. THAT PRIVATE VICES ARE PUBLICK BENEFITS.

Parag. last. "One hundred prints are taken off, design'd for a Latin or French edition."

If he is as long in translating this work into Latin or French, as he has been in translating his treatise on the High Operation, which he also promised, we cannot expect to see it for ten years to come; and if it is not better done than his translation of Rosser, from the Latin into English, it will not be intelligible when finished.

I shall next examine the prints themselves in the same order he has placed them. His first three plates, viz. the Frontice-piece, Title, and her Majesty's Arms, are very much a propo's, i. e. suitable to such a grand design, but the sourth, which is the Dedication, was, in my opinion, very ill chosen. What! present a Lady, nay, a Lady of the first rank upon Earth, with a Charnel-House; a sight enough to shock the hardiest of men, who are not used to see and handle them.

> This was also my own contriving! Here I directed!

^{*} Inanis gloriola pratiosus Emptor.

His ten folio Frontice-pieces, ten Head-pieces, and ten Tail-pieces, are made up of the Sceletons of Bucks, Bears, Dogs, Fishes, Fowls, Cats, Rats, Lizards, Bats, and such sort of vermin, merely for ornament, not use; some of which (allowing for the uselessness of the main design) are not only well contrived, but also very well executed: e.g. the Frontice-piece to his preface, viz. the Sceleton of a Buck stopping short and turning. The Tail-piece, viz. a Thornback. The Tail-piece, chapter i. viz. the horns of a Ram. The Head-piece, chapter iii. viz. a Crocodile. The Frontice-piece, chapter v. viz. an Ostrich. The Tail-piece, viz. a Swan. The Tail-piece, chapter viii. a Frog, &c.

Others are not only poor, mean Designs, but also very ill executed (in comparison with the rest:) e. g. the Head-piece to his preface, viz. the Sceleton of a Dog as he lies asleep. In his speech to the reader, he says, "The actions of all the Sceletons both human and comparative, were my own choice." Pray, is there no posture of a Dog more graceful, than when he is asleep? Would not the figure of a fine Greyhound bounding over the field, when eagerly expecting his game, have made a more agreeable print, than a Cur-Dog asleep, which he has here represented.

This posture was also my own choice!,

Here I directed!

The Tail-piece to the introduction, a Crane. He says, Their legs are made long to stand in waters, and the whole Sceleton as light as may be, they having no great occasion for strength." Pray, have they no occasion for both better arms and more strength when they are attacked by birds of prey?

The Head-piece, chapter i. viz. the head of a Bull, the grinding teeth of an Elephant, and the head of a Sea-horse. Gui bono! The Frontice-piece, chapter ii. scraps of the bones of Fish from the West-Indies, &c. a meaningless figure.

The Head-piece, chapter 2. viz. the Sceleton of a Cat, frighted at that of a Dog. Who ever heard of a Sceleton

being frighted? The Tail-piece, chapter 2. viz. a Lizard. The Frontice-piece, &c. chapter iv. viz. a Bear; Head-piece, viz. a Rabbit (Quere, Whether it did not come from the Godliman warren) and Tail-piece a Mole. Most noble and beautiful creatures! Head-piece, chapter 5. a Sparrow, and a Bat; poor, poor, poor. Frontice-piece, chapter vi. a Hog. Fit only for a Hog-Doctor! Head-piece of a Camelion; Tail-piece, a Squirrel; Frontice-piece, chapter vii. the head of a Cat, &c. Tail-piece, a Hedge-Hog. Fronticepiece, chapter viii. an Armadilla; Head-piece, a Weazel, and a Rat, &c. Whereas, if he had been as folicitous about making his work useful as pompous, i. e. all of a piece, both in contrivance and goodness of work, he might for the same expence, have filled the places of these useless monsters, with other parts of the human body, which would have been more beautiful, and very instructive; e.g. instead of his Buck, Dog couchant, and Thornback, (Preface) he might have given us for a Frontice-piece, a fore view of the muscles of the Human Body; for a Head-piece, a view of the muscles of the arm; for a Tail-piece, a view of the Diaphragma, &c. &c.

The ten initial letters are exceedingly well done, in the last of which he has the Sceleton of a Man and a Monkey, but gives the right hand to the Monkey.

This was also my contriving!

Here I directed!

His cuts of the Human Bones confift of fifty-fix lettered, and fifty-fix unlettered folio prints. Who ever packed two fuch large fetts of prints together, where there was fo little variation, viz. only one fett lettered, and the other not lettered? Pray, does it answer any other end, than encreasing the charge of that already too expensive work? Is there any thing material to be seen in the unlettered prints, which may not be observed in the lettered prints? especially if many of the letters had not been misplaced, and others not explained. Pray would it not have been much handsomer (and could have cost but a very trisse more) to have made also two impressions of the little reading there is? and then he might have given every subscriber two books.

Twenty-eight of them are well contrived, and the Designs exceedingly well executed, by the Draught's-man and Graver, yet our y—g H——s, tho' he had nothing to do after them, but to point out the places of the letters, and to explain them on the opposite page, has made several mistakes in this little and easy task.

Oh! quantum mutatus ab illo.

Tab. iii. Fig. 1. Is a front view of the scull, most beautifully performed; yet, letter B, he says, denotes, "The hole through which a nerve and an artery pass to the fore-head."

G, "A hole through which a nerve and an artery pass" Secure to the face."

Pray do's not the nerve and the artery letter B pass as Securely through their bony channel to the forehead, as those of letter G do to the face? Why then should he put such an Emphasis on the security of the passage G.? But he has forgot to tell us how the vein fairs, which returns through each of these holes.

D, Is twice placed upon the Sutura Transversalis, tho there was room enough, and it would have looked much better, if it had been placed above it.

H, "Os Unguis, in which may be feen the Ductus ad "Nasum."

The Ductus ad Nasum, is well express'd in the print, and ought to have been marked with another letter. But he takes no notice of the Cribriform part of the Os Unguis, neither in his description, explanation, or print, nor of the chirurgical operation often performed upon it, &c.

S, "Os Jugale." Is placed directly upon the Suture, tho it might have been more conveniently and properly placed, either a little more forwards, backwards, or upwards.

The other two figures on this plate, are also exceedingly well done; but I cannot say so much of the lettering and explanation.

Fig. 3. He marks the Sutura Coronalis with three E's, which is right, but then claps two more E's upon the frontal Sinus's; yet takes no notice of these two letters, or of the frontal Sinus's (the most remarkable parts of the figure) in the explanation.

Tab. iv. Is a fide view of the feull beautifully finished.

Fig. 1. He has placed the letters B D and F on the Sutures.

L, "Os Unguis." Here again, the Ductus ad Nasum is fairly represented, but not lettered.

Fig. 2. 4. and 5. Are good for nothing, but to fill up gaps.

Fig. 3. He delineats the little bones of the Ear, but do's not explain their number, names, fituation, &c.

Fig. 6. Is exceedingly well done, but ill explained.

Tab. v. The Basis of the scull.

The Offa Palati, division of the upper jaw, Hole behind the Dentes Incisivi, &c. are well express'd, but there are many other things in't, ill express'd, ill marked, and poorly explained.

Fig. 2. Seems to have been done by some youngster, on purpose to try his hand. It is sad work!

Tab. ix. Fig. 1. Is a beautiful figure of the lower jaw and teeth. But he has not marked the Chin, nor the Dentes Sapientiæ mentioned in his description.

Fig. 6. Is of no use, tho' tediously explained.

Tab. x. Three beautiful figures of the Vertebræ of the Neck, Back, and Loins.

Tab xi. A fine view of ten single Vertebræ, tho' fewer would have shewn all the variety in them.

Tab. xii. The Os Sacrum and Coccigis are well represented.

Tab. xiv. and xv. The ribs are well done, but all the variety in them might have been expressed in one plate.

Tab. xvi. and xvii. The Sternum and its cartilages. These two plates, might also have been included in one.

Tab. xviii. "Os Innominatum (which he describes thus, chapter 3. paragraph last) is in young persons composed of three bones, the upper is named Ilium, the lower and posterior Os Ischii, and the anterior Os Pubis; the upper edge of the Ilium is called its Spine, the anterior part of the Spine its Apex, and a little lower is the Process Innominatus. Ilium (Ischium it should be) has two processes, the one named the Obtuse Process, and the other the Acute;

Fig. 1. "The outward (potius external) view of the "Olla Innominata. (potius Os Innominatum.) B. he calls, "The obtuse process of the Os Ilium." But he should have called it the Processus Innominatus, mentioned in the description. F. he calls, "The acute process of the Os "Ilii." instead of the Os Ischii.

N. B. He has not lettered the Spine of the Ilium, nor its Apex, tho' mentioned in his description, and well express'd in the figure.

Fig. 2. The internal (which should have been inward, since outward went before) view of the Osla Innominata (potius Os Innominatum.)

C. "A roughness for the origin of ligaments and tendons."
This is not mentioned in the description.

Oh! the Herculean Labour!

Tab. xix. Is a most beautiful, and correct view of the Trunk.

Tab. xx. A back view of the Trunk, boldly finished.

Tab. xxi. Two exceeding fine views of the Spine.

Pray would not these two figures have been still more beautiful, if he had not Curheaded them, of the first Vertebra; as well as Curtailed them of the Os Coccigis?

Tab. xxii. Two good views of the Scapula; but there's too much work on both, and he has mark'd the neck of the Scapula, on Fig. 2. which ought to have been done on Fig. 1.

Fig. 3. and 4. Two views of the Claviculæ, but they don't feem to be graved by the same hand as the Scapula; they have also too much work upon them; and he has spent eight lines in describing them, when three might have done.

Tab. xxiii. Fig. 1. " The forefide of the Os Humeri."

Fig. 2. " The outfide of the Os Humeri."

Pray would not any genuine Successor of the great Hercules have said; foreside and backside, inside and outside, &c.

In Fig. 1. He has not marked the roughness, which appears in most bones, for the insertion of the Deltoides, either in the print or explanation.

Tab. xxiv. The Ulna and Radius are exceedingly well done. But in Fig. 2. he has graved the letters E and F on the plate, but has taken no notice of them in the explanation.

Oh! the monstrous labour of lettering these plates! Who can go through such a task without Blundering?

Tab. xxv. Fig. 2. "That part of the Carpal Bones, "which articulate with the Thumb and Fingers," instead of Thumb and Metacarpal Bones.

Is it not impossible for the Carpal Bones to touch the Fingers, as long as the Metacarpal Bones are in their places?

Tab. xxvii. Two fine views of the Os Femoris.

Fig. 1. Part of the Dent in the ball of the Thigh-bone, into which the Ligamentum Teres is inserted, is express'd

in the plate, but it is not lettered, nor mentioned in the explanation.

Fig. 2. The same Dent is drawn as big as the life, but not lettered.

The little Trochanter is very ill express'd.

Fig. 3. " A the forefide of the Patella; B the lower ex-"tremity of the Patella."

The Patella being almost round, cannot be properly said to have Extremities; but what he calls the extremity of the Patella, others very properly call it's Apex.

" By which it is fixed to the Tibia."

The Patella is fixed to no bone; the extensors of the Leg are inserted into it's Basis, (whence he may as well say, it is fixed to the Os Ilium, because one of their heads rises from the Obtuse Process of the Ilium) and the ligament which rises from the Tibia, into it's Apex.

C "The upper end," (alias Basis) why not the upper extremity, as well as the lower extremity?

Fig. 4. A "The Underfide (alias Backfide, fince he calls the other Forefide) of the Patella.

Tab. 28. A beautiful view of the Tibia and Fibula.

Fig. 1. E "That end of the Tibia, which articulates "with the foot."

Fig. 2. H I " The end of the Tibia, which receives the Astragalus."

Utrum Horum?

Tab. xxix. The bones of the Foot are well express'd.

Tab. xxxiii. A fore view of the Sceleton.

Tab. xxxvi. A fide view of the Sceleton.

Tab. xxxvii. A back view of the Sceleton.

Tab. xxxviii. Represents several ligaments finely.

Fig. 2. 5. and 6. Are extremely well done and well defign'd, i. e. contriv'd; but the other three are full of confusion, &c.

Tab. xxxix. Represents several ligaments most beautifully.

Fig. 1. C D. The ligaments which go between the Os Ischium and Sacrum are finely represented; but their use is not so much to join the Os Ischium and Sacrum together, as he seems to fancy, but to support the Intestinum Rectum, Uterus and Bladder, from falling between these bones, &c.

Tab. x1. Is also a fine representation of several ligaments; but in Fig. 2. he has graved the letter E on the plate, but takes no notice of it in the explanation.

Hercules like indeed!

Tab. xLiii. He says, "Is part of a crooked Sceleton, dug "out of a grave." It is a very good print. But if Mr. Cheselden dug it out of a grave himself, or set any body else about it, he ought to have kept that part of the story to himself: because People are too apt to suspect and surmise such things, without being told them in so publick a manner. Pray what is it to the reader, how he came by it?

Tab. xLiv. Are two figures of the Trunk of a crooked Sceleton.

Quere. Whether they were not also dug out of a grave?

But the other 28 plates feem rather to have encreased the expence, than added any thing to the real value of the work, e. g.

Tab. i. "Half the Os Frontis of an abortive Human "Fœtus, magnified about four times its natural Diameter."

Quare. Whether the leg of a Flea magnified to the bigness of the large claw of an Hermaphrodite Lobster, would not have been as curious and instructive a fight?

But to be short, in my opinion, the 2d and 13th Tables are a disgrace to the rest.

Tab. vi. Fig. 1. The Lamdoidal and Sagittal Sutures and one of the Ossa Wormiana are finely represented. All the rest of that large plate has neither beauty nor use.

Tab. vii. Fig. 1. All that's useful in this large figure, is the representation of the Openings into the Frontal Sinus's BB; the Crucial Spine of the Occiput R; and the Meditullium all round the scall, (but it is not lettered) in which he has made no distinction between the Temporal Bone, where the Meditullium never appears, and the rest.

Fig. 2. He has given a good view of the Sinus Frontales B, and of the Septum Nasi, and Vomer N P as also of the Spine, which runs from the Crista Galli up the middle of the Os Frontis; yet he did not think it of consequence enough to be lettered (or to draw any practical inferences from it) as he has done the Sella Turcica, worth no man's knowing!

Tab. viii. There's a great deal of work in this plate, and it is very well finished; but Cui bono?

Tab. xxxi. A "The upper part not yet Offyfied." alias the Fontanell.

All the rest of this plate is very ordinary work in respect of the rest, and would be of no use, tho never so well engraved, the design is so trisling, e. g. Fig. 3. "The lower part of the Os Occipitis separated."

Fig. 4. "The bones which compose one Vertebra se-

Fig. 5. "The circular bone on which the Membrana "Tympani is extended," &c. What man befides, would have been at fuch an expence, to grave fuch Baubles?

Tab. xxxii. xxxiv. and xxxv. are also front views of the Sceleton.

Pray, was it not superfluous to make four front views, and but one side, and one back view of the Sceleton?

Tab. 41. 42. 46. 47. 48. 49. 51. 52. 53. 54. and 55. mentioned before, represent a parcel of rotten bones, and all incurable cases, not worth delineating.

Tab. xLv. Fig. 1. "A diflocation of the Os Humeri "from a fracture of the Acetabulum Scapulæ, which being broke, the Os Humeri could not be retained in it's place."

This I take to be one of the oddest, and most insignificant accounts of the dislocation of the Os Humeri that ever was written since the days of Hypograpes.

But he gives a much better account of this very case in three of his 8vo editions, tho' he forgot it in this great volume, viz. "I have seen a Scapula of a man which Dr. "Douglas dissected, in which the inside of the Acetabu-" lum Scapulæ was broke all to pieces, and the Os Humeri displaced; which fracture, I believe, could not by any means be certainly known while the man was living, or if it could have been known, could not have been cured.

I say this is a much better account of the case, than the former, yet is but a very lame one; e g. He gives us no account how this extraordinary accident happened, or could happen. Neither does he give us any account of any other accident, which happened upon this fracture, except the diflocation of the Os Humeri: And do's not tell us, whether the parts were inflamed much, imposthumated, or mortified? nor how long the man lived afterwards. He also fays, he believes the fracture could not by any means be certainly known while the man was living. Why not? Are not the pains upon handling the part, the splinters of the bones, when broken all to pieces, and their crackling almost as eafily perceived, in that part (where there is commonly fo thin a cover) as in almost any other? He also afferts, that if it had been known, it could not have been cured. Why fo? Would not these bones, when simply broke, after being put into as easy a posture, as could be, united as foon and as well as any other? What should hinder them? Doubtless the motion of the shoulder must have been either much impared, or quite loft. But what's that to the cure of the fracture ?

Tab. xiviii. Fig. 3. "A (he calls) the infertion of the Patella." Who ever before heard of the Patella's being inferted into the Tibia? His letter A marks nothing, but the anterior process of the Tibia from which, the Ligamentum Patellæ, Tab. 40. Fig. 2. D arises. May he not as well call the Obtuse Process of the Os Ilium, the origin of the Patella? Vid. Tab. 27.

Tab. L. Fig. 3. "The upper end of the Thigh-bone fractured near the Joint (i.e. in the Neck) in which case the Limb always shortens, and has usually been mistaken for a Dislocation."

This case is accurately described by Dr. Douglas in the Philosophical Transactions of the Royal Society, 1716. No. 349. Which, if Mr. Cheselden had consulted, he might have given us a much more pertinent account of it. But some people have so good an opinion of themselves, that they despise all that's done by others.

Quere. Who can cure this extraordinary Disease, the better for reading Mr. Cheselden's account of it? No body. But, he would have explained the method of cure at large in his chapter of the Diseases of the Bones, if he had had room; therefore, &c. we must expect it in the second edition. But when that will come out, this Deponent sayeth not?

Lastly, to Sum up all, to shew a Cou de Maitre, i. c. that he is master of more —— than ever before entered into the heart of man; He makes his last print a broken Obelisk*, and upon it's base, the Sceleton of Hercules resting from his labours. Alluding thereby to the greater and more laborious work, which he has now, after so many years toil and satigue, sinished; and the great pleasure and satisfaction it must be to him at last to rest from his labours. By this allusion, some may perhaps be persuaded, that the young Hercules (like the old one) performed all this work himself, i. e. that he out-run one of the noblest Bucks in the King's forest, † catch'd him by the horns, threw him

^{*} Vid. chapter viii. paragraph last, † Vid. Plate v.

on the ground, riped up his guts, hung him on his club, and then flung him over his shoulder, as others do a hare, and so carried him home, to be anatomized, to the admiration of every body. That he had taken a Bear by the tooth, run his hand down his throat, dragged out his heart, and toss'd it to the dogs. That he had catched a Crocodile by the tail, Iwang him round his head, and flung him from him like a cat-flick, and so killed him by the fall, &c. &c. Then flead them, picked their bones, dried and joined them together, with wires, made draughts from them, and then graved them on copper, &c. all with his own hands. These indeed would have had the face of a Herculean labour! But as this affair really stands, all the part he acted in this great, this expenfive work, might have been done in feven days, without once Iweating, as well as in almost double the number of years; e.g. He took a parcel of dry bones, and fet them before a Painter, and he made a draught from them, then gave it to a Graver, and he graved it on copper. Then he transcribed a fort of a description of them, most of which he had published several times before, and gave it a Printer to print. These three different masters indeed, performed each of them their part to admiration. But how defective He has been in His little, little part, the foregoing observations, I hope, have abundantly shewn.

Wherein then, is there the least Analogy, between the labours of the old and the young Hercules?

Old Hercules, indeed, went to Hell, and came back again; but if young Hercules should go there also, he would find it a more difficult task to get back, than he could have had in publishing ten —— volumes.

Facilis descensus Averni, Sed revocare gradum!

Q. HORATIUS.

A List of Egotisms.

1. NE view of fuch prints, &c.	Pag. 3.
The first drawing We made, &c	24
3. Then We proceeded to others, &c.	25
4. But We foon found, &c	ibid.
5. Upon which I contrived (what I had long before a Camera Obscura, &c. ———————————————————————————————————	meditated) ibid.
6. With which We corrected, &c	- ibid.
7. Which We had before approved, &c.	ibid.
8. The actions of all the Sceletons, &cc. were	re my own 26
9. There I always directed; &cc	_ ibid.
10. Was also my contriving, &c	27
II. This volume is made above twenty per Cent. (which I always intended) better than the subscription proposals ibid.	
12. This volume was offered by subscription (contains) at four guineas.	ithout foli i-
13. The last plate represents a broken Obilisk, its base is the Sceleton of Hercules ressing f bours. Vid. Original, chap. viii. parag. last.	
Deofque præcetur, & oret,	
f / wardent will mis whent him a marrie . Cut lie	

POSTSCRIPT.

CANNOT omit this opportunity, of making a few observations (which I had long before meditated *) on the following remarkable passages, three times published by Mr. CHESELDEN, in his 8vo editions, † tho' left out in this great volume.

His words are these; ‡ " At the farther end of the MEA-" TUS AUDITORIUS lies the Drum, which is extended up-" on a bony ridge, almost circular. This membrane do's not " entirely close up the passage, but has one side a small Ape-" ture covered with a Valve. I found it once half open in a " man that I diffected, who had not been deaf; and I have feen " a man smoke a whole pipe of tobacco out through his Ears, " which must go from the mouth, through the Eustachian "Tube, and through the Tympanum; yet this man heard " perfectly well. These cases occasioned me to break the Tym-" panum in both Ears of a Dog, and it did not destroy his " hearing, but for some time he received strong sounds, with " great horror. And that most excellent Anatomist Mr. Sr. " ANDRE, to whom I am greatly obliged in this chapter, " and whom I wish I had had the happiness to have made ear-" lier mention of in this treatife, has affured me, that a patient " of his had the Tympanum destroyed by an Ulcer, and the " auditory bones cast out without destroying his hearing." Thus you see Mr. CHESELDEN afferts, that the MEM-

BRANA TYMPANI, never makes a compleat Septum or Partition, between the MEATUS AUDITORIUS, and Barrel

of the Ear. And brings two cases to prove it.

CASE I. " I found it once half open in a man that I dif-

" fected, who had not been deaf."

But what then! can any reasonable man infer from this fingle instance, that it is a common case? Do's one swallow make a fummer? Might he not have been very thick of hearing, tho' not quite deaf? Might not the Drum of the other fide have been whole, and thereby the hearing of that fide as good as ever? &cc.

CASE 2. "I have feen a man smoke a whole pipe of tobac-" co out through his Ears, yet this man heard perfectly well." Pray, was not this also a swallow? Dr. HEISTER & fays, he has feen a man, who could let the smoke of Tobacco pass

^{*} Vide page 25.

[†] Viz. in 1722, 1726, and 1730.

[‡] Chap. on the Ear.

[§] Compendium Anatomicum.

from his mouth out at his Ears, but then he was DEAF: and therefore he supposes, both his Drums to be broke. But he could never find any one, who heard distinctly, that could do it.

The famous Dr. Ruysch, and Rau, as well as Heister, &c. declare, that they could never observe any such Aperture or Valve in the Membrana Tympani of human bodies, as Mr. Cheselden says, He once found.

Then he goes on, "These cases occasioned me to break the Tympanum, (the Membrana Tympani) in both Ears of a Dog, and it did not destroy his hearing, but for some

66 time he received ftrong founds with great horror."

Pray, is there no difference between quite destroying his hearing, and making him very deaf? He do's not affert that he heard as well as ever, but that, for some time, he received flrong founds with great horror, but do's not tell us, whether he could hear weak founds at all? Would it not have been very much a propo's, if he had informed us how long he had kept or observed this Dog? And whether afterwards he recovered his hearing perfectly, or loft it altogether? inflead of faying, for some time: Who can tell what he means by some time? But to put this matter out of all dispute, and to convince us that the Membrana Tympani, and the four little bones of the Ear, are of no use in hearing, he presses us with the great authority of His MAJESTY's Anatomitt. 44 And that most excellent Anatomist, Mr. ST. ANDRE, has " affured me, that a patient of his had the Tympanum de-" stroyed by an Ulcer, and the auditory bones cast out, with-" out destroying his hearing."

Pray, would it not have been a very pertinent question, for Mr. Cheselden, to have asked that Anatomist, before he published this story, whether the Tympanum was destroyed, and the bones cast out of both Ears: or out of one only? if out of one Ear only, it is no wonder his hearing was not destroyed, but if out of both Ears, I am afraid he heard only strong sounds, and those with great borror, like Mr. Cheselden's Dog, or was quite deaf, like the person mentioned by the Experienced and judicious Dr. Heister, the whose hearing was entirely lost, by the casting out of those

Bones.

Is it not very furprifing, that Mr. CHESELDEN should ever be prevailed upon to publish such an improbable story at all? much more to publish it twice, after he had seen how his most excellent Anatomist had been treated by Dr.

[†] Compendium Anatomicum. "Mihi contra notum est, auditum lapsu horum ossiculorum omnino sublatum esse."

Ruysch, for endeavouring to fob fuch a Miracle upon fome Dutch Gentlemen who vifited him. The story is as follows: Some Dutch Gentlemen of the Faculty, being in London, about 12 years ago, were carried to visit our Anatomist, who (amongst other really curious and useful preparations) shewed them one preparation, which he called the Epidermis or Scarf skin injected, as fairly and fully as ever the Vessels of the Skin had been filled. But the Dutchmen were too well acquainted with these affairs, to shew the least inclination to swallow the bait greedily, and without any hesitation (as Mr. CHESELDEN did in the former case) that they only gave him the hearing civilly: But as foon as they returned to Holland, they gave an account of this pretended Miracle to Dr. Ruysch, that famous Injector; which so irritated the old Man, tho' then 85, that he foon afterwards published a long account of it; of which the following is an abstract in his own words. *

Quanam ergo me admiratione affectum putas, quando audivi, esse Londini celeberrimum Anatomes cultorem, Sancti Andrea nomine, qui asserat non modo Verbis, sed & clara Ostentatione, demonstrare se jactet; totam Epidermidem ita se præparare, ut infinitis Vasis rubra materia injecta distentis turgeat ita, ut vafcula ejusque canales ubique nudo appareant Oculo. Est cerie vel in errore ipse bic egregius Artifex, aut alios fallacia quadam decipere gestit. Tenuissimam enim cutis partem, aut alias quasdem tenues membranas, vasculis visibilibus praditis, pro Epidermide. falso ostendat. Si autem peritissimus ille Anatomicus, bac ita monitus à me per publicum boc scriptum, tamen bac sua in jactantia perseverat, age, paratus sum posito pignore decertare t, illum in Epidermide Vascula illa non posse ostendere. subducat se certamini, agitur de cute humana, agitur de Veritate, Hic Rhodus, bic Saltus! Vel convincat me, aut patiatur suo se liberari errore, & absistat bonos decipere. Desinat igitur Batavis Hospitibus talia proponere, certe & illis perspicax ad bac Animus, funt fideles o uli, & in Cerebro Salis quid.

Did not this very same Anatomist also, in the year 1726, give us an account, of his laying a woman of a litter of Rabbits? which drew also a very severe Satire from that ingenious Surgeon, and accurate Anatomist, the late Mr. Thomas Braithwaite, &c. &c. Who except Mr. Cheselden (after two such instances of Miracle-working) would have depended solely on his authority, in such extraordinary and incomprehensible cases?

^{*} Adversar. Anatomico-Chirurgic. decas 3tia 1723.

Is it not as abfurd to suppose, that a man may hear well, after the principal organs of hearing are destroyed, as to suppose vessels may be injected, which nature has not formed? Or that a woman may kitten Rabbits, or bring forth an

Elephant? Utrum borum!

When the Folly or Fraud of the Rabbit-mongers was discovered, they immediately pulled in their horns, and cry'd, peccavimus, orate pro nobis. But Mr. Cheselder conned several years upon the lesson his Anatomist had set him (and it is doubtful whether he has lest it off yet, or not) nay, he carried the Joke so far (contrary to the joint opinion of the fraternity, &c.) that nothing would serve him, but a Man, to use as he had done the Dog before, accordingly he hired a selon to make the experiment upon, but good fortune and a general outcry against it, prevented his design, and saved both the fellow's Hearing and Life.

Quid dignum tanto feret hic promissor hiatu! HOR.

" And whom I wish I had had the happiness to have

" made earlier mention of in this chapter."

If Mr. CHESELDEN had no greater obligation to his Anatomist, than putting it in his Head, that a man may hear as well, when the Drum and Small Bones of the Ear are destroy'd, as before, I think he mentioned him full early enough.

But pray, why did he not make up this lost happiness, by mentioning him earlier in the two next editions? which he has not done, nay, he has lest out this very, this most remarkable clause in both: Wherein then, can we suppose,

the lost happiness he complained of, consisted?

N. B. I was advised by a friend, before I drew up this Postscript, to get a Dog, and destroy the Drums and Small Bones of his Ears, according to Mr. Cheselden, and then give a particular and circumstantial account of the success. I told him, I would with all my heart, was I not convinced, I should thereby expose my own judgment, as much as the most excellent Anatomist, and Sir D_k did, when they were at the trouble to set out from London at sour in the morning, to ride thirty miles, to see a Woman Kitten Rabbits. Must he not be a very weak man, who cannot tell that a rope would choke him, or a ball knock his brains out, without making the experiment?

LONDON, Feb. 26. 1735.

PROPOSALS

For Printing (in Quarto) by Subscription,

Osteographia Anatomico-Practica:

Or, A PRACTICAL

Differtation on the Bones.

WHEREIN

Those Parts of the Human Bones which are of most Consequence to be well understood by Practitioners, will be so distinctly described, and fairly delineated, that any one may thereby make himself master of Osteology, without the help of a Professor. The Diseases to which they are liable, the Analogy between them and those of the soft Parts, and the most proper Methods of treating them will also be briefly and clearly explained, &c. &c.

By JOHN DOUGLAS Surgeon, F.R.S.

Non fumum ex fulgore, sed ex sumo dare lucem Cogitat. ——— Hor.

I. THIS Work will be printed on the best Paper, and most beautiful Character.

press'd in above 30 Copperplates, so neatly etched and touched up with the Graver, that they will convey as good an Idea of the Figures and Surfaces of the Bones, as if they were as large as the Life.

III. The Books are defign'd to be delivered Feb. 26.

IV. The Price to Subscribers will be Two Guineas, in Sheets.

V. The Names of the Subscribers, and the Number subscribed for, shall be prefixed to each Book, if permitted.

SUBSCRIPTIONS are taken by the AUTHOR, near Guild-Hall.