

Cases in surgery, with remarks: to which is added, an account of the preparation and effects of the agaric of the oak in stopping of bleedings, after some of the most capital operations / By Joseph Warner.

Contributors

Warner, Joseph, 1717-1801.

Publication/Creation

London : J. and R. Tonson and S. Draper, 1754.

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C A S E S
IN
S U R G E R Y,
WITH
R E M A R K S:

To which is added,

An Account of the Preparation and Effects of
the A G A R I C of the O A K in stopping of
Bleedings, after some of the most capital
Operations.

By JOSEPH WARNER, F. R. S.
And Surgeon to Guy's Hospital.

L O N D O N :

Printed for J. and R. TONSON and S. DRAPER
in the *Strand*.

M D C C L I V.

AS E S

J R G E R Y

W I T H

R E M A R K S

To which is added

Account of the Preparation and Effects of
A G A I N S T M E M B E R S I N R E P O R T O F
A N G E L S T A M E O F T H E M O S T A N T I C I A L

O S E P H I A W A R M E R T O S
A N D S W E E T O C O S T I C I A L

L O N D O N

For J and M Towner and S Dyer
in the Strand

M D C C L V



TO THE
PRESIDENT,
THE
TREASURER, *and* GOVERNOURS
of GUY'S Hospital.

GENTLEMEN,

AS the greatest part of the Cases described in this Collection, have occur'd to me in the Hospital over which you preside; I have taken the Liberty of Addressing them to you, as the only Acknowledgment I can make for the Honour you have done me, in appointing me one of your Surgeons.

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DEDICATION.

Should these Papers be found to conduce in any degree to the Advancement of my Profession, or in other Words, to the Benefit of Mankind, I dare say it will be no inconsiderable Pleasure to you, under whose Direction this Charity flourishes, to reflect, that an Hospital is not only the Instrument of Relief to the Distressed who are immediately received there, but also a Means of helping others, by furnishing such Principles and Practice, as may improve the Art of Surgery, and thus render the Benefit more general.

I am, with the greatest Respect,

GENTLEMEN,

your most obedient, and

most obliged humble Servant,

*Hatton-Garden,
July 18, 1754.*

JOSEPH WARNER.



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C A S E S



C A S E S
I N
S U R G E R Y.

C A S E I.

*Of a fractured Scull with a Wound of
the Longitudinal Sinus.*



IT is a Maxim with almost all Writers in Surgery, to speak of the Impropriety and danger of the Application of the Trepan, upon certain parts of the *Cranium*, previous to a Description of the Operation. The Parts of the Scull which are look'd upon as improper for the Admission of the Instrument, are the Sutures in general, the Sagittal Suture in particular.

ticular, the whole of the *Os Occipitis*, and the anterior, and inferior Part of the *Os Frontis*. But notwithstanding it may be right to have a general regard to these Rules; yet there are Instances where they cannot take place but by wholly neglecting the Operation.

THE particular Attachment of the *Dura Mater* to the Sutures of the Scull in general, and the Course of the Longitudinal Sinus under the Sagittal Suture in particular, are not sufficient Reasons for the absolute forbidding the Application of the Instrument upon these Parts; since Fractures of the Scull are sometimes so circumstanced as absolutely to require it, and the Patient is otherwise incapable of being reliev'd by the Operation.

THE Rule laid down by Mr. *Chefelden*, in his Observation upon Monsieur *Le Dran*, seems to be too positive, where he says, “ that no
“ Instrument should ever be applied over the
“ Longitudinal Sinus, nor ought the Instru-
“ ment to be introduced between that and
“ the Scull.”

As some reason and excuse for my dissenting from the Opinion of so eminent a Man, I am induc'd to offer the following Case as a Proof of its Necessity under certain
Cir-

Circumstances, and of the little Danger there seems to attend even a Wound of the Longitudinal Sinus. An instance of which Mr. *Chefelden* has given us himself, where he says, “ the Longitudinal Sinus, or the Vessels that “ empty into it were wounded by a Surgeon,” which he says, “ he stopt by dry Lint; and “ had the good Luck to save his Patient.”

R. — J. — aged 13, on the 16th of *November*, 1749, was struck with a pointed Piece of Iron, upon the upper and middle Part of the Head, so immediately upon the Sagittal Suture as to force a bit of both Parietal Bones into the Longitudinal Sinus. Immediately upon receiving the Blow, he fell down, and became senseless, but in a few Minutes afterwards recover'd, and continued well for six Days. At the End of which Time, he was seiz'd with Epileptic Fits, which were very frequent, accompany'd with Vomitings, and a Palsy of the left Side; the Sight of his left Eye was perfect, but his right Eye was so affected as to make all single Objects appear double. These Symptoms continued till the 27th of *December* following, when he was put under my care. Upon examination, I found

the Circumstances as related above, and immediately afterwards proceeded to the Operation. Upon taking off the Scalp, there issued a continued Stream of Blood through the Hole made in the Bone; I applied the Trepan so as to include the Hole made through the Bone, and the Sagittal Suture, within the Circle of the Instrument. Upon taking out the circular Piece of Bone, there appear'd a Wound which was made into the Sinus by the bits of Bone that were then sticking in it, which I enlarged with a Lancet, in order to extract them with less Violence. Upon taking them out, the Discharge of Blood was increased; but upon the Application of dry Lint only, the *Hæmorrhage* stopt. Immediately after the Operation, he fainted, but soon recovered; in half an Hour's time he express'd an agreeable Sensation on his left Side, and by the next Morning had so well recover'd the Use of his Limbs as to be able to move them freely to any part of the Bed. In six Days after the Operation, he perfectly recover'd the Sight of his right Eye; from this time he continued to mend till the 19th of *January* following, when he accidentally receiv'd a Blow upon his Head. Soon after
which,

which, he complain'd of a Numbness in his left Arm, and a return of the Dimness in his right Eye. Upon taking off the Dressings, there appear'd some clots of Blood upon them, and his Head was considerably disorder'd till the 26th of the same Month, when he grew tolerably well again. Upon observing a Fungus to have risen a considerable Height, above the Surface of the Skull, which would not subside with proper Applications assisted by pressure, I pared it off: This gave him very little Pain, but for a few Minutes afterwards he complain'd of a Numbness all over him, which soon went off, and he continued well till *February* the 2d, when he complain'd of a Sickness in his Stomach, and of acute Pains in both his Elbows. *February* the 3d, as I was dressing him, he was suddenly attack'd with a Shivering, and the *Dura Mater* appearing particularly prominent, I divided it, and discover'd a Piece of Bone sticking in the Brain, which I endeavour'd to extract, but meeting with considerable resistance, was obliged to enlarge the Wound, which admitted of its being more easily removed.

A FEW Days after this, he complain'd of considerable Pain on the right Side, about

two Inches below the old Wound, which increased upon Pressure: Upon Shaving the Scalp, there appear'd a small Discoloration which induced me to repeat the Operation upon this Part. Upon taking out the Bone, the *Dura Mater* appear'd considerably elevated, and discolor'd: For which Reason I divided the *Membrane*, and gave issue to a large quantity of Matter, which was confined underneath it. On the next Day he was free from Pain, but on the Day following his Pulse grew bad, and so continued till the Evening, when he expired.

UPON opening his Head, there appear'd a considerable Quantity of Matter lodged in the Substance of the Brain, particularly in the right Hemisphere.

Query. Could the want of Success in this Operation be attributed to the Wound of the Sinus Longitudinalis; and is it not reasonable to hope that the Operation might have been successful, if no extraneous Body had been lodged in the Substance of the Brain?

THE Wound of the Longitudinal Sinus did not probably produce any dangerous Symptoms,
because

because it never bled again after being once stopp'd, which was easily effected; and if we credit the fourth Observation of *Marchetti*, there does not seem to be so great a Danger attending a Wound of this Sinus as is generally apprehended.



CASE II.

Of a fractured Skull, where the Operation was successfully perform'd upon the Lambdoidal Suture.

MAY 1754, *H—A—* aged 18, receiv'd a Blow on the posterior Part of the Head upon the Lambdoidal Suture, at about an Inch and a half distance from its upper Angle, which lacerated the Scalp, and fractured the Skull. Upon examining the Wound, and finding it thus circumstanced, he was immediately scalp'd, which gave me an opportunity of discovering the Nature and Extent of the Injury done to the Bone. The Fracture extended to about three Inches in length obliquely upwards upon the left Parietal Bone; and one of the *Ossa Triquetra* appear'd vi-

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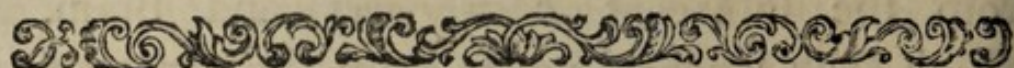
sibly depress'd, and beat inward upon the *Dura Mater*. Upon receiving the Blow, the Boy fell down, and became senseless, which was soon succeeded by Vomitings, and a Discharge of Blood from the Nose. In an Hour after the Accident, he was brought into the Hospital, and the Operation was perform'd so immediately upon the Lambdoidal Suture, as to include the depress'd Bone, which could not otherwise have been remov'd. Upon taking out the Piece of Bone, the *Dura Mater* appear'd prominent, and tense; I divided it with a Launcet, and gave issue to a Quantity of Serum that was confined underneath it. From the great Extent of the Fracture, I judged it necessary to apply the Trepan a second Time, which was accordingly done upon the Parietal Bone, at about an Inch and half distance from the former Place. The *Dura Mater* appear'd here in its natural State; for which reason I thought it unnecessary to divide it. The next Morning after the Operation, the Patient was blooded on account of a fullness in his Pulse, and of the Stupor which still remain'd in some degree; in the Evening an emollient Clyster was administer'd, from which Treatment he receiv'd immediate relief, and continued

continued to mend from this time without any Relapse till he perfectly recover'd, which was in nine Weeks after the Operation.

REMARK.

IN this Case, the Attachment of the *Dura Mater* to the Lambdoidal Suture appear'd very inconsiderable ; and seeing the Nature of the Accident was such, as to render the Application of the Instrument upon that Part, absolutely necessary to the taking off the Pressure from the subjacent *Membranes* and Brain, which they labour'd under from the depress'd Bone ; I'm induced to think there could be no doubt of the Propriety of Operating upon the Suture. The Course of the Longitudinal, and Lateral Sinuses, were here quite out of the Question. It has been observed by Writers, that when the Head receives so violent a Blow as to Fracture the Scull, that the natural Attachment of the *Dura Mater* to the internal Part of the *Cranium*, is broken off, and consequently there can be very little danger of injuring the subjacent *Membrane* with the Teeth of the Saw. Again it is agreed, under some circumstances, to be absolutely necessary to divide the *Dura Mater*, to give issue to any
ex-

extravasated Fluid that is confined underneath it, which is often practised with success. I am induced therefore to think, it has been a Rule too generally laid down by Authors, to forbid the Application of the Instrument upon these Parts; since by following it too strictly, the Trepan must necessarily be omitted in Cases that are not otherwise to be relieved; in consequence of which, the Patient is deprived of such benefit, as might probably accrue from the Operation.



CASE III.

Of a Man where the Operation of the Trepan had been successfully perform'd upon the Os Occipitis.

IN the two preceeding Cases, I have given instances where it was absolutely necessary to apply the Trepan upon the Sagittal and Lambdoidal Sutures. In the following it will appear, that the Trepan may be likewise safely apply'd upon the *Os Occipitis*, contrary to the general Opinion of Authors.

ON the 21st of *February*, 1753, I gave a Lecture upon the Brain of a Man who was executed at *Tyburn*. Upon sawing through the Scull (which I have now by me) I observed that he had formerly been trepan'd upon the *Occipital* Bone. The Instrument appeared to have been apply'd upon the *Os Occipitis*, at least an Inch distant from the upper Angle of the Lambdoidal Suture, and very near to the left Side of the *Sulcus*, which is form'd in that Bone for the Reception of the posterior Part of the Longitudinal Sinus.

THIS Operation must have been perform'd a considerable time before his Execution, since there was a firm *Cicatrix* of the Integuments. There was not the least Appearance of a Callus which had shot from the Circumference of the Hole made into the Bone by the circular Saw. The Cure seem'd to be compleated merely by a strict Adhesion of the *Dura Mater*, to the Circumference of the Opening made through the Scull, and by an elongation of the Integuments which compose the Scalp. The principal Reasons given by Authors for the Impropriety of the Application of the Trepan upon this Bone, are these: The Unevenness of
of

of its external, and internal Surfaces, and the Course of the Longitudinal, and Lateral Sinuses.

BUT the first Objection can be of no great weight ; and as the chief Sinuses possess only the upper and middle lateral Parts of the *Os Occipitis*, the Operation may, contrary to the general Opinion, be safely perform'd upon this Bone, on either side the Lambdoidal Suture, as low down as the first occipital Ridge, corresponding to which, on the Inside, are the lateral Sinuses.

FROM what has been already observed in the preceding Cases, I think it may be fairly concluded, that there is no Part of the Scull upon which the Operation may not be performed in Cases of Emergency, except, at the anterior inferior Angles of the parietal Bones, on the internal Part of which the *Arteria duræ Matris* runs, and on the anterior and inferior Part of the *Os Frontis*, where its Tables are well enough known to be at a considerable Distance from each other in Adults, and by this means to form a Cavity distinguish'd by the Name of the *Sinus Frontalis*.



CASE IV.

A short Account of some extraordinary Facts attending the Operation of Couching, &c.

W. L. aged 26, about nine Years ago was suddenly attacked with a Dimness in both his Eyes, which happened without any previous Accident or Pain in the Head, the Disorder continued for three Years in much the same State, when it began to increase, and so continued till he became incapable of distinguishing Objects. He remained under these Circumstances till *March*, 1748, when he came to *London*, and put himself under my Care.

THE Disease was a *Cataract*, or Opakeness in each of the *Chrystalline* Humours; that in the right Eye appeared to adhere to the inferior Part of the Iris, but without any defect or Alteration in the Shape of the Pupil. He was capable of distinguishing Light, and Colours. In the left Eye, the *Chrystalline* Humour was adherent to the greatest Part of the

the Iris. The Pupil appeared to extend beneath the *Cataract*, and to have changed its Shape, from a Circle, to an oblong through the lower Part of which, a small Share of Light was admitted to the Bottom of the Eye.

FROM these Circumstances, I judged it improper to meddle with the left Eye, and at the same time considered the Event of the Operation as precarious in the Right. However, I undertook it upon a probability of Success, and couched the right Eye on the third of *April* following.

UPON endeavouring to depress the *Cataract* I perceived it to make a considerable Resistance to the Instrument, which was occasioned by its adhesion to the inferior Part of the Iris. So that I was obliged to direct my Needle underneath the *Cataract*, and lift it up, before I could disengage it from the Iris, which I effected with some difficulty, and at length depressed it.

HE suffered very little Pain from the Operation. In six Days after I examined the Eye when the *Cataract* appeared to have resumed its former Situation.

ON the third of *May* following, I couched him a second Time, the *Cataract* subsided much more easily than before; this Operation was attended with as little Pain as the preceding: Upon examining the Eye a Week after, I perceived the *Cataract* to have risen a second Time, but so imperfectly, as to cover the lower Half of the Pupil only. The upper Half of it appeared clear, and he could distinguish Letters through it, by the help of a Convex-glass.

I WAS in hopes from this Appearance, that the *Cataract* might in time have subsided (as I have frequently known it do under the like Circumstances) without any farther Operation. But on account of the little Pain which the Patient had suffered from these Operations, he insisted upon a Third, which I performed upon the 23d of the same Month, and the *Crystalline* was easily depressed. But such was the Disposition of the *Cataract*, that it rose up a third Time, but in so shaking and wasted a Condition, as to promise a Speedy Disappearance. However, the Patient remaining dissatisfied, and unwilling to return Home upon a bare Probability of its wasting away; I was prevailed upon to perform the Operation a fourth Time.

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THE *Cataract* immediately subsided upon the slightest Touch of the Needle, and did not appear again.

THE Patient was capable of reading, and writing, with the Assistance of a Convex-glass, in a Fortnight after this Operation; and now sees well enough to follow his Profession of Surgery and Pharmacy. It is remarkable that there was hardly any Inflammation or Pain, in consequence of either of these Operations.

WHEN he first began to look at a Candle, or any other single Object, it appeared to him multiplied; and when he first read, he conceived of Letters as remaining imprinted upon the Bottom of the Eye for some Hours afterwards, but by a little use these *Phænomena* were quite removed.

REMARK.

FROM this Example it appears, how difficult it is to remove the *Cataract* effectually, when complicated with an adhesion of it to the Iris: and again, how warrantable it may be to repeat the Operation with a Probability of Success, in such Cases as are attended with the like favourable Circumstances.

IF the *Chrystalline* had been totally removed by Extraction, these Returns of the Disease could not have happened. But I am inclined to think, that if it had been attempted by opening the *Cornea*, the Operation would not probably have terminated so happily; since the vitreous Humour must in all likelihood have been wholly, or in a great part discharged, in endeavouring at a Removal of the *Chrystalline*.

INSTANCES of which I have known to occur, attended with such circumstances, as to render a second Operation impracticable. So that however successful this method of Operating may have proved in *Cataracts*, that are quite free from adhesion; yet I think the Operation is not likely to be attended with equal benefit, when they are otherwise circumstanced.

MONSIEUR *Daviel's* own Accounts of the Success attending his method of opening the *Cornea*, and extracting the *Chrystalline*, are so very extraordinary, as almost to exceed probability; and I cannot help considering them as partial, when I reflect upon the Accounts given us of the very different Success attending this Operation, when performed by
C others

others in nearly the same Manner, as well as from my own Experience.

FROM the result of those Experiments, which were made upon nineteen Eyes, by M. *Morand*, M. *Poyet*, and by M. *De la Faye*, of which there is a particular Account given in the Memoirs of the Royal Academy of Surgery at *Paris*, printed in the Year 1753, it appears that the Benefit attending both methods of Operating is so nearly equal, as to make it uncertain which of the two is attended with the greatest Success: So that, in all probability, both methods of Operating may be found to have their Advantages in particular Cases.

SINCE I have taken the Liberty of making some Remarks upon M. *Daviel's* own Account, of the great Success attending his Method of the Removal of *Cataracts*, by extracting the *ChrySTALLINE* Humours; perhaps it will not be unacceptable, should I make such an Abstract from his own Memoir, as immediately relates to this particular, and the Manner of his performing these Operations; and upon presumption of meeting with this Indulgence, I have added a second Abstract relating to the Event of those several Operations which were performed by M. *Morand*, M. *Poyet*, and M. *De la Faye*. A

A short Abstract from the Memoirs of the Royal Academy of Surgery at Paris, of an Account of the Operations of the Cataract, for the Extraction of the Chrystalline, done by Monsieur Poyet, before the Commissaries of the Academy, as drawn up by Messieurs Morand, and Verdier.

THE Academy has observ'd with Pleasure, the Eagerness which has been shewn to make the Operation for the *Cataract* more simple and perfect, by extracting the *Chrystalline*, which has been successfully practis'd by M. *Daviel*, who has himself given an Account of this method, Page 337. See *Acad. Royal of Surg. at Paris*, printed *Anno. 1753*. Several Persons have invented an Instrument, and almost at the same Time, with which the *Cornea* might be divided in such a Manner as to make one Instrument only necessary.

MONSIEUR *Poyet*, formerly Surgeon of the *Hôtel Dieu*, and lately appointed Surgeon of *La Charité*, hath presented one of his own Invention. A little Time afterwards, Mr. *Sharp* of *London*, sent to M. *Morand* the Design of another Instrument, which he had exhibited to the Royal Society.

MONSIEUR *Poyet* has already made some Experiments upon dead bodies with his Instrument, before the Commissaries nam'd by the Academy for that Purpose ; they report that it appear'd to them to have succeeded particularly well. M. *Morand*, from that time, engaged to ask Leave of the Governors of the Hospital of Invalids, for M. *Poyet* and M. *La Faye*, to operate, which they consented to, out of regard to the great Zeal, which the Surgeons of *Paris* shew for their Art.

MONSIEUR *Morand* assembled nineteen People diseas'd with proper *Cataracts*, who were prepar'd for the Operation ; and on *June* the 11th, 1753, they were all operated upon, one after another. Six of the Operations were perform'd by M. *Morand*, Six by M. *La Faye*, and Seven by M. *Poyet*, of which take the following Account. M. *Morand* endeavour'd to depress the *Cataract* of M. *Vallot*, an Officer, aged 65 Years, but from some unaccountable Accident it escaped from its Bed, upon being touch'd with the Needle, and was ready to pass into the anterior Chamber of the Eye. Upon which, M. *Morand* recommended the Patient to M. *Poyet*, as a favourable Opportunity of trying his Operation, which M. *Poyet* accepted

accepted of. When the *Cornea* was sufficiently divided, the *Chrystalline* immediately follow'd without any pressure at all, and no Accident happened. The Cicatrix of the *Cornea* appear'd firm on the eighth Day. The Patient was visited by the Commissaries on July 11, and 25, when he declar'd he could not distinguish Objects. Upon Examination, it was found he had a *Gutta Serena*; and besides this, a second *Cataract* was form'd by a thickening of the *Membrane* which invests the Bed of the vitreous Humour.

John Baptist Roux, aged 65, was operated upon next by M. *Poyet*; after the *Cornea* was divided, the *Chrystalline* fell out upon the Eye being gently press'd; the Patient had only a slight Inflammation of the *Conjunctiva*; he was visited by the Commissaries on July the 11th, and could distinguish Objects. He was visited again on July 25, and could only see Day-light; his Eye was attack'd with an Inflammation; upon the Whole, he sees but little.

Peter Mercier, aged 64, was next operated upon, by M. *Poyet*, he had no bad Symptoms after the Operation: he sees very well. The Pupil has chang'd its Figure, and is not quite round.

Francis Riviere, aged 56, was operated upon next, the *Cornea* of his right Eye was opened by *M. Poyet*; the *Cornea* of his left was opened by *M. La Faye*; he has had no accident in the right, but has suffered greatly in the left Eye; he can see Light, but cannot distinguish Objects.

Julien Le Gendre, aged 70, had his *Cornea* opened by *M. Poyet*; he has had no accident; the Pupil has chang'd its shape, and he can distinguish Colours.

Claude Boucher, aged 72, had both his Eyes very much sunk, and his Eye-lids a little cleft: The Section of the *Cornea* of the right Eye was a little too small, by which means *M. Poyet* was oblig'd to press the Eye a little more than usual, to squeeze out the *Chrystalline*. A considerable Inflammation succeeded this Operation, which was followed with a Suppuration of the whole Globe of the Eye, and the Patient does not see at all. The left Eye had no Accident; the Patient sees indifferently well.

SUCH was the State of *M. Poyet's* Patients on *July* the 25th, which was six Weeks after the Operations.

It

IT now remains for us to tell his Opinion upon some Points, and compare his Operations with the others. *M. Poyet* thinks the Instrument for cutting the *Cornea*, ought to be straight like his own; he pretends that the Iris is by that means less liable to be wounded, and that the Section of the *Cornea* made with an Instrument a little Convex, becomes more difficult.

Mr. *Sharp's* Instrument is also straight, *M. La Faye's* Instrument is a little curv'd on the fore part of its Blade. But we have not been able to distinguish any difference in their advantages; they each of them had one Patient whose Iris was a little wounded.

MONSIEUR *Poyet* attributes the Inflammation which befel the Eye of one of his Patients, to the *Conjunctiva* being wounded; but we don't think this a sufficient Reason to account for it. However, we agree with *M. Poyet*, that the *Cornea* should be divided two thirds of its Circumference to facilitate the Exit of the *Chrystalline*, if it presents itself readily; or to be able by this means to cut with ease the *Capsula* of the *Chrystalline*, if it adheres too much to its Bed. We don't think that the Imposthumations which happened to the Eye

operated upon by M. *La Faye*, and to that operated upon by M. *Poyet*, are to be attributed to their Instruments. These Accidents have happened to M. *Daviel*; nor do we think these Accidents peculiar to the Operation of the *Cataract* by extraction of the *Chrystalline*, since we have seen them happen in the common method of Couching.

IN fine, we will give a short Account of the Success of these nineteen Operations which have been successively perform'd.

OF the six *Cataracts* couch'd by M. *Morand*, in the common Method, three have succeeded, and the Patients see very well; three of the *Cataracts* are risen again.

OF the Six which M. *La Faye* has operated upon by extracting the *Cataract*, there are two that see well, two who see not so well, and two who do not see at all.

Of the Seven operated upon by M. *Poyet*, two of them see well, two not so well, one sees Day-light, two do not see at all.

THIS is a true Account of the Proceedings and Success of the Operations; but we are not answerable for any Accidents which may have happened since our last Examination, as they would be foreign to the Operation.

Abstract

Abstract from the Memoirs of the Royal Academy of Surgery at Paris, publish'd Anno. 1753.

IN Page 338, M. *Daviel* distinguishes *Cataracts* into two Species only ; one he calls the true *Cataract*, or that of a good kind ; the other he calls the false *Cataract*, or that of a bad kind, when it is accompanied with other Diseases. He says, it is not the Colour of the *Cataract* which determines the good Species, but other Circumstances, such as the Motion of the Pupil of the Eye, and the Ability of distinguishing Day from Night.

MONSIEUR *Daviel* says, he receiv'd the first hint of this Operation from an Accident, which happened to him in couching the common way ; the *Chrystalline* was broken into Pieces, and escap'd into the anterior Chamber of the Eye. This determin'd him to open the *Cornea transparens* to empty the anterior Chamber, after which, the Pupil appear'd clear, and he could distinguish Objects ; but in ten Days after the Operation, there ensued an Inflammation and suppuration of the Eye, which he attributed entirely to the Violence done to the vitreous Humour, and to the inner

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Membranes of the Eye in his first Attempt; this made him determine not to proceed for the future in the same Method, but to begin with opening the *Cornea*, and afterwards to introduce a small Spatula into the anterior Chamber of the Eye, and to dislodge the *Chrystalline* from its Bed; which he did upon a Woman, and she was cur'd in fifteen Days.

THE event of this Operation induc'd him to try it upon four more, which he did with Success. But (says he) there appear'd to me to be still many things wanting to perfect this Method. After these four, he tried the same Method upon several others, but not with equal Benefit. From this time he thought proper to try a new Method of Operating. The preceding Operations had been perform'd by three Instruments, *viz.* a curved Needle, a Pair of crooked Scissars, and a small Spatula. But he now undertook the Operation with two Instruments only, one like a small Bistory, with which he opened the *Sclerotica*: Afterwards he introduced a small Spatula through the same opening into the Eye, betwixt the posterior Part of the Iris, and the *Chrystalline* Humour, and by this means easily depress'd the *Cataract*.

A GREAT many Operations of this kind being attended with Success, as many eminent Surgeons (he says) can testify, he thought for some time this method preferable to any other. He put in Practice all the different Methods of Operating, and with all the different Instruments: But he found upon the whole, that when the vitreous Humour, and the several *Membranes* that are situated behind the Iris, are disturb'd by the Needle, there very often succeeded Inflammations and Suppurations of the Eye, and sometimes an Atrophy of the Globe, with other Accidents. On which account he at length dropp'd this method, and determin'd for the future to Operate by opening the *Cornea*, as he had done at first.

IN the following Manner, he says, he has performed two hundred and six Operations, out of which, one hundred and eighty two have succeeded.

IT is of no Consequence (he observes) of what kind the *Cataracts* are, whether soft, hard, of long standing, or of different Colours. The Operation will succeed equally well, if the Eyes be found in other respects, because the principal Intention of his Operation is the
Ex-

Extraction of the *Chrystalline*, which is easily effected by these means. The Instruments he employs are a curv'd Needle with a sharp Point, and Sides like a Launcet; a blunt pointed curv'd Needle, with sharp sides; a Pair of crooked Convex Scissars; a small Spatula of Gold, Silver, or Steel a little curv'd, to lift up the *Cornea* with, another small pointed Needle, which cuts on both sides to open the *Capsula* of the *Chrystalline* Humour; a small Golden, Silver, or Steel Curette to facilitate the Issue of the *Chrystalline*, or to draw out the remaining Fragments when they stick to the Edge of the Pupil; and besides these, a small Pair of Pincers to take out any pieces of the *Capsula* of the *Chrystalline*. The Method of his Operating is this; he places the Patient opposite to him, upon a Seat of a convenient height, and covering one Eye with a Bandage, the upper Eye-lid of the other is help up by an Assistant plac'd behind the Patient, and the under Eye-lid is held down by the Operator, who places his Elbow upon his Knee by way of support to his Arm; then he plunges the first Instrument like a Launcet into the Bottom of the *Cornea*, near the *Sclerotica*, and thrusts it a little above the Pupil, taking

taking care not to wound the Iris; this being done, he withdraws this Instrument; then introduces the blunt pointed Needle, with which he enlarges the Incision by cutting on each side still more; as the *Cornea* is now grown flaccid, he makes use of a Pair of curved Convex Scissars, with which he enlarges the Wound on each side still more, till the *Cornea* is divided near three Parts round; then he introduces a small Spatula into the Wound, with which he lifts up the *Cornea*, and afterwards proceeds to wound the *Capsula* of the *Chrystalline* with a sharp small couching Needle. Sometimes, says he, this *Membrane* must be cut all round in order to bring it entirely out, if it is thickened and wrinkled, for fear it should obstruct the Pupil; when it is so cut, it may be extracted with a Pair of Pincers: After having cut the *Capsula* in this manner, the Spatula may be introduc'd bewixt the Iris and *Chrystalline* to detach it from its Bed, and facilitate its Exit.

THE *Cornea* is then to be put in its proper situation again, and at the same Time the inferior Part of the Globe of the Eye must be gently press'd, by which means the *Chrystalline* may be squeez'd out without breaking the posterior

terior Part of the *Capsula*, which keeps the vitreous Humour in its proper Place. M. *Daviel* says, he thinks there are no Inconveniencies attending this method of Operating, but what may with care be avoided; and it has this great Advantage over others, that the *Cataract* can never rise again.

The Manner of performing the Operation of extracting the Cataract with one Instrument only, by Mr. Warner.

THE Manner in which I perform the Operation is this.

THE Patient being seated in a Chair of a convenient height, with a low Back, I seat myself exactly opposite to him in another Chair of an equal height; this being done, an Assistant stands behind the Patient, who places his right Hand under the Chin, after having first cover'd the right Eye with an Handkerchief, and pulling his Head back against his Breast, he directs his Face upwards to prevent the Discharge of the vitreous Humour, and to keep him steady. The same Assistant lifts up the superior Eye-lid with the fore and middle Finger of his left Hand;

Hand, taking great Care not to press the Globe of the Eye above. I then depress the inferior Eye-lid with the fore and middle Finger of my left Hand; at the same Time taking notice not to press the Globe of the Eye below.

THE Patient is directed to keep his Eye as steady as possible, looking with it straight forwards, and a little upwards. I then plunge the Knife suddenly into the Globe of the Eye on its external Part near the Circumference of the *Cornea*, and opposite to the Center of the Pupil, directing it forwards betwixt the Iris and the *Cornea*, till its Point comes out on the opposite Side; by this means, the *Cornea* becomes at least half divided in its circumference. The Knife being kept in the Eye the whole Time, must be gently drawn backwards, and its Point carefully introduc'd through the Pupil, with which the *Capsula* of the *Chrystalline* Humour is divided. Immediately after the Division of this *Membrane*, I press the Globe of the Eye gently upwards with the fore and middle Finger, which have been hitherto kept upon the inferior Eye-lid, and by this means squeeze out the *Chrystalline* Humour through the Wound; the Knife being still retain'd in the anterior Chamber

ber of the Eye, the *Cornea* becomes a little elevated, and the Exit of the *Cataract* is on this Account facilitated.

I LOOK upon the Division of the *Capsule* of the *Cataract* to be of great Consequence in many Instances, since this *Membrane* becomes sometimes so tough and thickened, as to make a very considerable resistance to the Pressure; in which Case, a great part, or the whole of the vitreous Humour is discharg'd, and the *Cataract* sometimes remains behind, which will not admit of a second Attempt to an Operation.

BUT it sometimes happens, that the *Cataract* immediately follows the Division of the *Cornea*, without making any external Pressure upon the Globe, owing probably to the involuntary Contraction of the Muscles of the Globe, which draw the Eye inwards, and compress it on ev'ry side.

THIS Operation cannot be properly perform'd, but upon such as have the Power of keeping their Eyes from rolling about.

THE *Speculum Oculi* must never be made use of in this Operation, since the Compression from the Instrument has been found to be so great, as to squeeze out the whole of
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the vitreous Humour, even before the Operator could make the Wound sufficiently large through the *Cornea*, for the Expulsion of the *Crystalline* Humour.

IT very often happens that a Part of the vitreous Humour is discharg'd in the most successful Operation; but I have never known it happen otherwise in such Cases than to be soon restor'd, and the Eye to resume its natural Figure, by being replenish'd either with a fresh supply of the vitreous or aqueous Humour, or both.

THE Inflammation succeeding this Operation is generally very considerable; but neither that, nor the Operation, seems to be very painful. It is generally several Weeks after the Operation, before the Inflammation of the Eye is dispers'd.

DURING this State, it should be treated with emollient Fomentations, and cooling Ointments, and the Patient's body kept open.

IF the *Cornea* of the right Eye is to be divided, the Operator places himself in the same Situation as has been already directed, supposing he has a Power of using his left Hand to Advantage; but if he has not a sufficient command of his left Hand, he must stand be-

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hind the Patient, and, after having lifted up the superior Eye-lid, use his right Hand ; his Assistant at the same time standing before the Patient, and holding down the under Eye-lid with the same precautions already given.

WHEN the *Cornea* is divided, and the *Capsula* of the *Cataract* wounded, the Assistant must press gently upon the inferior Part of the Globe of the Eye, and squeeze out the *Cataract*.

THE Knife to be made use of in this Case, is exactly like that which is us'd in the Performance of the Operation of cutting the Iris, only that it must be about three times as broad, and about twice as thick.



CASE V.

Of an extraordinary Tumour in the right Orbit of the Eye.

R. S. aged 42, had a large schirrous Tumour formed in the superior Part of the Orbit, which had been growing seven Years, and was now become so large as to push the Globe of
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of the Eye considerably downwards, and out of its Socket. It appeared at first in the Shape of a small moveable Swelling, which took its rise under the upper Eye-lid.

THE Tumour increased gradually, and without Pain for the the four first Years. For the three last Years it became very troublesome, and full of Pain, which extended to the whole of that Side of the Head.

THE Sight of the Eye became impaired in proportion to the increase of the Tumour.

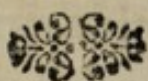
ON the 30th of *March*, 1749, he was admitted in the Hospital, and in ten Days afterwards it was cut out.

THE Tumour was found to extend itself from the outer Corner of the Eye, to within a very little of the inner Corner, and quite to the Bottom of the Socket. The Operation was difficult, and attended with considerable Pain, which continued for several Days, soon after which he became perfectly easy. During the Cure, there was a large Discharge from the Wound; in about eight Weeks the Wound was healed, and he continued perfectly easy. His Sight was much the same, as before the Operation.

REMARK.

WHEN the Eye is thrust out of the Orbit by a subjacent Tumour, the Tumour frequently takes its rise from the Brain itself; which Circumstance renders the Operation impracticable. Sometimes the Tumour, though it arises within the Orbit, is of a cancerous Nature, and affecting all the Contents of the Orbit, renders the absolute Removal of it impossible. These Circumstances have brought the Operation into Disrepute. But there may be a Species of schirrous Tumour within the Orbit, where the Operation may be attended with Success.

NOTWITHSTANDING, that after the Cure in the preceding Instance, the Eye remained in the Position it was before the Operation, and with the same Imperfection of Sight (from probably the Compression which the optic Nerve had sustained) yet the Patient being free from Pain, and in every other respect perfectly well, was sufficiently recompensed for the Pain of the Operation.





CASE VI.

Of an uncommon Tumour upon the Roof of the Mouth.

A. B. aged 40, had a Tumour formed upon the Roof of his Mouth, which at length had arrived to so great a Size, as to prevent his feeding upon any thing but Liquids. The Tumour had been growing about seven Years, and at length possessed the whole Roof of the Mouth. He came to *London*, in *June* 1747, and was admitted into the Hospital under my Care. In consideration of the foregoing Circumstances, and the Improbability of procuring Relief by any other methods, it was recommended to him to have it cut out; but at the same Time the Operation was judged hazardous from the *Hæmorrhage* that might probably arise from it, and the Difficulty of stopping it, as had happened sometime ago in a similar Case; but as no other Methods could be thought on for his Relief, I undertook the Operation, and performed it in the following Manner.

THE Patient being properly seated, and secured, a piece of Wood was placed betwixt the Teeth on the left Side of his Mouth; and a curved Knife, such as Gardeners make use of in pruning Trees, was conveyed to the posterior Part of the Tumour, with which I effectually separated the Tumour from its Basis. The *Hæmorrhage* that ensued upon the Operation was so trifling, as to require no Pains in stopping it. But in a few Hours afterwards, a considerable Artery burst out, which bled freely, and could not be restrained by pressure, or other gentle means. Seeing this, and considering the Impossibility of using the Needle and Ligature to Advantage, I had recourse to the actual Cautery, which answered the End, and the Patient was perfectly cured in three Weeks, without farther trouble.

UPON opening the Tumour it was found to consist of a firm cartilaginous Substance mixed with long boney Particles.

REMARK.

THE actual Cautery is hardly ever made use of in *England* by Surgeons of the present Age, to stop bleedings. The crooked Needle and Ligature are for many Reasons justly preferr'd
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to it. But nevertheless, there are some Instances where the actual Cautery may be found necessary, as the preceding Case undoubtedly proved.



CASE VII.

Of an encysted Tumour situated upon the fore-part of the Neck, successfully extirpated.

A. B. A Girl of about 14 Years of Age, had a Tumour formed upon the Fore-part of her Neck, immediately beneath, and on the left Side of the thyroid Cartilage; the Tumour had been growing about four Years, and was at length become so troublesome from its Situation and Size, as to occasion a Difficulty in breathing, and a total Inability of swallowing any thing but Liquids. It was of the encysted Kind, and composed of a Quantity of Fluid. Its Situation was betwixt the *aspera Arteria* and the *Æsophagus*, as appeared in the Operation. It was cut out, and the Patient did well in a few Weeks. But on Account of its deep Situation, only a Part of the

Cyst was dissected out, the rest of it came away in a few Days afterwards with the Dressings. The Patient, since the Operation, has been free from any Inconvenience in breathing, or swallowing; and is otherwise perfectly well.

R E M A R K.

THERE is a Species of Tumour sometimes formed betwixt the *Aspera Arteria* and the *Æsophagus*, which from its schirrous Nature, extent of its Basis, and deep Situation, renders all Attempts to Extirpation unadvisable. An Instance of which, *Tulpius* has given us in the 44th Chapter of his first Book of *Observations*.

A CASE similar to that, I was consulted about some time ago, in a Man 55 Years of Age. The Tumour increased so fast, as to destroy him in a few Months. But where the Tumour is differently circumstanced, both as to its Nature and Contents, the Operation may be advisable, as the preceding Instance undoubtedly proves. The Success of which sufficiently warranted the Undertaking.

C A S E



CASE VIII.

Of a Steatoma, possessing the greatest part of the Neck on one Side, successfully extirpated.

S. G. aged 45, had a large Tumour on the right Side of her Neck, which had been growing for twenty Years. It was much larger at its Basis, than at any other Part, and extended from the right mastoid Process, to the Clavicle on the same Side; and from all the *Vertebræ* of the Neck to the mastoid Muscle, under which a Part of it was situated. The Tumour was not attended with Pain, but had of late become so insupportable from its size, as to render her incapable of Service. Under these Circumstance, she applied to me. I saw no Objection to the Operation, and accordingly advised it, which was complied with. There was no extraordinary Circumstance or Difficulty attending the Operation, but that it required some care and nicety in Dissecting out that Part of the Tumour which lay under the mastoid Muscle upon the internal

ternal Jugular Vein, and carotid Artery. There was but one Vessel which required tying, (a Circumstance very uncommon in a Swelling of this Size, which weighed near four pounds.)

IN the Operation, all that part of the *Trapezius* Muscle covering the back Part of the Neck, was laid bare. The whole of the *Platysma Myoides* was taken away with the Tumour, and the *Coracobyoidæus* Muscle appeared in view. After the Tumour was removed, and the *Hæmorrhage* stopp'd, I pass'd the Needle and Ligature twice through the Integuments, in a transverse Direction, to prevent their Retraction ; by which means I hoped the Cure might be hastened. This seem'd to have the desired Effect, and the Wound was perfectly healed in six Weeks.

REMARK.

IN all steatomatous Tumours, it is absolutely necessary to remove the whole in the Operation, if possible ; and not trust to the Effects of Dressings, for the Removal of any part that is left behind.

I HAVE known an Instance, where, by trusting to this Method, it has been found necessary to repeat the Operation, which seldom fails to bring a Reflection upon the Surgeon.

I ONCE knew an Instance of this Kind in the Case of a *Steatoma*, which grew in the inner Corner of the Eye. Its Basis was situated upon the *Lachrymal Sac*; which, it was apprehended, there was a Danger of wounding with the Knife. On this Account, a very small Share of the Tumour was left behind. This in a few Months afterwards, arrived to the Size of the former Swelling, and required a Repetition of the Operation, which was then effectually executed, as I had an opportunity of informing myself some Years afterwards.



CASE IX.

Of an incurable Disease of the Æsophagus.

I HAVE already given an Instance of a difficulty in Swallowing, which arose from a Pressure made upon the *Æsophagus*, by a considerable Tumour that appeared externally upon the Throat; and observed that the Patient was cured in consequence of its Extirpation. I took notice likewise, that some
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of these Tumours arising in the neighbouring Parts, are not to be relieved by Operation, on account of their great Extent, &c.

BESIDES the incurable Tumours to which these parts are liable; there is another Species of Disease, which seems equally dreadful in its consequences, and incapable of being relieved by Physick or Surgery. This Disease is but too common, though not to my knowledge as yet described by Writers.

IN *July*, 1752, *F. L.* a young Woman aged 25, was admitted into *Guy's Hospital*, and put under the Care of the Physician, on account of a Difficulty in Swallowing, with which she had been afflicted for some Months. She had made use of all the Means that could be thought of in Physick for her Relief, but to no purpose.

THERE was nothing appeared outwardly that could lead to the Discovery of the Malady, but she complained of a particular Tightness in Swallowing, just below the back part of the *cricoid Cartilage*. The Part affected was situated too low to be looked into, but it was easily discovered by conveying down the Throat a bit of Sponge fastened upon Whalebone, and dipt in Sweet-Oyl; which, though
very

very small, could not be made to pass beyond it. She at length became incapable of taking any nourishment, and died soon after.

I OPENED the Neck after her Death, and inquired minutely whether I could discover any Swelling behind the *Æsophagus*, or betwixt that, and the *Aspera Arteria*; but there was nothing of this Nature that could be seen.

UPON taking out the *Æsophagus*, it appeared considerably thicken'd about an Inch in length, just beneath the *cricoid Cartilage*.

UPON opening the *Æsophagus* length-ways, its Coats appeared so contracted in the diseased Part, as to be only just capable of admitting a Passage to a common Probe. The internal Coat of the *Æsophagus* was in part ulcerated, and besmeared with Matter.

THE *Larynx*, *Aspera Arteria*, &c. appeared sound and well.

REMARK.

I AM afraid that this remarkable Case is one, amongst the many in Physick and Surgery, that could not possibly have been prevented, or even relieved, if its Nature had been originally known; and that this Observation only tends

tends to prove, what must unavoidably be the Fate in other Diseases of the like Nature.

HOWEVER, as it is always a Satisfaction to the Surgeon, and implies Judgment in him to be able to prognosticate with some Degree of certainty, what may probably be the Event of a future Disease of the like Kind, and by this means prevent the Administring of many useles Applications; for these Reasons, this Observation may not probably be esteemed altogether useles.



CASE X.

Of a Tumour situated upon the Forehead.

WHEN a Tumour, Excrecence, or any preternatural Appearance is born with Children; the *Phænomenon* is generally distinguished by the Name of a Mark, and attributed to some particular Desire of the Mother during Pregnancy. There are some of these which are Tumours of the encysted Kind and though at first they appear inconsiderable yet it frequently happens that they do not remain

main long in this State, but by gradually increasing, at length arrive to a considerable Size, proving troublesome, and unseemly from their Situation and Appearance: To prevent which, it is generally adviseable to remove the Tumour when small; by which means much Pain is prevented, and the Scar arising from the Wound becomes inconsiderable.

I WAS consulted some Years since in the Case of a Child near a Year old, who was born with a Tumour of a Claret Colour upon the Face; it was at first no bigger than a common Pea, but before she had arrived to this Age, the Tumour was increased to the Size of a Wallnut.

IT was judged adviseable to have it cut out, which was done, and the Patient was cured in a little Time.



CASE XI.

Of a Tumour situated upon the Occiput.

IN the Year 1750, I was consulted in the Case of a Child, near two Years old, who had a Tumour situated upon the *Os Occipitis*.
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The Tumour was as large as a Turkey's Egg, and appeared filled with a transparent Fluid. It arose from the back Part of the Brain, which was easily discovered, by examining the Basis of the Tumour. There was a Defect of almost the Whole of the *Os Occipitis*. The Child was lusty and strong, and had no visible Disease in its Limbs. I advised nothing, but to defend the Tumour from external Accidents ; but the Parents being dissatisfied with my Advice, consulted another Surgeon, who advised the Extirpation of it, which he did, and the Patient died in a few Days afterwards.

REMARK.

THIS is a Species of encysted Tumour which is sometimes seated upon the *Vertebræ* of the Loins, sometimes upon the *Vertebræ* of the Back, and at other times upon those of the Neck, *Os Sacrum*, or betwixt the Sutures of the Scull ; all of which I had seen before. But I had never before now, seen an Instance of a Tumour of this Kind upon the *Os Occipitis*. These Tumours are to be distinguished from all others by their Rise, Situation, the Circumstance of their being always born with the Subject, who is generally

generally afflicted with a partial Palsey; and by their Contents, which are Fluid, and commonly transparent.

THEY take their rise from the Brain, or spinal Marrow, where there is a visible Defect of the Bone; which from the Circumstance of the Spine being divided, or rather defective in it its processes, in that particular part, has given them the Name of *Spinæ Bifidæ*.

THE opening of these Tumours by Incision, or taking them off by Ligature, has been always found to be fatal; as observed by *Tulpius*, in the 29th and 30th Chapter of the 3d Book of his *Observations*; and by *Ruysch*, in his 34th, 35th, and 36th *Observations*. *Ruysch* observes, that Children thus afflicted, seldom live to fifteen Months old: but I knew an Instance of a young Man of twenty Years old, who had one of these Tumours upon his Loins. He was healthy, but had laboured under a Paralysis of his Legs from his Infancy; but not so bad a one, as to disable him from walking.

FROM this Observation I would infer, that it is always unadvisable to attempt the Extirpation, or opening of these Tumours; which

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piece of Advice has been peremptorily delivered by *Tulpius*, in the following Words. *Cave Sis improvidè unquam aperias, Quod tam facile occidit hominem.* N. B. *Ruyfch* has given us a Case like this in his 52d *Observation*.



CASE XII.

Of an extraordinary Disease of the humeral Artery.

WHEN a Bone, and its neighbouring Tendons and Ligaments are affected with Inflammation, Caries, &c. The Disease may sometimes extend itself farther, so as to affect the neighbouring Vessels; or it may probably happen, that the Diseases of these particular Parts may sometimes proceed from a previous affection of those very neighbouring Vessels, from which they receive their nourishment and growth.

C. D. was afflicted with a Caries of the Joint of the Elbow, which was attended with such Circumstances as rendered the Amputation of the Limb necessary. The Operation was performed

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at a proper Distance above the diseased Part, and the Vessels were taken up by the Needle and Ligatures.

IN a few Days after the Operation, the humeral Artery became so dilated above the Ligature, as to endanger its bursting. Upon this Account, it was judged necessary to perform the Operation for the Aneurysm, which was done, and the Vessel secured by Ligature above the upper Extremity of its distended Coats. After this, every thing went on seemingly well for some time, when suddenly the Artery appeared again dilated, and in Danger of bursting above the second Ligature. These Circumstances made it necessary to repeat the Operation for the Aneurysm; from this time every thing went on successfully, till the Stump was at the Point of being healed; when, quite unexpectedly, the Artery appeared a third Time diseased in the same Manner as before; for which Reason a third Operation for the Aneurysm was determined upon, and performed.

THE last Operation was near to the *Axilla*, and the Patient continued well from this time without any Relapse.

Query. Could the several Aneurysms of the humeral Artery be attributed to the sudden

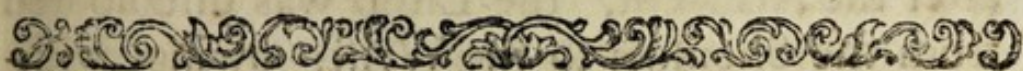
Check alone, which the Blood met with from its Extremity being secured by Ligature; or is it not more reasonable to suppose, that the Coats of the Artery, nearly as high up as the *Axilla*, were originally diseased and weakened? The latter seems the most reasonable way of accounting for these successive Returns of the Disease of the Vessel; since it is found from Experience, that such Accidents have been very rarely known to occur after Amputations, either of the Arm, or Thigh, where nearly the same Resistance must be made to the Circulation in every Subject of an equal Age and Vigour, who has undergone the same Operation.

IF it should be supposed that the several Dilatations of the Coats of the Vessels arose merely from the Check in the Circulation; it will not be easy to account for the final Success of this Operation; and especially when we reflect, that the Force of the Blood is increased in proportion to its nearness to the Heart.

THE Nourishment of the Stump may be accounted for, from the Ramifications arising from the principal Trunk about the *Axilla*, which becoming dilated, in proportion to the Resistance the Blood meets with in its passage through the humeral Artery, were found sufficiently

ficiently numerous and large to convey a proper Supply to the Parts beneath.

THIS Species of Aneurysm I have been describing, is distinguished by the Name of the true Aneurysm, and is a Disease which frequently happens to the *Curvature* of the *Aorta*, extending sometimes to both sides the Neck, sometimes producing convulsive Fits, and admits of no other than a palliative Relief.



C A S E XIII.

Of an Aneurysm of the humeral Artery.

H. M. aged 37, was admitted into the Hospital in *July* 1753, with a Disease of the right Arm, which upon inquiry was found to be greatly swelled and enlarged. The Tumour extended from a little above the bending of the Elbow, to pretty near the middle of the Cubit; and appeared somewhat discoloured, and pointed on its superior part. Upon pressing the Tumour, I discovered a Fluctuation, but there was not the least perceivable Pulsation. He informed me of his having been

blooded in the Basilic Vein about 13 Months ago, that he felt considerable Pain from the Operation, and that the Blood was discharged through the Orifice by leaps. Immediately after being blooded, he perceived a small Tumour to arise in the Neighbourhood of the Orifice, which in a Week's time arrived to the Size of an Egg, and continued to increase gradually for nine Months. For a few Weeks after the Accident, the Limb was discoloured from the Shoulder to the Wrist, owing, without doubt, to the confinement of the extravasated Blood. He had considerable Pain for the first three Months.

THE Operation was determined upon, and performed in the following Manner. The Tourniquet being fixed upon the humeral Artery, and the Arm disposed in a proper Situation, and firmly secur'd.

AN Incision was begun at the upper Extremity of the most prominent Part of the Tumour, and continued downwards about three Inches, directing the Knife in such a Manner as to describe the half of an Oval; then a second Incision was made on the opposite Side in the same Manner; by which means an oval Piece of the Integuments was cut out. Upon their removal,

removal, the Contents of the Tumour were discharg'd. It consisted of a large Ball of coagulated Blood of a fibrous Texture contained in a thick Cyst, which appeared like the Coats of a Vein. Upon slackening the Tourniquet, the Wound of the Artery appeared circular, and its Coats were discoloured, and thickened at least an Inch above its Division. A crooked Needle with a Ligature was passed under the Artery above the diseased Part, and tied upon it, &c. A second Ligature was made upon the Artery below its Orifice, which should always be done to prevent the risk of an *Hæmorrhage* from this Part; since it has been found that by neglecting to do this, a considerable Discharge of Blood has ensued some Days after the Operation, and the Patient's Life been brought into imminent Danger by a Reflux of Blood from the neighbouring Anastomoses. After the Operation, the Wound was dressed in the common manner, and the Patient removed to bed.

IMMEDIATELY upon tying the Artery, he complained of a Numbness in his Fingers, and no Pulsation could be discovered in his Wrist; but in half an Hour after the Operation, a very regular Pulsation appeared, and his Numbness began to go off. FROM

FROM this time he went on very well for several Weeks, but was at length seized with general Convulsions, attended with the Symptom of a locked Jaw, which killed him.

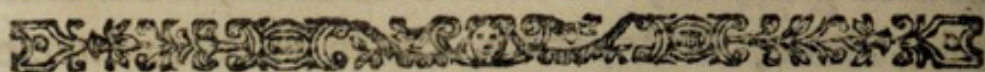
REMARK.

As a Pulsation in the Part is one of the principal *Characteristics*, by which an aneurysmal Tumour is distinguished from a Tumour proceeding from any other Cause; the want of it in the preceding Case may be accounted for, from considering the Distance which the Artery was at from the Integuments, occasioned by the Quantity of extravasated Blood which lay upon the wounded Vessel; and again, there could be no room to doubt of the Nature of the Disease, as the original Symptoms were a sufficient Proof of its certainty. The want of Pulsation in this Instance is not peculiar, since by the succeeding Cases it will appear, that they were likewise attended with the same Circumstances, partly from the same Cause, and partly from the deep Situation of the Vessel under the *Gastrocnemii* Muscles, which rendered their Pulsations equally imperceptible.

THE Circumstance of a locked Jaw is no very uncommon Symptom; it sometimes comes

comes gradually on after a Wound, a Fracture of a Bone, Dislocation, or in Consequence of the Stricture made upon the Arteries, and their neighbouring Parts by Ligatures; at other times this Symptom happens on a sudden, and is generally the Fore-runner of a speedy Dissolution. But there are Instances where these Symptoms have been effectually removed by large Blisters applied to the whole of the back part and Sides of the Neck.

Two Instances of which success, I remember to have seen within these few Years. It is generally advised upon undertaking an Operation of this kind upon the Arm, to have the Amputating Instruments in readiness, lest a Mortification should ensue upon the Parts beneath the Ligatures, in consequence of an Obstruction arising in the Vessels. But notwithstanding this is a Circumstance which may possibly happen, yet I must own, amongst the several Operations of this Kind which I have performed myself, or seen performed by others, I never once knew an Instance of its turning out so unfortunately, as to require Amputation.



CASE XIV.

Of an Aneurysm of the Arteria Tibialis Postica.

J. B. aged 34, the last Week in *April*, of the Year 1748, was taken with a Cramp a little below his Ham, which was followed with an immediate swelling of the Calf of the Leg, attended with excessive Pain; it continued in much the same State till the Month of *July* following, when it began to increase both in Size and Pain.

THE whole Leg was exceedingly tense, but there was not the least Pulsation to be discovered.

ON *October* 15, the Operation for the Aneurysm was attempted.

UPON opening the Tumour, the congealed Blood appeared to have acquired a fleshy Consistence; and adhered very firmly one Portion of it to another. Upon removing it totally, the *Tibia* and *Fibula* were found carious, and the Orifice of the ruptured Artery appeared just between the Heads of the *Tibia*
and

and *Fibula*, so that it was impracticable to tie it, or at least judged unadviseable, considering the Condition of the Leg.

IT was amputated above-knee on the Spot, and the Patient did well.

UPON opening the Knee, the *Os Femoris* was affected, and consequently the Artery diseased above the Part where it appeared to be ruptured. Some Years ago, the Operation for the Aneurysm was performed in a similar Case within a few Hours after the Rupture of the Vessel. The Tumour increasing so fast, and the Pain proving so intolerable, that it was necessary to loose no time.

THE *Tibialis Postica* was burst in the Middle of the Leg, it was taken up with some difficulty, and the Patient recovered.

REMARK.

WHEN we are convinced of the same Species of Aneurysm happening to any part where sufficient Pressure cannot be made to restrain the *Hæmorrhage*; it is generally adviseable to proceed immediately to the Operation, lest the neighbouring Parts should become so affected by the Extravasation, as to bring on a Rotteness, and by that means render
the

the Operation impracticable, as happened in the first Instance, where it was found necessary to part with the Limb to save Life.

IN the second Instance, it is probable that this was prevented by the timely Assistance given by the Operation.

IN Aneurysms of the Arm proceeding from a Wound of the Artery by a Launcet, the Cases are differently circumstanced; and though it is found in general, necessary to proceed to Incision and Ligature for their Cure, on account of the Part having been neglected for some time after the Accident; yet there are Instances of Cases, where, upon timely Application, the Cure has been effected merely by Compress and Bandage; which I would recommend to be first of all tried in recent Cases, and to be continued for three or four Weeks at least, if there is no very good reason to forbid it.

THE Manner in which the Wound of the humeral Artery has appeared, upon Examination after Death, to be cured, is by an intimate Cohesion of the *Aponeurosis* of the *Biceps Muscle*, of the *Capsula*, and of the Wound of the Vessel; and it has been farther observed, that the Orifice made in the Artery (which appeared

appeared circular) has been stopt up with a Clot of solid Blood, resembling, on its external part, the Head of a Nail; which adhering firmly to the *Cicatrix* of the Integuments, produced a considerable Callosity.



CASES XV and XVI.

Two remarkable Cases of Ganglions, where the Operations were performed with Success.

GANGLIONS, or Tumours formed upon the *tendinous* and *ligamentous* Parts of the Extremities, are a Disease sufficiently known to every Surgeon of Experience, and have been treated of by most Writers under the Head of encysted Tumours.

THE Parts most frequently attacked with this kind of Swelling are the Hands and Feet; but there are Instances of their appearing upon many other parts of the Body; an extraordinary Instance of which I was sometime ago consulted in, that possessed the whole back Part of the Neck.

THESE Tumours sometimes take their rise from a Strain, and at other times they happen

pen without any previous Accident. Unless they disperse of themselves, or are removed by Art when recent, they frequently increase to a considerable Size, proving very inconvenient by depriving the Part of its Strength and Motion.

THE Methods prescribed for their Cure are various, but those which are said to have been found most effectual, are constant Pressure, and sudden Blows, which may have sometimes succeeded. At other times the Tumour has been known to disappear for a Time only, and at length has returned again, owing without doubt to the Cyst being left behind; which is well known to be frequently the Case in every other Species of encysted Tumour, where the Bag is not sufficiently destroyed in the Operation, or by future Applications.

BUT as the Instances are so common, where all Attempts to disperse them prove ineffectual, and the Parts become disabled both from the Size and Situation of the Tumour, the Surgeon is at length obliged to have recourse to the Knife, as a radical Cure.

I KNOW there are some who object to this Operation, on account of the Danger attending

a Wound of the subjacent Tendon, or Ligament; imagining that such an Accident would probably be attended with the worst of Consequences. But this objection can be of no great weight, since it is always in the Power of a skilful and steady Operator to avoid this Accident, by cutting away only a Part of the Cyst, and leaving the rest behind to digest out with the future Dressings; which it will most certainly do, if the outward Wound be made sufficiently large, as has been already most judiciously and fully explained by Mr. *Sharp*, in his Chapter of *encysted Tumours*.

BUT supposing it should happen that the Tendon, or Ligament, or both should be wounded in the Operation, the Consequence will not probably be so bad as is apprehended, since every Day's Experience proves, that accidental Wounds of these Parts are known to do well with proper Treatment; and, as some proof of the Validity of this *Hypothesis*, the two following Cases are related. In both of which it was found absolutely necessary to divide a considerable Ligament, before the Operation could be properly and effectually performed.

A. M. 19 Years of Age, in the Year 1745, strained her Wrist by a fall. The Accident was immediately followed with great Pain, a Weakness, and Swelling of the whole Hand; which, notwithstanding the proper Methods used for her Relief, continued much in the same State till 1749; when she perceived a small distinct Tumour to arise in the inner, and lower part of her Wrist, which in a few Days increased to so great a Degree, as to render her incapable of shutting her Hand, or moving her Fingers.

ON the 21st of *April* 1750, she applied to me. Upon Examination I discovered a Fluid in the Tumour which extended for about an Inch above the *Ligamentum transversale carpi*, to about half an Inch below it, and upon Pressure seemed to pass underneath it.

I DETERMINED upon the Operation, which I performed in the following Manner. Her Hand being properly placed and secured upon a Table, covered with a double Blanket; I began my Incision a little above the upper Extent of the Tumour, and continued it to a little beyond its lower Extent, through the Integuments, which I carefully dissected upon each side. This gave me an Opportunity of
discovering

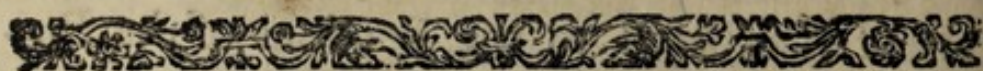
discovering its exact Situation, which I found to be under the Tendons of the *Flexor carpi ulnaris*, and *Palmaris longus Muscles*. Both of which were considerably lifted up, and removed from their natural Situation, by the subjacent Tumour. It likewise extended itself under the *Ligamentum transversale Carpi*, which there was a Necessity of dividing, before I could have an opportunity of dissecting the Tumour from its Basis. The upper Part of the Cyst was strongly attached to the inferior Parts of the Tendons of the *Flexor Carpi ulnaris*, and *Palmaris longus Muscles*. The lower Part of it adhered to the Tendons of the *Perforans* and *Perforatus Muscles*; from whence I fairly dissected the Whole away.

THE Contents of the Tumour were a Composition of a *gelatinous and steatomatous Substance*.

SHE continued in a good deal of Pain for four Days after the Operation; at the End of that time she grew easy, and so continued to the finishing of the Cure, which was perfected in six Weeks without any considerable Inflammation, or the least Abscess, and she was restored to the perfect Use of her Hand.

THE other Case was so like That I have just now described, that I look upon it as unnecessary to give a particular Account of it.

THE Operation was performed in the same Manner, and the Cure was attended with no other Difference in its Progress than this, that the Patient had a small Abscess which arose on the middle Part of the Fore-arm, which was opened by Incision, and did well, with very little trouble. The Use of the Hand was as perfectly recovered in this, as in the preceding Case.



CASE XVII.

Of a Ganglion situated upon the Fore-finger.

C. P. A very lusty Woman aged 50, some Years ago perceived a Swelling to arise upon the anterior Part of her Fore-finger, which at length increased to the Size of a Pigeon's Egg. It was now become so troublesome from its Size and Situation, as to deprive her of the Use of her Finger, and to render it quite incapable of Motion.

IT was not attended with much pain, but from the Circumstance of its uselessness, she was desirous of having it removed.

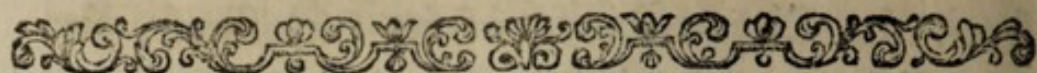
SHE had asked the Advice of several Surgeons who refused to undertake it.

AT length she applied to me : I saw no objection to the Operation, and accordingly proceeded to the Extirpation of the Tumour.

ITS Contents were intirely *gelatinous*, and contained under the *Capsula* of the Tendons of the Flexor Muscles of the Index, or Forefinger.

THERE was neither much difficulty, nor pain, in the Operation ; and the Patient did well in a short Time, without the least Interruption or bad Symptom. She now enjoys the perfect Use of her Finger.

BUT notwithstanding the favourable Circumstances that attended these several Operations ; I would not have it inferr'd from what I have said, that Inflammations and Abscesses very rarely happen in Consequence of the Operation. I confess, I have known them to occur several times, but I never knew an Instance of their terminating otherwise than well.



CASE XVIII.

Of an Empiema, where the Operation was unsuccessfully performed.

NOVEMBER 1750, S. K. aged 37, in May last was suddenly seiz'd with a Pleuritick Pain in his right Side, attended with a Fever and difficulty in Breathing; for which he put himself under the Care of a neighbouring Apothecary, who bled him occasionally, and at the same Time administer'd such Medicines and topical Applications to the Part as he thought proper, but without effect. He continued much in the same State, till July following; when he was admitted into the Hospital under the Care of the Physician, who prescribed for him near four Months, but without much Benefit. On the first of November following, he was attacked with an uncommon difficulty of Breathing, and Pain in his right Side, for which he was blooded, this gave him some relief. On the Day following, I was consulted; upon learning his Symptoms, and

and upon inquiring into farther Particulars, I discovered the right Side of the *Thorax* to be somewhat larger than the Left, and the Integuments appear'd a little thicken'd, but without the least Tendency to Discoloration, Softness, or any Appearance of a Fluctuation. He was incapable of lying on his left Side without suffering excessive Pain, which he described as extending from the Middle of the Breast-bone to the Back. This was perceivably attended with so great a difficulty of Breathing, as seem'd to threaten Suffocation. He could lie on his right Side without any considerable inconvenience, but he was most easy when lying on his Back; he never had been troubled with a Cough till within this last Month; nor had he ever perceived the least Discharge of Matter, either by spitting, or otherwise. His Pulse was quick and low, his Countenance pallid, he had no Appetite, and complained of great restlessness. It is remarkable, that he never remembers to have had any Rigor, which is a Circumstance that commonly attends the Formation of Matter. Upon the Appearance of the foregoing Symptoms, I thought proper to advise the Operation for the *Empiema*, which he readily assented to, and I performed it on the

Spot in the following Manner: When the Patient was properly situated and secured, I began by making an Incision of about two Inches and an half long with the Course of the Ribs, upon the Part where they form their greatest convexity, and betwixt the sixth and seventh Ribs, into the Cavity of the *Thorax*, from whence there issued three Pints of a thick foetid Matter; from this Instant, he was greatly relieved. The Discharge was very considerable for the five first Days, when it began to decrease. From the Moment of the Operation, he was capable of lying on either side, or of sitting upright without the least inconvenience; and he continued to grow better till the first of *December* following, when his Discharge increased, and continued in great Quantities till his death, which happen'd in about seven Weeks after the Operation. Upon opening the Body, I found the *Diaphragm* destroy'd quite through, and the upper Part of the Liver had suffer'd greatly from the incumbent Matter. The Lungs lay loose in the Cavity of the *Thorax*, and were not in the least ulcerated, or apparently diseased.

N. B. In the Operation, the Incision was made nearer to the superior Edge of the lower Rib,

Rib, than to the inferior Edge of the Upper, which prevented the Risk of wounding the, intercostal Artery.



CASE XIX.

Two Cases of the Operation for the Empiema successfully perform'd and read before the Royal Society the 19th of March 1752, and 28th of June 1753.

CASE I.

T. H. aged 27, was admitted into the Hospital on the 19th of *December* 1751, on account of a Pain in his right Side, and Cough, which he had labour'd under for three Weeks; he was immediately put under the Physicians Care, but notwithstanding all proper methods used for his Relief, his Disorder increased till the 13th of *January* following, when I was consulted.

UPON enquiry, I found him afflicted with the following Symptoms. A quick low Pulse, frequent Cough, and difficulty of Breathing, which last Symptom was greatly increased upon

lying on his left Side, or upon sitting upright. He appeared greatly emaciated, his Countenance was very pallid, or fallow. Upon further enquiry, I found the right Side of the *Thorax* somewhat enlarged; the Integuments were visibly thicken'd, but without the least Discoloration, or perceivable Fluctuation. However, being perswaded from the foregoing Symptoms, that there probably was an extravasated Fluid underneath; I advised the Operation which was consented to, and I performed it upon the Spot in the following Manner.

THE Patient being conveniently seated, I made an Incision of about three Inches long with a Knife, between the tenth and eleventh Ribs, counting from above, and at about four Inches distance from the *Vertebræ*; the direction of the Incision was agreeable to the Course of the Ribs, and upon being made nearer to the superior Edge of the eleventh Rib, than the inferior Edge of the tenth, the intercostal Artery by that means escaped being wounded; upon dividing the intercostal Muscle, very near twenty Ounces of Matter were discharged. After this, I introduced my Finger through the Wound into the Cavity of the *Thorax*, but
found

found no adhesion of the Lungs to the *Pleura*; from whence I am inclined to conjecture, that this Abscess was originally form'd in the cellular *Membrane* of the *Pleura*, and had at length made its way into the Cavity of the *Thorax*.

WHAT seems to corroborate this Conjecture is, that the violent Symptoms which happened upon lying on the sound Side, or upon sitting upright, did not occur till within a Week before his Application to me. From the Moment the Matter was discharged, he found very great Relief; his Respiration became quiet, his Fever and Cough gradually abated, till in about six Weeks he perfectly recovered, and was accordingly dismiss'd the Hospital. The Discharge from the Wound continued in considerable Quantities for the first Fortnight; during which time the Wound was kept properly open with Tents; but when the Discharge was no more than what might be expected from a superficial Wound of the same Size, all Tents were discontinued, and superficial Applications only made use of.

CASE



CASE XX.

On the 19th of March 1752, I did myself the Honour of communicating to this Society the Case of T. H. on whom I had perform'd the Operation for the Empiema with Success. Since then I have perform'd the same Operation a second time with equal Benefit; and therefore presume to lay this Case likewise before you as a farther Proof of its usefulness under the like Circumstances.

CASE 2.

J. C. aged 17 Years, was admitted into Guy's Hospital on the 10th of May 1753, on account of a Complaint in his Chest which he had labour'd under for three or four Weeks.

His Symptoms were a continual Pain in his left Side, a difficulty in Breathing, and an inability of lying on his right Side, or of sitting upright, without greatly increasing his Complaints; his Pulse were quick and low, he had a short Cough, was a good deal emaciated, and appear'd fallow in his Complexion.

UPON

UPON Examination, I perceiv'd a small Tumour situated on the anterior Part of the *Thorax*, obliquely on the left Side of the Extremity of the Sternum, or Breast-bone. There was not the least Discoloration of the Integuments. Upon pressing the Tumour his Pain, and difficulty of Breathing were encreased, and there appeared something like a Fluctuation under my Fingers. He had never had any Rigor, which is a Symptom generally attending the Formation of Matter ; but from Experience I have found, that the Want of this Symptom is no proof of the contrary.

FROM the foregoing Circumstances and Symptoms, I made no doubt of the propriety of the Operation, which I perform'd in the following Manner.

THE Patient being properly situated and secured, I began with making an Incision of about two Inches long through the Integuments and tendinous Expansion of the *oblique Muscles* of the *Abdomen*, upon the most prominent Part of the Tumour ; then I proceeded to the making a second Incision of an equal length with the first, transversely through the upper Part of the *Rectus Muscle* (which had a perfect healthy Appearance) directing my
Knife

Knife forward betwixt the *cartilaginous* Portions of the seventh and eighth Ribs, and the Extremity of the *Sternum*, into the Cavity of the *Thorax*; upon which, a thick clotted Matter was discharged, to the Quantity of twenty three Ounces and upwards.

As soon as the opening was made into the Cavity, and the Fluid began to be evacuated (which was by leaps) the Patient express'd a painful and uncommon kind of Sensation, which he compar'd to a Weight being suddenly taken from his Heart. Hence, I conjecture that this part had suffer'd so great a Compression, as to have been for some time incapable of performing its natural Actions, but, upon the Fluid being set at Liberty, the Ventricles of the Heart probably became immediately more dilated, than they had been for some time before, on account of the Weight they had sustain'd. After the whole of the Matter was discharged, I introduced the Forefinger of my right Hand into the Cavity, with which I evidently felt the Lungs (quite loose and free from Adhesion) the *Mediastinum* and superior part of the *Diaphragm*, which last part had been press'd considerably lower than its natural Situation, by the Weight of
th

the incumbent Matter ; from whence it undoubtedly appeared, that this great Quantity of Fluid had been contained in the *Thorax*. After the whole of the Matter was discharged, I introduced a Linen Tent, properly secured, into the Cavity, which was continued to be introduced every Day for about the Space of three Weeks, now and then, as occasion required, making use of the prepared Sponge-Tent. The Discharge was considerable for the first Week, when it began to decrease gradually, till at the end of three Weeks there was no discharge at all. From this time superficial Applications only were made use of ; at the End of five Weeks, he was perfectly well in all respects, and had recover'd his former plumpness and healthy Appearance.

I MUST observe to you, that about two Years ago he receiv'd a violent Blow on his left Side by a Fall, for which he had little or no Care taken of him. He has ever since this Accident been affected with some Complaints in his Side at times, but not constantly, nor have they ever been so bad as to prevent his acting in his business as a Sailor, till within a few Weeks before he applied to me.

R E-

REMARK.

FROM the Circumstances, and Symptoms attending the three preceding Cases, I think it could hardly be doubted what the Nature of the Disease was; and as the Lungs, *Diaphragm*, and *Intercostal Muscles* must not only be impeded in their Actions, in proportion to the Quantity of extravasated Fluid, which is confined in the Cavity of the *Thorax*, but must also be in great danger of Ulceration or Consumption from the Quality, and Pressure of the incumbent Matter; I look upon the Operation in all Cases of this Kind, to be absolutely and immediately adviseable, and that it should not be deferred in Expectation of the Fluid being absorbed into the Circulation, and evacuated by Urine, by Stool, or by Spitting: Since it must be acknowledged, that the Instances are very rare where these Events have been successfully brought about; and at the same time that the Instances are numerous, where Death has ensued in consequence of the Operation being deferr'd too long, or being totally neglected.

THE Operation for the *Empiema* is neither very difficult nor dangerous, and I conclude there can be no better Arguments advanced in support

support of its safety and usefulness, when undertaken in time, than the Success that attended its performance in two of the three preceding Cases; in which it has been already observed, that the Diseases were only of a few Weeks standing: in the third Instance, where it has been likewise already observed, that the Operation was not successful; I think this want of Success might, with some Reason, be attributed to the Injury which had been communicated to the *Diaphragm*, and superior part of the Liver, in consequence of the long Confinement and quality of the Fluid; or it may possibly happen, that the Matter had been originally formed in one or both of these parts, and discharged itself into the Cavity of the *Thorax*; which, for want of being evacuated in time, had at length increased the Disease, and destroyed the Patient by the Largeness of the Ulceration, and Quantity of the Discharge.





CASE XXI.

Of an incarcerated Hernia Inguinalis.

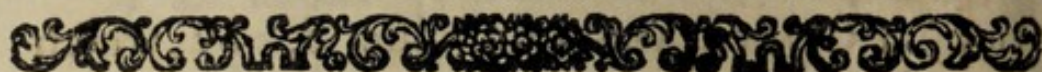
A. B. about 30 Years of Age, in the Year 1748-9, was brought into the Hospital with an *Hernia Inguinalis*, which he had been subject to for many Years without ever wearing a Truss. It had been down for ten Days attended with excessive pain, without being once return'd, or any means used to relieve him. His Symptoms were a low languid Pulse, frequent reachings to Vomit, and Hiccoughs. The Tumour was still exceedingly tense, for which reason it was judged advisable to proceed immediately to the Operation. The Contents were a Part of the *Intestinum Ileum* and *Omentum*, both exceedingly inflamed, and the latter tending to Mortification. They adhered to each other, and the *Omentum* to the *Sac* formed by the *Peritoneum*, which was become thicker than a Crown piece, and seemed quite distinct from the *Tunica Vaginalis*, upon which it lay. The *Sac* as well as the diseased

Part

Part of the *Omentum* were cut off, without making any Ligature upon either of them. The Intestine and sound part of the *Omentum* were returned into the *Abdomen*, and two stitches were made through the Integuments, after having first dilated the Rings of the *oblique Muscles* upwards and outwards with a Pair of probe Scissars. Soon after the Operation, a Clyster was administer'd, by which means two or three Stools were procured, and the Patient grew tolerably easy. The second Day after the Operation, the whole *Abdomen* became prodigiously enlarged and tense; but in a few Days afterwards it subsided, by the help of Fomentations and Clysters, and the Patient went on seemingly well to the eighteenth Day; when on a sudden he became very restless, a violent Looseness, attended with *delirium*, ensued, and he expired about forty eight Hours after this Attack. Upon opening the Body, I found the Intestines in general greatly inflamed, the *Ileum* was mortified in many places, and several Abscesses were form'd in the Mesentery.

Query. Is it not probable, that the bad Symptoms, such as Inflammation, Tension, &c. ceased a few Days after the Operation; and

that the Fever, attended with Inflammation, which came on afterwards, was merely accidental, and not at all the Effect of the Operation ? Since it is very certain that all Inflammations of the Bowels, terminating in Mortification, are very speedy, and admit of no great Intermifion in their Progress.



CASE XXII.

Of an Hernia Umbilicalis from Tapping.

NOTWITHSTANDING it seldom happens that an *Hernia* is form'd in consequence of opening the Integuments at the Navel, in order to evacuate the Water contained in the *Abdomen*, in that Species of Dropsy call'd *Ascites* ; yet there have been undoubted Instances, where this Species of Rupture has arisen merely from this Cause, and been attended with such Circumstances as made it necessary to perform the Operation for the *Hernia Umbilicalis*. It appears that the opening made through the *Peritoneum*, tho' very small, is nevertheless capable of being so enlarged

enlarged from the Stream of Water in the time of its Evacuation, or from Pressure of the Intestines against the internal Part of that *Membrane*, grown greatly distended and flaccid from the Quantity and Nature of the Contents, as to make it incapable of resist- the Force it sometimes meets with in Cough- ing, Sneezing, &c.

A. B. was admitted into the Hospital with an Ascites or Dropsy of the *Abdomen*, which was become so distended by the Water, as to render him incapable of lying down without bringing on such a difficulty of Breathing as threaten'd suffocation (from the Compression, probably, which the *Diaphragm* and Lungs labour'd under in this Situation) for these Reasons it was judged necessary to Tap him. Upon Examination, his Navel appeared *protuberant*, and pushed forward as large as an Egg. Its Integuments were thin, and almost transparent. Upon my considering that an opening made through this part would be sufficient to evacuate all the Water; and having several times performed the same Operation (agreeable to the Advice of the Moderns) without incurring the least inconvenience, I did not at all hesitate at the

Propriety of repeating it, which I did in the following Manner.

THE Patient being seated in a Chair of a convenient Height, and his Hands properly placed across the upper Part of the *Abdomen*, at the same Time having an Assistant to press on each side of it, I plunged the Point of a common Lancet into the Navel on its most protuberant part, and by this means discharged the Whole of the Fluid without farther trouble : After this, a Flannel Compress, dipt in Spirits, was applied upon a Plaister that was first put to the Wound, which was secured on by a long Flannel Roller, and the Patient removed to Bed. He appeared as well as could be wish'd for several Days, but at length complain'd of excessive pain in the Navel, which appear'd swell'd and inflamed, attended with frequent reachings to Vomit and Fever (the constant Symptoms of an incarcerated *Hernia*) I endeavoured to relieve him by Fomentations, Clysters, &c. but his Pains remaining intolerable, and being incapable of assisting him by any other means. I proceeded to the Operation, which I performed in the following Manner.

THE

THE Patient being removed from his Bed and laid supinely upon a Table of a convenient Height, cover'd over with a double Blanket, I placed a Pillow under his Shoulders, by which means the *Abdomen* became relax'd; his Legs at the same Time hanging down from the Sides of the Table, were properly secured by two Assistants. After this, I began with making an Incision, with a round edged Knife, at the upper Extent of the Tumour; continuing it in a straight Direction downwards, a little beyond its lower Extent, carefully through the Integuments: Upon which, I discover'd a Portion of the *Intestinum Ileum* without any of the *Omentum*; the *Intestine* was greatly inflamed. When I had proceeded thus far, I introduced the Fore-finger of my left Hand through the Wound into the Cavity of the *Abdomen*, with which I gently compress'd the *Intestine*, and then proceeded to enlarge the Wound with the same Knife, which I introduced upon my Fore-finger. This gave me an opportunity of returning the *Intestine* without Difficulty. It appear'd quite loose, and free from adhesion. When the *Intestine* was thus return'd, I made one Ligature across the Wound, by passing a crooked

Needle through the Integuments only, at about a Quarter of an Inch from the Edge of the Lips of the Wound : but the *Abdomen* appearing considerably distended in two Days after the Operation, and the Patient complaining of great uneasiness from the Ligature, I immediately cut it away, which relieved him ; but the Symptoms of his Vomiting, &c. still continued, and he expired in a few Days afterwards.

Query. Is it not probable, that if the Operation of the *Paracentesis* had been perform'd on the left Side of the *Abdomen*, obliquely below the Navel, half way betwixt that and the Spine of the *Os Ileum*, that the Patient might have lived for some time, as is very common in Cases of this Kind ; and is it not more than probable that his speedy Death was brought on by the strangulated *Intestine* ? If this is allow'd, it may be inferr'd from the preceding Case, that the Operation cannot be said to be entirely free from that Danger, which may always be avoided by tapping with the Trocar, in that part of the *Abdomen*, I've just now described. Though I must own this Accident is not likely to occur often, since this is the only Instance of
the

the Kind I have ever seen, which arose from the like Cause.



CASE XXIII.

Of a Wound Penetrating the Abdomen.

J. W. aged 22, was stabb'd with a Horse-Picker on *Wednesday* the 22d of *November*, 1748, about three Inches a little obliquely on the right Side, below the Navel. He bled very little at first; about an Inch of the small *Intestine* push'd out at the Orifice, which was return'd by a Surgeon, and the Wound sew'd up.

THE Wound continued discharging Blood in small Quantities till the *Sunday* following, when his Fever increas'd, and a large Quantity (as nearly as could be guess'd about a Pint) of blackish curdled Blood, burst out at the Orifice; the Ligature burst open the following Week.

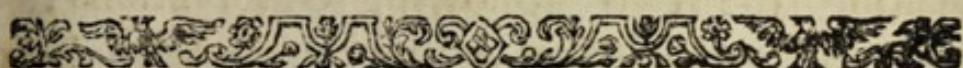
THE Fever continued with Vomitings, accompanied with a Tension of the Whole *Abdomen*, which was particularly hard and tumified, in the Neighbourhood of the Orifice.

IN this circumstance, I had thoughts of dilating the *Abdomen*, in order to evacuate the extravasated Blood; but the *Sunday* following it discharged itself in a larger Quantity than before, and continued to discharge very greatly for some Days, when at last it began to diminish; all the bad Symptoms (Vomiting, Purging, Fever, loss of Appetite, &c.) by degrees abating, and in process of time the Discharge was purulent, but considerable in quantity. However, it healed without any further Incision, and was well the 17th of *January* following.

Query. Is it not reasonable to imagine, from the Circumstances attending this Case, that the Violence of the Symptoms arose from the extravasated Fluid being confined in the Cavity, and from the Inflammation consequent, upon the Needle and Ligature being pass'd through the *Peritoneum* and tendinous expansions of the *transverse Muscles*?

IT is probable, that if a free Discharge of the Blood could have been procured from the Beginning (which might possibly have been effected by leaving a depending Orifice) these Symptoms might have been prevented. So that in all Wounds penetrating the Cavity
of

of the *Abdomen*, we should only make use of the Suture, where the Intestines are incapable of being retained in their proper Situation without it; at the same Time having a Regard to a depending Orifice for the Discharge arising from the divided Vessels.



CASE XXIV.

A singular Case of the Stone.

IT is a Maxim laid down by the most experienced Writers in Surgery, that when a Stone, taken out of the Bladder, is found to be rough on its Surface, it amounts to a Proof of there being no other remaining behind. But notwithstanding it is confirm'd by Experience, that this Observation is generally well grounded, yet there are Instances which prove this Rule to be not altogether without exception.

FOR which reason it is adviseable not to be determined absolutely from appearances only, but to be farther satisfied during the Operation by introducing the Fore-finger, or a Female Catheter through the Wound into the Bladder;

Bladder; which may always be done without giving much Pain to the Patient, or any great trouble to the Operator; and is doubtless the best way of being satisfied in a fact of so great Importance.

SINCE I have had the Opportunities of making the two following Observations; can't help conjecturing, that there have been some Instances of a Stone, or Stones, been left behind in the Bladder, merely from having too great a Confidence in this general Rule at the time of Operating; which Opinion I am led into, from having sometimes known Patients relapse into the same Disorder, in a few Months or Weeks after the healing of their Wounds, and to require a second Operation. When the Stone, upon being extracted, has appeared of so considerable a Size, as to make it probable, that it must have been of much longer growth than the short Time between the two Operations could admit of.

IN *October* 1753, I cut a Boy of 14 Years of Age, from whom I extracted a rough Stone of the Size of a Pigeon's Egg. After which, I introduced my Fore-finger through the Wound into the Bladder, and discover'd a second rough Stone, nearly of the Size with the former.

former, which I likewise extracted, and the Patient recovered without any occurrences worthy of communication.

REMARK.

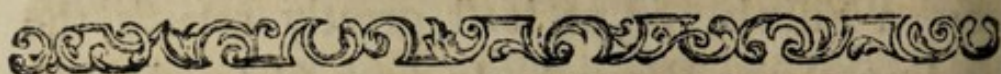
IN a few Days after the Operation, it commonly happens that some of the Urine passes through the *Urethra*, and continues to do so without interruption, till the Whole of it finds its way through this Channel, and till the Wound is healed ; but I have sometimes observed, that at the End of several Weeks, the Urine still continues to flow in great Quantities through the Wound, and endangers a Fistula, or at least greatly retards the healing of the Wound. In such Cases, I have often introduced a Bougie through the *Urethra* into the Bladder, with advantage. This, by equally distending the Passage, and pressing upon the internal Part of the Wound, has in a few Days diverted the Course of the Urine, and disposed the Parts to heal more evenly and expeditiously, than they otherwise would have done.

N. B. The Reason that induced me to be particularly circumspect in the Case I have just now spoken of, arose from the following Accident.

IN

IN *December* 1752, I saw ten rough Stones presented to the Royal Society, which were taken out of the Bladder of an old Man; the largest of which weighed eight Ounces and an half, the others were small; these Stones were taken out of the Bladder after the Patient's Death.

SINCE then it appears, from the preceding Accounts, that two Instances have occur'd in so short a Time, which prove Exceptions to the general Rule laid down by almost all Writers, I was induced to offer these Histories to prove the Possibility of the like *Phænomenon* happening again.



CASE XXV.

Of a Piece of Bone, together with a Stone in the Bladder, successfully extracted: inserted in the Philosophical Transactions, printed Anno. 1753.

THE Stone in the Bladder is a disease common to both Sexes, and the Symptoms and Circumstances attending it, are in general so much alike and so well known, as to render few Cases of this kind worthy of particular Notice;

Notice ; but as the following is attended with a very singular, and perhaps unparallel'd Circumstance, I am induced, merely on this account, to give a short History of the following Fact.

M. E. aged 48, (in all other respects an healthy Woman) had been afflicted with the Symptoms of the Stone in the Bladder for about two Years, for which she put herself under my Care. After having prepared her in the usual Manner, I proceeded to the Operation, but in a Method somewhat different from that generally practised, which is effected merely by a forcible Dilatation, and consequent Laceration of the *Urethra* ; but having almost always observed an incontinence of Urine, in consequence of this Method of Operating, for this Reason, and from the Success which I had some time ago met with in the Case of *M. B.* mentioned hereafter, from whom I had extracted an Excrescence that was growing on the Inside of the Bladder ; I differ'd from the usual Method of Operating, and cut the *Urethra* obliquely upwards on the right Side to about half its length, which I easily effected by introducing a small Knife into the Groove of the Staff, and found very little force
requisite

requisite to the Introduction of the Gorget and Forceps into the Bladder, and in the Extraction of the Stone, and piece of Bone.

UPON laying hold of the Stone, it broke so that only a Part of it, of the Size of a Pigeon's Egg, was extracted upon the first Introduction of the Forceps into the Bladder; upon introducing the Forceps a second time, I extracted a ragged and irregular piece of Bone weighing sixteen Grains, which I have now in my Custody.

BEFORE the Bone was washed and cleansed its Cavities appear'd filled, and covered with a Mixture of hairy and stoney Particles; from whence I conjecture, that it probably was the *Nucleus* of the Stone.

NOTHING remarkable occur'd during the Cure, but that the Patient ever since the second Day after the Operation, was capable of retaining her Urine, and recover'd perfectly in less than three Weeks after the Operation was perform'd.

SINCE the Performance of the preceding Operations, I have always follow'd the same Method of dividing a Part of the *Urethra* in Females, previous to the Introduction of the Gorget, &c. and have found it to be much

much more easy to the Patient, less troublesome to the Operator, and more successful, than when perform'd by a forcible Dilatation of the *Urethra* without Incision.



C A S E XXVI.

Of a Retention of Urine occasioned by the Size of the Hymen.

[T has been observed by many Writers, that a straitened Prepuce in Males penetrated by so small a Hole, as to prevent a free Discharge of the Urine, convey'd in a full Stream through the *Urethra*, is often productive of such Symptoms, as are similar to those arising from a Stone in the Bladder; which are probably occasion'd by a Distention of the Prepuce, and an irritation of its internal Part, and the Glans. The Removal of these Complaints depends upon a longitudinal Division of the Prepuce, or a Circumcision of its Extremity, by which means a free Issue is procured to the Urine. But I don't remember to have read any Observation of a Disease of the like Kind happening to Females, and producing

producing the same Symptoms, from a preternatural Formation of their Parts.

IN the Year 1749, I was consulted in the Case of a little Girl about three Years old who had labour'd under such violent Symptoms in voiding her Urine ever since her birth as to make it suspected by her Physician, that she had a Stone in her Bladder. Upon enquiry, I was inform'd that her Urine came away by drops, that she was inclined to put her Hand to the *Pudendum*, when she made Water, and that she could not help crying and stamping with her Feet, merely from the Pain. These Symptoms so nearly resembled those of the Stone, that I thought proper to propose the passing a Staff into the Bladder, that we might be satisfied whether there was a Stone, or any other Disease of the *Urethra* or Bladder; but upon endeavouring to do it I observ'd the *Urethra* was at least half cover'd over with a Continuation of the *Hymen* which appear'd imperforated; for this reason I could with difficulty execute my Design. However, I effected the Introduction of the Instrument into the Bladder, without using much violence, but there was no Stone, or any other præternatural appearance to be felt
it

in that, or its Passage. Seeing this, I gave my Opinion, that the Difficulties and Pains which arise in discharging the Urine, probably proceeded from the Size and Situation of this *Membrane*; which I recommended as necessary to be divided. It was comply'd with; and I accordingly proceeded in the following Manner. The Infant being placed upon her Back, and properly confined upon a Table of a convenient Height, in the same Manner as is done in the Operation for the Stone; I divided the *Membrane* with a small Knife by making a longitudinal Incision, and the Patient was cured in a few Days, by Anointing the Parts with Sweet Oyl, assisted with an emollient Fomentation.

R E M A R K.

I F the Circumstances of a Difficulty in making Water had not occur'd, so as to have made it necessary for the Parents to seek for Relief during this Infant State, it must have happen'd; that at the Time of puberty, the Menfes could not have been voided, so that the Surgeon must have been then obliged to have divided this *Membrane*, to have given Issue to what must have been otherwise confined; as has been known to have been some-

H

times

times the Case, where this *Membrane* has been found imperforated in Adultness.



CASE XXVII.

Of an Amputation of the Penis.

T. C. aged 63, about four Months ago perceived a small Pimple to arise upon the *Glans Penis*, which continued without pain for six Weeks. At the end of which Time, it grew painful, and increased in size, which obliged him to apply to a neighbouring Surgeon for relief. The first Applications made use of to the Part, were *emollient Cataplasms*, which were continued for a Fortnight, but without any other effect than keeping the Part easy, and preventing an increase of the Symptoms. Seeing this, he was induced to apply a *Caustic* to the Excrescence, which brought on excessive pain, and produced an Ulceration; and from that time, the Tumour began to grow considerably worse.

ON the 3d of *August* 1749, he was admitted into the Hospital. Upon examination the

the whole *Penis* was found cancerous, and considerably enlarged, to within about an Inch and a half of the *Abdomen*, attended with excessive pain.

IT had for the last four Weeks discharged so greatly, as to weaken him considerably, and had bled at times, but not very profusely. On the seventh Instant, it was amputated near the *Abdomen*, in the following Manner.

A TOURNIQUET was applied on the *Penis*, as near the *Abdomen* as possible, and an Incision was made first through the Integuments only, which were drawn back, and then a second Incision was made as near as possible to the Integuments through the *Corpora cavernosa*; there was no Instrument introduced into the *Urethra*, nor was there much difficulty in stopping the *Hæmorrhage*, which was effected by the Needle and Ligature.

A FEW Hours after the Operation, he urin'd freely, and from this time continued to go on very well, till he recover'd. But in a few Months afterwards, he relaps'd into the same disorder, and died.

A SIMILAR Case to this is mentioned by *Ruysch*, in his 30th *Observation*; but there the Operation is described as being perform'd

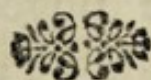
in a very different Manner, as follows: A Catheter was introduced through the *Urethra* into the Bladder, and confined by a proper Ligature from slipping out; after this, a Ligature was made very tight upon the *Penis* above the diseased Part; the next Day, a second Ligature was applied upon the first, and in five Days after, the *Penis* was amputated with a Knife in the same Part, which had been almost wore through by the Ligatures.

THIS method was made use of, in order to prevent an *Hæmorrhage*; for he observes, that by this means, the Part became almost mortified off, and no bleeding ensued. But as this method must be infinitely more painful than what attends the Operation, when perform'd by Incision only, I think there can be no doubt, which of the two is preferable. Mr. *Ruyfch* observes, that the Patient did well, and continued so. He says, that part of the *Penis* which was left behind, drew quite back into the *Abdomen*, so that he was obliged to make use of an Ivory Pipe, which was occasionally introduced through the *Urethra* into the Bladder, to prevent the Inconvenience of being wetted by the Urine.

REMARK.

IT is worth observing, what different Effects were produced by the Emollient, and Caustic Applications in the preceding Case. The First it appears, kept the Parts easy, and prevented the Disease from increasing, though it had no farther tendency to the Cure of the Wound. But the Latter, which was painful, immediately aggravated the Symptoms, and considerably increased the Inflammation and Ulceration. This Case is one of the many, which shews the Impropriety of all painful Applications to Ulcers that are attended with the like Malignancy; and at the same time the great Advantages of such as are emollient and relaxing.

FROM the Event of *Ruyseh's* Case, we may learn the Possibility of Success after the like Operation; though it must be acknowledged, that the Instances are rare where the Patient does not relapse into the same Disease.





CASE XXVIII.

Of the good Effect of medicated Bougies, in diseases of the Penis and Scrotum.

P. *E.* in *August* 1731, contracted a Clap, which he neglected till the *March* following, when there appeared a Swelling in the *Scrotum*, which suppurated, and was open'd by Incision. He was at the same time put under a Course of Physick; but notwithstanding this Treatment, there appear'd a second Swelling on his *Scrotum* soon afterwards, which suppurated, and was likewise open'd; his Urine issued through the Wound, and continued to do so for four Months, when it healed up.

HE had a purulent Discharge from the *Penis* the whole Time, attended with frequent Inclinations to Urine, which came away sometimes by drops, at other times in a small twisted Stream tinged with blood, and attended with excessive Pain. He remain'd pretty nearly in this State, till *August* 1747, when he perceived a Swelling to arise in *Perrinæo*,

rinæo, which obliged him to apply for further advice. The Tumour suppurated, and was open'd by Incision, and the Patient salivated. But notwithstanding all proper care having been taken of the Wound, it remain'd fistulous.

HE was admitted into the Hospital, the first of *December* 1748. Upon examination, I discover'd two Fistulas in *Perinæo*, and two more in the *Scrotum*, through which the greatest Part of his Urine was discharged. The *Scrotum* was enlarg'd to four times its size, and appear'd anasarcous.

THE whole *Penis* was distorted, and its Integuments extreamly thicken'd. Upon introducing a Probe into the *Urethra*, I discovered an obstruction about an Inch and half distant from its hither extremity, which I could not break through. The Day following, I introduced a medicated Candle, which was kept for some Hours in contact with the Obstruction; it produced a considerable Discharge of Matter; the Bougie was continued for some Hours every Day for about a Week, when the Obstruction gave way. A little farther up the *Urethra*, there was a second Obstruction, which was removed in a few Days by the same means. After having

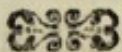
surmounted these two difficulties, I met with a third near the Entrance into the Bladder, which was made to disappear by the same Application in ten, or twelve Days; so that I could now introduce a small Bougie quite into the Bladder. The Bougies first used were very small, not larger than a common knitting Needle; but their sizes were gradually increased, till I could easily introduce those of the Size of a Goose-quill.

FROM the Time I got into the Bladder, the Fistulas grew better, the Tumour of the *Scrotum* subsided gradually, till in about five Months he was perfectly cured, and the Parts appear'd in their natural State. The Swelling of the *Scrotum* was form'd in consequence of the Urine having insinuated itself into the *cellular Membrane*. I saw him two Years after his cure, he was then perfectly well, and had not perceived the least return of his Disorder. Before he left the Hospital, he could Urine in as full, and large a Stream, as though he had never been diseased, and was well in every other respect.

THE Inference I would draw from the preceding Case, is to prove the great usefulness of Mr. *Daran's* Method of treating these
Dis-

Diseases, and at the same time to shew, that it is undoubtedly true, as has been already observed by Mr. *Sharp*, in his *Critical Enquiry*, that whatever Applications will produce a Discharge, must probably be attended with nearly the same Success, if continued a proper time. The Composition of the Bougies made use of in this extraordinary Case, was, one Ounce of old *Diachylon*, and two Drachms of *Mucilage* Plaister, slowly melted together; to which was added a Drachm and half of white *Precipitate*, which being stirred together, and afterwards spread upon Rag, was cut into slips, and rolled up in a conical Form for use.

I HAVE several times since made use of the same Plaister, with an addition of one Drachm and half, or two Drachms of *Calomel*, or red *Precipitate* finely lœvigated and stirr'd into it, with equal benefit, in a Variety of Cases; and could never discover any material Difference, either in their Efficacy, or manner of Operating.



CASE



CASE XXIX.

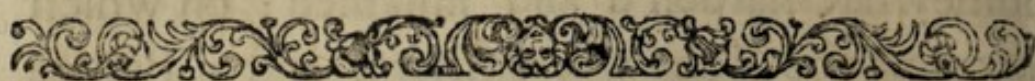
Of an Hydrocele.

J. M. aged 63, in the Year 1749, about eight Months before he applied to me, received a Blow upon the *Scrotum*, which in a few Weeks afterwards began to swell, and continued to increase from this time without pain, till the 27th of *September* of this Year, when he was admitted into the Hospital. The Disorder appear'd to be an *Hydrocele*, or Dropsy of the *Tunica Vaginalis*, which upon being tap'd discharged about ten Ounces of a clear Water. About a Week after the Operation, the Water had collected nearly to as great a Quantity as before; upon which, I perform'd the Operation a second Time. After the whole of the Water was evacuated, I introduced a small Sponge tent into the Orifice, which was continued for twenty four Hours without producing any pain, or visible effect. Seeing this, I renewed the Introduction of the Tent, which remained in till the third Day. During this time,

time, there was no Discharge at all. Upon Examination, the *Scrotum* began to appear somewhat harden'd and inflamed; on which account the Tent was omitted, and a Pultice of Bread and Milk applied to the Part. On the fourth Day, a small quantity of Matter oozed through the Orifice, which increased considerably for about ten Days, when there appeared a small Abscess on one side of the Orifice, which, upon being open'd, discharged about an Ounce of Matter; from this time, the Discharge became trifling, till it was quite well, which was in four or five Days afterwards. The Coats of the Testicle, and Testicle itself, form'd an Adhesion with each other. It is observable, that the Pain and Fever which attended the Cure were so trifling, as render'd it unnecessary for the Patient to keep his Bed longer than two Days; which, in all probability, was owing to the gentle and gradual Action of the Tent upon the *Tunica Vaginalis*.

FROM the Success which attended this method of Operating in the preceding Instance, I have been induced to perform it several times since in the same Manner upon other subjects,

subjects ; most of which Operations have been attended with equal Lenity and Benefit.



CASE XXX.

Of a Tumour growing on the Inside of the Bladder, successfully extirpated ; inserted in the Philosoph. Transact. for the Months of April, May, June, and July 1750, printed Anno. 1751.

AN Excrescence, or Tumour arising from the internal Coat of the Bladder, is a Disease, though not very common, yet sufficiently known to the curious in Physick and Surgery. But I believe that hitherto, no one has attempted the Cure of this Disorder by Extirpation.

NOR indeed can it be suppos'd that the Instances are frequent, where the Operation is practicable : But as it is notorious from the History of Physick, and Surgery, that several disorders which were formerly unobserv'd, have been found to occur frequently, after their Nature has been once discover'd and exactly described, I flatter myself, the Publication

lication of this Account, may possibly throw some light on the present Subject.

M. B. aged 23, on the 24th of *June* 1747, strained herself, by endeavouring to lift a great Weight; she was immediately seiz'd with a Pain in the small of her Back, and a total Suppression of Urine; which Symptoms, notwithstanding the several Methods used for her Relief, continued till the 29th of the same Month; when an eminent Physician, and Man-midwife was called to her Assistance, who drew off her Urine with the Catheter.

DURING the Suppression, she was seiz'd with an acute Fever, and for eighteen, or twenty Hours before her Urine was drawn off, she discharged by the Mouth a great Quantity of saltish Water tinged with Blood; which, upon lying down, flow'd in so great Quantities as to threaten Suffocation.

IN *April* 1750, she applied to me. Upon enquiry, I learnt she never had been able, from the Moment of the Accident, to void a Drop of Urine without the Assistance of the Catheter, which had been ever since made use of two or three times every twenty-four Hours; that she was in continual pain, and had lately been much weakened, by having
several

several times lost considerable quantities of Blood, occasion'd by the Force made use of, for the Introduction of that Instrument into the Bladder. Upon examining her with my Fore-finger, which I introduc'd with great difficulty through the *Meatus Urinarius*, I discovered a considerable Tumour, which seem'd to be of a fleshy Substance, and took its rise from the lower Part of the Bladder near its Neck; the Extent of which I could with difficulty reach. I observ'd it to protrude a little Way out of the *Meatus Urinarius*, upon straining to make Water when the Bladder was full; but upon ceasing to strain, it presently return'd.

It had preserv'd pretty nearly the same Appearance ever since it was first taken notice of; and about eighteen Months ago, a small Incision was made into it by a Surgeon, on presumption of its containing a Fluid, but without any effect.

HAVING first prepared her, as before the Operation for the Stone, that is, by giving a gentle Purge on the Day preceding the Operation, and an emollient purgative Clyster a few Hours before I operated, the *Rectum* by this means became emptied, and consequently did not make so great a Degree of Pressure upon

upon the inferior Part, and neck of the Bladder, as it would otherwise have done ; which gave me an opportunity of executing my design with much less difficulty, than I should probably have met with in the Performance of the Operation, had I attempted it without this preparation.

WHEN this was done, I proceeded to the Extirpation of the Tumour, which I effected in the following Manner.

WHEN her Bladder was full, I order'd her to strain, as though she was going to make Water ; upon which, I perceived the Tumour to protrude a little, this, I effectually secured from returning into the Bladder, by the help of a crooked Needle and Ligature, which I passed through the Tumour in different Directions, and endeavoured to draw it out through the *Meatus Urinarius*, but could not effect it by reason of its largeness.

SEEING this, I dilated the *Meatus Urinarius* on the right Side, by cutting it upwards about half way towards the Neck of the Bladder ; when, by pulling the Tumour forwards, I had sufficient room for tying it with a Ligature passed round its Basis, which was very large.

FOR

FOR the three first Days after the Operation, she complained of a good deal of Pain in the *Abdomen*.

ON the sixth Day after the Ligature was made, the Tumour dropt off.

FROM the first Day of the Operation, she voided her Urine without any assistance, and is now perfectly well in every respect.

THE Size of the Tumour was nearly equal to a Turkey's Egg, and something like to it in Shape.



CASE XXXI.

A remarkable Instance of two Excrescences of the Urethra, successfully extirpated.

THE urinary Passages of Females, as well as Males, are incident to some Disorders, which are not to be cured, or reliev'd but by surgical Operations. These Disorders in Males proceed from various Causes, which are generally to be accounted for from a previous venereal Affection, or the frequent Passage of gravelly, or stony Particles through the
Urethra

Urethra, though it is certain that they sometimes happen without any accountable cause.

IT seems to have been a Matter of Dispute amongst Surgeons, whether these maladies arise from Excrescences, Caruncles, Contractions of the *Fibres* of the *Urethra*, Callosities proceeding from venereal causes, callous Ulcers of the *Lacunæ* of the *Urethra*, or Affections of the prostate Gland, or the rest of the mucous Glands of the *Urethra*. But it is a Matter of no very great Consequence, what the exact Nature of the Disease may be, seeing the Cure depends entirely upon the removal of the Obstruction, and it is probable from observing, that as other parts of the Body are liable to these several appearances, this part is so too; and though it has been asserted by many, that there is no such disease as a fungous Excrescence in the *Urethra* of Males, owing to the Difficulty of discovering such appearances after Death, yet from the Analogy there is subsisting betwixt the Structure of the internal Part of the *Urethra* of Males and Females, I am inclined to think, that the Existence of this fungous Appearance in them can hardly be doubted; and that a very trifling Disease of this Kind, is

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capable

capable of producing the most excruciating Pains may be concluded from the History of the following Case, the Cure of which immediately depended upon the Removal of a Fungus of so inconsiderable a Size and Appearance, as would not have been regarded in many other parts of the Body. But as the same Operation cannot be undertaken in Males with an equal probability of Success from the difficulty of knowing the exact Situation and Nature of the Disease, as well as from the different Length of the *Urethra* itself; we are oblig'd to have recourse to such methods as operate more slowly, and not with so great a degree of certainty.

E. C. a Virgin aged 27, had been afflicted, as I was inform'd by herself, and her Mother, with a Disease in the urinary Parts, ever since she was four Years old. The Symptoms under which she had laboured from the Beginning, were frequent inclinations to make Water, which she voided by drops, and with excessive pain.

SHE had never been quite free from these complaints ever since her first attack, but was particularly ill at the Times of having her Menfes. These discharges were in general
regular,

regular, both as to time and quantity; when it happened otherwise, her complaints were greatly encreas'd, especially at the very Time when she expected a Return of them. The Pain and Irritations had been frequently so great, as to occasion Convulsions; and she had been always incapable of getting her livelyhood at Service.

SHE had try'd various methods for her relief, without receiving the least Benefit.

IN *January* 1754, I was desired to attend her.

UPON enquiry, I learnt that her complaints had been from the Beginning in the *Urethra*, and neighbouring Parts. I carefully examined into the *Meatus Urinarius*, by introducing a female Catheter, with which I dilated it by inclining the Instrument to one side, and with some difficulty discover'd two Excreescences arising oposite to each other from the internal Part of the *Urethra*, near its hither Extremity.

EACH of these Excreescences was near as broad as a Silver Penny, and resembled the Valves of a Vein in their Situation.

THEIR colour was red, their texture spongy, and they consisted of a Number of Fibres, as

appear'd upon Examination after being removed.

UPON discovering their seat and rise, I proceeded to extirpate them; which I effected in the following Manner.

THE Patient being laid upon her Back, and her Knees bent and rais'd, I divided the *Urethra* a little way obliquely upwards on its left side with a Pair of Scissars, then I proceeded to snip off the Excrescences at their roots, to do which, the previous Division of a Part of the *Urethra* afforded me sufficient room.

THE Operation was expeditious, but painful. There was very little discharge of Blood at first. In a few Hours after the Operation, the wound bled profusely, but at length stop'd of itself.

FROM this time, she had no other inconvenience or pain in the Part, than what arose from the Acrimony of the Urine, which gradually abated till the Wound healed, which was in about ten Days after the Operation.

THE only Applications made use of to the Parts, were Fomentations of warm Water and Milk, and afterwards a dossil of Lint spread over with cooling Ointment, and repeated twice or thrice a Day.

I HAD the Curiosity to call upon her, about five Months after her Cure. She informed me, that she had continued perfectly well without the least Return of her Complaint, and that her monthly Discharges had been regular ever since I left her, without producing any of her former Symptoms.



CASE XXXII.

A remarkable Instance of a Wound, by which the Tibia was entirely divided.

ON the 9th of October 1749, J. L. aged 44, receiv'd two remarkable Wounds from his Antagonist, who struck him with a Hedging-bill. The one upon the upper Part of his left Leg, immediately beneath the Insertion of the Tendon of the *Patella*, by which the *Tibia* was entirely divided, without any remarkable contusion of the Integuments, or neighbouring Muscles; the other on the left Side of the Head, which divided the *parietal* Bone quite to its *Diploe*, and he lost a considerable Quantity of Blood, before any Assistance could be procured him.

THREE Days after the Accident, he was admitted into the Hospital and put under my care. His complaints were a Giddiness, Fever, and Costiveness; for which he was let Blood, and Stools were procur'd by a Clyster; from this treatment he was considerably relieved. The following Day, his Giddiness had quite left him, and his Wound had a favourable aspect, which continued to go well on, till the 21st Instant, when the Discharge was considerably increased, appear'd oily, and smelt very foetid. He had rested but little the preceding Night, and complain'd of great lowness and oppression. Upon pressing the Ham, a considerable Quantity of Matter was discharged, and upon introducing the Probe, both Bones were found bare. From this time, the Discharge continued to increase till the 26th; for which reason, I made a counter Opening, in order to procure a more depending Orifice for the Evacuation of the Matter. On the 27th, he was attack'd with a Looseness, attended with a Fever, and restless; which several Symptoms continued till the 4th of *November* following, when his strength became greatly impair'd, his appetite quite lost, and colliquative sweats coming on,

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it was judged adviseable to Amputate the Limb, which was done above Knee, and the Patient recovered; all his bad Symptoms disappearing from the Day of the Operation.

UPON examining into the Condition of the Leg, the *Tibia* and *Tibula* were found carious for a considerable Length.

THE wounded *Cranium* became granulated, and was quite healed in a few Weeks, without any exfoliation or difficulty attending its management.

R E M A R K.

THE Looseness, Fever, &c. which came on so many Days after the Accident, could not be attributed to the Pain and loss of Blood arising from the recent Wounds, as the Patient had been quite easy and well for several Days together; nor could they arise from any Impropriety in his diet, &c. since he had been kept in the most abstemious and quiet Manner, from the Time of his Admission into the Hospital; but these Symptoms may reasonably be accounted for from the foetid Matter being absorbed into the Blood, and falling upon the tender *Viscera*; and it is most likely, this was the Case, seeing the several bad Symptoms of Looseness,

Fever, and Lowness immediately disappear'd, upon the Removal of the Part affected.

Query. Is it not probable, from the Circumstances I have mentioned, that if the Operation had been deferr'd, the Patient must have sunk under the Discharge, or have died from a Reflux of the Matter into the Mass of Blood?

IF these Arguments are of any weight (which seem to be supported by many Instances given us by Authors of undoubted Authority) the Operation was beyond dispute adviseable, and must in general be so, where compound Fractures, Wounds, or Abscesses of the Joints are attended with the like Symptoms. For though there may be a few Instances of the recovery of People, who have been nearly under the same Circumstances, yet I think, they are by no means sufficiently numerous to induce one to trust to any other method of preserving Life, than by having recourse to the Operation. To which the Patients generally submit with great resolution, in expectation of a Recovery.



CASE XXXIII.

A singular Instance of a diseased Joint requiring Amputation.

IN the Year 1744, T. C. accidentally injur'd his Knee by a Fall, it appear'd swell'd, and continued painful for some Months; but at length, by proper management, grew quite well, and so continued for three Years; when his Symptoms return'd with violence, and increased for three Months, notwithstanding the Assistance given him by a neighbouring Surgeon; who, besides the Use of Fomentations, and other various applications to the Part affected, made him an Issue by Incision just below, and on the Outside of the diseas'd Knee, which was kept open for six Weeks, and then dried up. About a Month after the Issue was healed, a distinct Tumour appear'd immediately below the *Patella* and on its outside, which bursted of itself, but discharg'd very little. However, he grew considerably worse from this time; his appetite became bad,

bad, and his Leg and Thigh began to waste. Under these Circumstances, he was admitted into the Hospital. But notwithstanding the several Methods used for his Relief, his disease increased to so great a Degree, as to make amputating the Limb necessary, which was done above Knee, and the Patient recovered.

R E M A R K.

UPON opening the joint, the Integuments were found greatly diseas'd, the Ligaments appeared considerably thickened, and the Extremities of the *Os Femoris* and *Tibia* greatly enlarged, and their *Cartilages* eroded.

BESIDES these *Phænomena* which are common to almost all diseased Joints requiring Amputation, it had one thing peculiar to itself, which was, that it contain'd five Peas which were confin'd within the *Capsular*, or *Bursal* Ligament of the Knee. I examin'd whether I could discover the opening made by the Peas through the Ligament, but could not. It is to be observ'd, that the Issue had been healed up for near three Months before the Amputation.

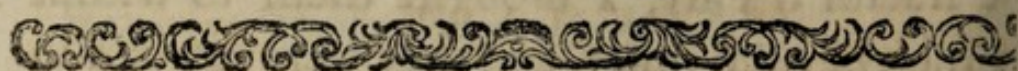


CASE XXXIV.

Of a fractur'd Patella.

A. B. aged 25, in *August* 1747, broke her Knee-pan by a fall down Stairs, for which she put herself under my care. The Extremities of the divided Bone were at a considerable Distance from each other, but by extending the Leg, and gently pressing the Muscles, and Tendons of the Thigh above the fractur'd Part, I brought them to within an Inch of each other, and they were retain'd in this Situation by a proper compress and Bandage. In a few Days after their Reduction, gently moved the Knee, by carefully bending and extending it, which was repeated every Day during her cure. At the end of six Weeks, she appeared so well recover'd, as to be able to walk upon plain Ground, or up and down Stairs with very little inconvenience. She could bend and extend her Knee very well; the Parts of the fractured Bone remaining at the same Distance from each other, in which

which they were at first placed. I observed during my care of her, that she had formerly broke her other Knee-pan, and that the Part of the fractur'd Bone were then at least three Inches distant from each other. She inform'd me, that she had never applied to any one for Assistance in this case; and that during the whole Time she had been capable of walking about, but was lame for three Months after the Accident. Since which time, she has enjoy'd the free use of her Leg, and has been capable of walking upon plain Ground, or up and down Stairs without pain or difficulty.



C A S E XXXV.

Of a fractur'd Patella.

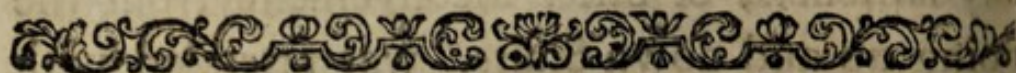
S. P. 43 Years of Age, broke her Knee-pan in *October* 1748 by a fall down Stairs, for which accident she was recommended to my care. Upon enquiry, the whole Knee appeared greatly contus'd, attended with a considerable Ecchymosis and Tumour, which could not be dispers'd for near three Months. Upon

Upon the Removal of these Complaints, the Extremities of the fractur'd Bone were discovered to be near two Inches from each other; her Knee appearing at the same Time stiff and inflexible, in which state it remain'd for some time afterwards; but by the use of Fomentations, relaxing Ointments, and daily pains being taken in bending the Joint; it at length became flexible, and she was capable of walking upon plain Ground without any lameness, or other inconveniency, but the going up and down Stairs, was attended with more difficulty.

REMARK.

THE Method recommended above, in the Treatment of transverse Fractures of the *Pavilla*, is very different from the general Rule laid down by Writers to be observ'd in the like Cases. Their advice being, to bring the Extremities of the Bones, if possible, into contact with each other, and to keep the leg immoveably extended for eight or ten Weeks; but since it is found by Experience, that in consequence of such Management, the Joint becomes stiff and inflexible, from, probably the *Callus* of the broken Bone and Synovia

Synovia of the Joint mixing together, and foldering up the Joint, there is no doubt of the great Impropriety attending this method of Treatment; and for these reasons, it is now a Custom with some of the most eminent in the Profession, to treat these Accidents in the Manner I have prescrib'd, preferable to that which has been advis'd by Authors by which means, the Motion of the Part is still preserv'd.



CASE XXXVI.

Of a Division of the Tendo Achillis.

WHEN a Tendon is in part divided by a sharp Instrument, or wholly broke through, in consequence of Jumping, Dancing, or any other extraordinary Violence; it is agreed, that the bringing the divided Extremities into contact with each other, and the keeping them so for a certain time by the helps of Compress and Bandage, are generally sufficient to compleat a Reunion, or at least an Adhesion of these parts, to the
neigh

neighbouring ones, without any farther Operation. It is nevertheless advis'd by Writers, who approve of this method under the like Circumstances, to make use of the Needle and Ligature, when the Tendon with its Integuments becomes totally divided by a sharp instrument.

BUT from the several Instances of divided Tendons, which have come under my Cognizance, and which have been so treated, I have observed, that the Parts always suffer considerable Pain and Inflammation from being stitch'd, and generally terminate in Abscesses of the neighbouring Integuments, and Scloughs of the Extremities of the Tendon, through which the Needle and Ligature have been pass'd; by which means, the Cure is considerably retarded, and extraordinary pain incurr'd. So that from these Observations, and from many others, I am induced to recommend a total Disuse of the Needle and Ligature, and to trust to a favourable Position of the Limb, assisted by proper Compress and Bandage. Again, the Needle and Ligature should not only be rejected in Divisions of the Tendons, but in all other recent Wounds, where

where Compress and Bandage can be apply'd to advantage.

A. B. had the Misfortune of dividing the *Tendo Achillis*, about two Inches above the *Os Calcis* by the Slipping of an Ax, with which he was at work. He was put under my care. Upon Inspection, I observed the upper Part of the Tendon to be at a considerable Distance from the Lower in consequence of the Contraction of the *Gastrocnemii Muscles*. I made use of no other method in bringing the Extremities together, than bending the Knee, extending the Foot, and gently compressing the Leg downwards from the Calf; which, being done I applied a Bandage from the Ham, quite to the upper Edge of the Wound. At the same time, observing to keep the Foot extended which was secured in this Situation by the help of a Piece of Paste-board properly adapted to the Foot, and secured on by a second Bandage. The Parts were kept in this posture for five Weeks; at the end of which time the Wound was heal'd, and the Extremities of the Tendon appeared perfectly reunited, at least adhered to their neighbouring Parts. The Ankle became stiff from being constantly kept

kept in this position, but by the use of Fomentations, and an Embrocation of Neats-foot Oyl, it soon became pliant, and perfectly useful.



CASE XXXVII.

Of a Division of the Flexor Tendons of the Wrist.

A. *B.* accidentally run his Hand through a Pain of Glass, which cut his Wrist on the fore Part, quite a-cross. The upper cubital Artery was divided, and bled profusely, but was stopt without much difficulty by the Needle and Ligature. The Tendons of the Flexor *Carpi Radialis*, *Palmaris longus*, and Flexor *Carpi Ulnaris Muscles*, were likewise divided, and their upper Extremities were drawn at a considerable distance from the lower ones; the Flexor Tendons of the Fingers were in part divided; however, upon bending the Hand, and pressing the Arm downwards, the Parts were brought together, and kept in that Situation till cured;

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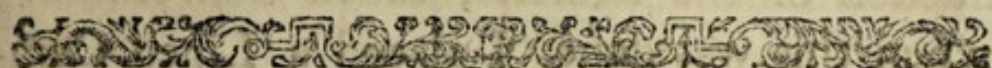
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which was in twenty-five Days after the Accident. Upon healing the Wound, the Parts appeared stiff, and somewhat uneven, but by the help of Fomentations, relaxing Oyls, and gentle extension frequently made use of, they perfectly recover'd their free Motion, usual Strength and Evenness.

I SHOULD not have thought these Cases worthy of Communication, had not they been merely intended as an Illustration of the Advantages of this Practice, preferable to the other Method.

IT is worth observing, that the Inflammation which succeeded upon this method of Treatment, was no more than what always happens to other parts in incised Wounds of equal depth and size, and that there were neither Abscesses, nor Sloughs in consequence of the Accident, or Management of the divided Tendons.





CASE XXXVIII.

Of a Rupture of the Tendo Achillis.

A. B. had the Misfortune to break the *Tendo Achillis* entirely in two by Jumping, but as he was ignorant of the Injury he had sustain'd, he was carried home, and had not proper Assistance given him till a Week after the Accident, when he was recommended to my care. Upon Examination, I found the *Tendo Achillis* entirely separated; the Extremities of the divided Parts were at least an Inch and half distant from each other, and the Patient complain'd of considerable Pain. I proceeded to the Reduction of the divided Parts which I effected with some difficulty by extending the Foot, bending the Knee, and forcibly compressing the Muscles downwards. When this was done, I placed a Compress upon the Leg, from the Ham down to the upper edge of the divided Tendon, and upon this, applied a Roller, with a Degree of tightness sufficient to prevent the Con-

traction of the Muscles, called *Gastrocnemii*; when this was done, I placed a Linen Compress upon the upper Part of the Foot, and upon that, a piece of Paste-board, which were secured on by Bandage, and the whole Leg was tied up in a Pillow. He became easy soon after the Reduction of the Tendon, and so continued till he left me, which was in about five Weeks; during which time, the Compress and Bandages were renew'd as occasion required. The Extremities of the Tendons remain'd together, but he continued lame and weak in the Part for some time, till at length he recover'd the Use and Strength of the Limb. I did not observe, that there was any wasting of either of these Limbs, as is not uncommon after Accidents of the like kind.

R E M A R K.

IF it should be insisted upon, that the Needle and Ligature are still adviseable in Tendons that are divided by a sharp Instrument, they cannot but be equally so in Tendons that are divided by being ruptured where there is no injury done to the Integuments; but I fancy it will be allowed upon consideration, that a divided Tendon is as likely
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to do well, as a ruptured one, where the Parts may always in recent Cases be brought together with equal ease, and kept so by a proper Situation of the Part, assisted with Compress and Bandage.

Monfieur Faget's Remarks on the Use, &c. of the Styptic purchas'd by his Most Christian Majesty; communicated by James Theobald, Esq; F. R. S. inserted in the philosophical Tranflations for the Year 1753.

December 7, 1752, about the end of the Year Seventeen hundred and fifty. Mr. Brofsard, a Surgeon from Berry, came to Paris to propose the use of a Remedy, which he had discover'd for stopping the Blood after Amputations, and which he asserted, to have found effectual in several Amputations of the Arms and Legs.

AT his request, some Gentlemen of the Academy of Surgery were deputed, in whose presence he was to make some new Experiments in stopping the Blood upon different Animals, and in all which he succeeded, by stopping it in the largest Arteries after Amputation. But the Success of this Remedy

might yet be consider'd a little dubious, because many Animals, as in Dogs particularly, the great Arteries stop of their own Accord; and rarely any Dog dies from an *Hæmorrhage*, because their Blood is more disposed to congeal, and by that means to stop the Discharge.

FOR this reason, the Experiments made on Animals not being thought satisfactory, and yet being convinced, that no ill effect could follow the Application of this Remedy on human Kind, Mr. *Brossard* was permitted to use it at the Hospital of the Invalids, in an Amputation of the Leg, which succeeded perfectly well; and not the least ill Accident happened through the whole time of the Cure.

SOMETIME after this, two Waggoners were run over by a Waggon loaded with Stone, and each of them had one Leg broken in a miserable Manner. These two Men being brought to the Hospital of the Charity, I saw no other hopes of Success, but in amputating the Legs; and, for that reason, I requested Mr. *Brossard* would be present, and give me a Proof of this new Application, which we applied in the following Manner.

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As soon as the Leg was cut off, I slackened the Tourniquet to discover the Vessels, and Mr. *Brossard* applied upon the Orifices of the two Arteries, two pieces of his Astringent, fastened one upon another with a Ribband, in the Manner which I have sent to you, and as it is in the Drawing. After the Application was made, I streightened the Tourniquet, and pass'd the two ends of the Ribband, which was fastned to the upper Piece of the Astringent, upon the Stump, over the Knee, and applied a Linen Bag, fill'd slightly with the same Astringent in Powder, upon the whole Wound; and, over all, applied the common Dressings in the like Case. After the Dressing was finish'd, I slackened the Tourniquet, and two Hours after, took it entirely away. Eight and forty Hours after this, we took off the Dressings, and not the least drop of Blood follow'd from the Vessels; and we again applied one single piece of the Astringent upon the two Vessels; and I dress'd the other Parts of the Wound with Pledgets of Lint, with common digestive, a Styrax Plaster, and the usual Bandage.

THE third Day the Astringent fell off of itself, in the time of Dressing; and the Patient,

that time was dressed in the common Manner. The same was done to the other Patient, after the Amputation, as to this.

THE first of these Men died on the fifth Day, and the other on the ninth; but there did not appear through the whole, the least tendency to an *Hæmorrhage*. Thus the Remedy fairly produc'd its effect, as to the stopping of the Blood.

HOWEVER, in order to determine the Manner, in which this Astringent produces its effects, I examin'd the blood Vessels of those two Patients after their death, and I found them contracted and straitned, as if they had been tied, and in the largest of them a conic Coagulation of the Blood, which was an Inch and half long; and after having taking out this Coagulation, it was with difficulty, that I could introduce the Point of a very small probe into the Orifice of that Vessel.

THE Patient who died on the ninth Day, had the Arteries contracted in the same Manner; but with this difference, that the Congelation was at least four Inches long.

Mr. *Morand* has employ'd this Remedy with Success, in applying it to a Wound made
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by a Sword in the bending of the Arm; and, I myself have made use of it, with great Success on occasions where the temporal, and intercostal Arteries have been opened.

IN the last mention'd Cases, I applied but one piece of the Styptic upon the opening of the Artery; and this generally falls off at the first Dressing, that is, forty-eight Hours after the Application, without the least Appearance of an *Hæmorrhage*, or other ill Symptoms which can raise any Objections to this Styptic; for those Patients are all recover'd.

THERE have been lately made at the Hospital of the Invalids, two Experiments of this Astringent in Amputations; and in both, the Success has been equal to all that can be desir'd. The Surgeon, in these Cases, us'd only the two Pieces applied one upon the other, without using the Powder in the Bag, as before; and dress'd the whole Wound with Lint, and the common Bandage.

THUS, then at last, there appears to be discover'd a Remedy beyond our hopes, and which Art has never yet equall'd. The Application of Fire was the cruel Resource of the Ancients; and *Paré* believ'd himself inspired, when he discover'd the use of the
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Ligature. But, alas! how many Accidents are there, which arise from the use of those two Manners, and which too often terminate in the Death of the Patient! Happy for us, that those Accidents now appear to be no longer to be fear'd by the lucky Discovery of this Styptic, the first Experiments of which have so greatly promis'd Success?

It may be remark'd, that, if this Astringent succeeded only in coagulating the Blood, it has produc'd nothing extraordinary, for these Coagulations would not have been sufficient to have stopp'd the *Hæmorrhage*, directly after the Operation in Amputations; but its excellency lies in contracting the Arteries so closely, that it hardly lets a little Probe into the Aperture of the Artery, and by this means, forms as it were a perfect Ligature, much more certain than the usual one, as this is not made in any one point of the Cylinder of a Vessel. Thus this Application exceeds every thing, which has hitherto been produc'd by the Operation of our hands.

THIS singularity in the Operation of this Remedy, supposes another in the Vessels, which is the great Contractility of the Fibres of the Arteries. These, indeed, do naturally contract

f themselves, but not to two thirds of their Diameter; nor to that state, in which they are straitned by the effect of this Astringent; because by that, the whole Aperture is almost intirely taken off in the largest Vessels, and it is easy to imagine their Effects in the smallest.

IT may be observed, that it is not in the lead parts of Bodies that this Contraction can be made; it requires the Assistance of the vital Principal, and operates on the Fibres by certain Articles contain'd in it, which dispose the Animal Body, by its Irritation to shorten its Fibres, and reduce the tiffue which they compose in a lesser Volume.

THIS Remedy, of which I have been speaking, is nothing else but the Agaric of the Oak. The best kind of it is found on the Parts of Oak-trees, where the large Limbs have been cut off, and it very often resembles a Horse-shoe in its shape. This Agaric is distinguish'd into four parts, the Rind; the second Part, which is preferable to the other; the third Part serves for the stopping the Blood in smaller Vessels, as well as that part which touches the Tree; this last was what was
pow-

powder'd, and applied in the little Bag, as in the Operations of the Charity.

THE second Part is what I make use of in Amputations, which is cut into pieces, of the Size of that which I have sent you. It must be beaten by a Hammer till it is soft and this is its whole preparation. Every part is prepared alike.

THE best time of collecting it, Mr. *Brofsard* has found to be in the *Autumn*, in fine Weather, after great Heats.

THIS, then, Sir, is all I can collect of the Use, Application, and Preparation of this new Remedy for stopping Blood. If the *Royal Society* shall find any thing in it worthy their regard, I shall think myself happy in having communicated these Observations.

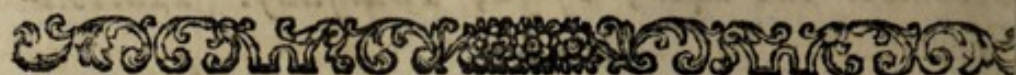
AT the time of reading the above Memoir, some bits of Agaric were exhibited to the *Royal Society*, part of which was delivered to me to make trial with, upon the next Opportunity, which I did in a few Days after with Success; and presented the following Account of its effects to the *Royal Society*, which was read by one of the Secretaries.

December the 14th, 1752, Thursday. Hatton-Garden.

AGREEABLE to the Desire of this Society, I have taken the first Opportunity of Communicating the Effects of the Agaric of the Oak in stopping of *Hæmorrhages*, or bleeding from the principle Vessels after Amputation. If I have been too circumstantial in my Narrative of the Symptoms and Circumstances attending the following Case; I hope you will attribute it merely to the Desire I have of giving you all the Satisfaction I am capable of, relating to the Experiment made with this Styptic; and this I have been more particularly induc'd to, as it is the first Case of the Kind offer'd to your Consideration, where this Application has been made use of in *England*.



CASE



CASE XXXIX.

Of an Amputation of the Leg.

SATURDAY December the 9th, 1752
C. S. aged 24, had her Leg amputated below the Knee, at twelve o'Clock at Noon on account of an incurable Ulcer, with which she had been afflicted for 13 Years. She lost very little Blood in the Operation. Immediately after the Amputation, a Piece of Agaric of a proper Size. (The same which was deliver'd to me by the *Royal Society* for this purpose) was applied to the Mouths of the Principal Arteries. Two other small pieces of Agaric were applied to the Mouths of two smaller Arteries, which appear'd at some distance from the principal ones. Upon the Pieces of Agaric, Dossils of Lint were applied, and over all, a Pledgit of Tow spread with yellow Basilicon, which were kept on by the common Bandages made use of in such cases, and applied with the usual degree of tightness.

For

FOR about an Hour and quarter after the Operation, the Tourniquet was kept on moderately tight at a convenient Distance above the Knee, at the end of which time, it was slackened so as to have no degree of Pressure upon the Femoral Artery. The Patient was much easier than I had ever observ'd after the use of the Needle and Ligatures. Her Pulse appear'd very little disturb'd, till about four o'Clock this Afternoon, when the Symptomatic Fever began to come slightly on, attended now and then with convulsive twitchings of the Stump and Thigh; for which reasons, the Tourniquet was somewhat tightned. At seven o'Clock this Evening, the Tourniquet was quite let loose; soon after which, the convulsive Twitchings became less frequent, and less severe; These Spasms of the Limb, she had been long used to have, and by her own account, they had been more severe before the Operation, than since.

SHE had but little rest this Evening; *Sunday* Morning she appeared as well as could be expected, her Pulse was calm, and she had no particular Complaints. At twelve o'Clock

o'Clock at Night, she fell asleep, and so continued till seven o'Clock the next Morning.

Monday Morning she appear'd well, her Pulse was calm, and she had no particular pain.

Monday Night she slept but little, but was very easy the whole Time; *Tuesday* Morning she appear'd very well, and her Pulse quiet; this morning, she was dress'd in the usual Manner, her wound appear'd with a very good Aspect. She has suffer'd no pain in the Part where the Agaric was applied, and is in all respects as well as can be expected. At seven o'Clock this Evening I visited her, she was perfectly easy, the convulsive Twitchings, of which she at first complain'd, are quite remov'd.

Thursday December 14, she continues well; her Wound was dress'd again this Morning, from which there appear'd a very proper Discharge of Matter, not in the least tinged with Blood. The whole of the Agaric with the rest of the Dressings were remov'd without giving pain. Upon the Removal of the Agaric, I enquired narrowly, whether I could discover the Extremities of the Arteries, or their Pulsation, but there was not the least ap-

appearance of either of them: From this time she continued to mend without the least Interruption, till she was was dismiss'd the Hospital.

A short History of the Effects of the Agaric of the Oak in stopping of bleedings, after some of the most capital Operations in Surgery; with an Account of the Manner of its acting upon the Vessels; communicated to the Royal Society.

I N December 1752, I had the Honour of communicating to the *Royal Society*, the good Effects of the Agaric of the Oak in the Case of a young Woman aged 24, whose Leg I had cut off below the Knee. Since that time, I have not heard of any farther Trials which have been made with it, or of any Accounts that have been given to the *Society* of its great Usefulness in Surgery. This may probably arise from the Virtues of the Agaric not being as yet much known in *England*, or from the unwillingness of Surgeons to adopt such a Method as they may probably suppose to be attended with hazard. The great Success which attended

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my first Experiment of this kind, was a sufficient Inducement to me, to make a farther trial of it in other Cases of the like Nature. This I have lately done in four more Instances; all of which have been attended with Success, equal to the first. The particular Advantage of the Agaric is evidently this, that it has the Power of effectually restraining the Bleeding without giving Pain; for which reason, there appears to be much less of the Symptomatic Fever, than what occurs after the use of the Needle and Ligature; which is, by much, the most painful Process of the Operation in Amputations, and is sometimes productive of Convulsions, as has been observ'd by Monsieur *Le Dran* in his Chapter of *Amputations*, under which Circumstances he particularly advises the cutting the Ligatures, &c. The Ligatures have sometimes the farther Inconvenience of remaining quite fix'd to the last, on which account they unavoidably retard the healing of the Wound.

BESIDES the Effect of restraining the *Hæmorrhage* in all recent Wounds, which the Agaric has in common with the Ligature, it

it has one great Advantage peculiar to itself, which is that of effectually restraining the Bleeding, in Wounds of several Days or Weeks standing, where the Parts are become so rotten as to be incapable of bearing the Ligature. This I have known to have been the Effect of it in several Instances, where the Ligature has been attempted in vain. The Manner in which the Agaric acts, is by contracting, or purging up the Extremities of the divided Vessels. I had an opportunity of enquiring into this Fact in a Patient, whose Leg was cut off below the Knee. Immediately after the Amputation, pieces of Agaric were applied to, and properly secur'd upon the Mouths of all the principal Vessels. In about an Hour after the Operation the Stump bled a-fresh, on which account I remov'd all the Dressings, except those pieces of Agaric that were at first applied. This gave me an Opportunity of discovering the Source of the *Hæmorrhage*, which was from a collateral Vessel at least an Inch distant from the principal ones. When I had secur'd the Vessel, I had the Curiosity to remove the bits of Agaric from

those very parts to which they were at first applied. I observed the Mouths of the Vessels to be totally contracted in so short a space of Time, and to be capable of resisting the whole Force of the Circulation; the Extremities of the Vessels being alter'd from their natural Shape of a Cylinder, to that of a Cone. After having said thus much in favour of the Agaric, I shall conclude with a Reference to the following Cases, as some Confirmation of what has been above advanced.



CASE



CASE XL.

Of an Amputation of the Leg.

CASE the 1st.

MAY 1754, J. L. aged 51, had been long afflicted with an Ulcer in his Leg, which at length became so general (occasioned by an impoverishment of the whole Mass of Blood, and a constant slow Fever with which he had been for some time afflicted) as to destroy the greatest Part of the Tendons and Muscles, from the Calf of the Leg down to the Ancles. The Discharge from the Wound had been for some Weeks so excessive, as to reduce him to the greatest Extremity; and the whole Substances of the *Tibia* and *Fibula* appear'd quite rotten for a considerable Length.

IN consideration of the foregoing Symptoms, it was recommended to him to part with the Limb (though at the same time the Success of the Operation was judged to be very precarious, on account of his great

L 3 weakness,

weakness, and bad habit of Body) which he readily assented to, and I perform'd the Operation in the following Manner.

THE Patient being seated upon a Table of a convenient Height, and properly secur'd by Assistants, a Linen Compress about two Inches broad was applied round the Thigh a little above the Knee. Upon this, the Screw Tourniquet was fix'd, with a degree of tightness sufficient to prevent the Course of the Blood through the Femoral Artery.

THIS being done, I applied a Piece of Tape round the Leg, about five Inches below the Knee, as a Direction for the Knife; then I proceeded to divide the Integuments quite through, which were drawn back by an Assistant, and afterwards divided the Muscles as near as possible to the Integuments quite to the Bone. Immediately after this, I introduced the Catline betwixt the *Tibia* and *Fibula*, with which I divided the *inter osseous* Ligament, &c. and then proceeded to saw through the Bones.

IMMEDIATELY after the Amputation, I look'd for the principal Vessels, and easily discover'd them without slackening the Tourniquet (which

(which I have seldom had occasion to do in Operations of this kind.) Upon the Mouths of these, I applied small bits of Agaric, about the Size of a Shilling, as well as upon the Mouths of the smaller Vessels, which discover'd themselves by their oozing. Upon the bits of Agaric, I applied soft layers of Lint. All these were cover'd with a Pledget of Tow spread with yellow Basilicon, and properly secur'd on by the common Bandage.

ABOUT three or four Minutes after, he was roll'd up, and put to bed, I discovered the Blood to Discharge freely through the Dressings, upon which, I tightned the Tourniquet in expectation of stopping the Bleeding, but it appear'd evidently to encrease it.

SEEING this uncommon effect, I quite slackened the Tourniquet, upon which the Bleeding immediately ceas'd. This I was led to from a Supposition, that the Veins had probably suffer'd so great a Compression from the Instrument, as to be incapable of returning that Blood which was carried to the neighbouring Parts by the collateral Arteries, arising from the principal Trunk, above the

Ligature. But whether this was the true Reason or not, I cannot take upon me to determine; however the Fact was, that the Bleeding immediately ceas'd, and did not return again.

THE Patient was dressed on the fourth Day after the Operation, and the whole of the Agaric was removed. Since then, he has been treated in the common Method without any farther use of the Agaric. The Patient has had very little Fever, or Pain since, and was well in health nine Weeks after the Operation, but the Wound was not then healed.





CASE XLI.

Of an Amputation of a Breast.

CASE the 2d.

MAY 1754, *E. H.* a very lusty Woman, 38 Years of Age, had been afflicted for some time with a diseased Breast, which at length became cancerous. The Basis of the Breast was much larger than common, and was complicated with a considerable Schirrous Knot which extended to the Arm-pit.

As things were thus circumstanced, it was plain that nothing could be advised, but the Amputation of the Part; which she consented to after some Weeks deliberation, and I performed the Operation in the following Manner.

THE Patient being seated upon a long Stool of a convenient Height, and an Assistant behind her, who secured her by clasping her round the Waste, I seated myself in a Chair opposite to her, and supporting the Breast

Breast with my left Hand, I began with making a semicircular Incision upon its superior Part with a round edged Knife, which was continued quite to the pectoral Muscle. After this, I discovered an adhesion of a Part of the Basis of the Breast to the pectoral Muscle from whence I separated it; then I proceeded to divide the Integuments quite round on its inferior part, and finished the Amputation by dissecting the inferior Part of the Breast from the lower Part of the pectoral Muscle, upon which it lay loose, and quite free from adhesion.

IN the Operation, several Arteries of a considerable size were divided, which were compressed by the Fingers of an Assistant, till the whole of the Breast was removed.

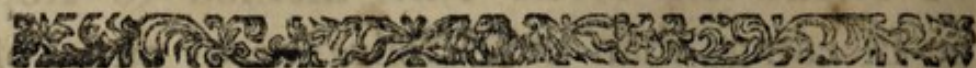
AFTER cutting off the Breast, I made a longitudinal Incision through the Integuments quite to the Extent of the Schirrous Tumour, which afforded me sufficient Room to dissect it out.

IN removing the Tumour, I necessarily divided a considerable Artery which nourished it.

THE Wound was large, and bled freely from five or six Arteries.

I MADE use of no other method to stop the Bleeding, than the Application of pieces of Agaric to the Mouths of the Vessels, which were properly secured on by a Flanel Roller, after being first covered with common dry Lint, and a Pledgit of Tow spread with Digestive. The symptomatic Fever was very slight ; she has been quite free from those painful Spasms, which constantly arise from the use of the Needle and Ligature. There has not been the least loss of Blood since the Operation. Her Wound was dressed on the fourth Day, when the whole of the Agaric came away. Since then it has been treated in the common Method. She is very well, and her Wound was at the Point of being healed in nine Weeks after the Operation.





CASE XLII.

Of an Amputation of a Leg.

CASE the 3d.

MAY 1754. *G. W.* aged 12 Years, was admitted into the Hospital with a Complaint in one of his Ancles and Feet, with which he had been afflicted for some time. The Disease was an Abscess in the Joint of his Ankle; and he had another Abscess on the upper Part of the same Foot, which had discharged, and continued to discharge so much, as to waste his whole Limb, to bring on an hectic Fever, and to render him incapable of putting his Foot to the Ground without giving excessive pain.

HE had very little Appetite, and the Ligaments of the Ankle and Foot, as well as the Bones were much enlarged, and become carious.

IN consideration of these circumstances, and not being able to cure, or give him relief by any other Methods, I advised the Amputation
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of the Leg, which was complied with, and I performed it on the 13th of *May* 1754, in the Manner as before described, and in the usual Place below the Knee.

THE Agaric and Dressings were applied as in the preceding Cases, which answered perfectly well in all respects.

THE Tourniquet was quite removed in ten Minutes after the Patient was put to Bed. He has had very little Fever, restlessness, or pain since the Operation.

HIS Wound was dressed on the 5th Day after the Operation, and the whole of the Agaric was then removed.

THE Patient is very well in Health, and his Wound was very near being well in eight Weeks after the Operation.





CASE XLIII.

Of an Amputation of a Leg.

CASE the 4th.

MAY 1754, R. B. aged 54, was admitted into the Hospital with a Mortification in his Foot, which, notwithstanding all the means used in Physic and Surgery for his Relief, continued to advance till it extended to about two Inches above the Joint of the Ankle, where at length it stopped, after having destroyed the several Tendons, Ligaments, and Periosteum, which belong to the neighbouring Parts.

THE Patient was of a very bad habit of body, his Countenance was fallow, his Pulse quick, and languid. He was in a very weak State, and his whole Mass of Blood greatly impoverished. He at the same time had a Mortification in the other Foot, which deprived him of all his Toes.

WHEN the Mortification was separated, and his habit of Body improved by proper Medicines and Time, the Amputation of the Limb
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was advised, and he consented to it; which was performed in the usual Place below the Knee, on the 21st of *May* 1754, and in the same Manner as has been already described in the Case of *J. L.*

I MADE use of no other methods to stop the bleeding than the Agaric, which was applied to the Mouths of the Vessels, as in the preceding Cases.

IMMEDIATELY after the Operation and Dressings were finished, the Patient was removed to Bed, and the Tourniquet taken off.

HE has not had the least loss of Blood since the Operation.

THE Pain and Fever have been very inconsiderable.

IT is now eight Weeks since the Operation was performed; the Patient is alive, and his Wound as near being well, as the Time, his Age, and bad Habit of Body can be supposed to admit of.

REMARK.

THE Case of *J. L.* has something singular in it, and particularly proves the extraordinary Efficacy, and Usefulness of the Agaric.

I HAVE already taken notice, how frequently it is impracticable to make a proper Use of the Needle and Ligature in Wounds of long standing; and farther know from Experience, that it is no uncommon thing to meet with the same Disappointments even in recent Wounds that are made upon diseased Parts. So that I think it may be reasonably questioned, whether I should not have met with the like difficulty in this Subject, had I attempted to secure the Vessels by Ligatures.





CASE XLIV.

Of an Amputation of the Leg.

THIS Operation was performed since the Communication of the four preceding Cases to the *Royal Society*.

July the 6th 1754. *H. R.* a young Man of 24 Years of Age was admitted into the Hospital on the 25th of *April*, of this Year, on account of a Disease in his left Foot.

THE Part was much enlarged and inflamed. He had a Fever, and there was a considerable Collection of Matter which pointed on the upper and outer part of the Foot, betwixt the Extremities of the *Tibia*, and *Fibula*.

THE Tumour was opened by Caustic, and discharged about a Quart of very foetid Matter.

THERE was a second Abscess formed on the Inside of the Leg, under the *Tendo Achillis*, which was opened by Incision.

FROM the Account given me by the Patient, the Disorder had been about sixteen Months
M standing,

standing, and took its rise from a strained Ankle, which was immediately succeeded with considerable pain and swelling. But by Rest, and the Application of warm Vinegar to the part, these Symptoms were soon removed, and he continued easy and perfectly well for a few Weeks, when he had the Misfortune to strain the same Ankle again.

FROM the Moment of the second Accident, he became lame, his Ankle and Foot swell'd, and his Disorder increased for two Months.

IN this Situation, he put himself under the Care of an eminent Surgeon. The Tumour terminated in an Abscess, and was opened by Incision.

THIS Collection of Matter was succeeded by several others, which were opened in the same Manner.

THE Wounds were cured in about eighteen Weeks, and the Patient was restored to the perfect Use and Motion of his Foot.

HE continued quite well for six Months, when on a sudden, the Foot became painful, and swelled again without any previous Accident, and soon afterwards one of the former

Wounds

Wounds broke out, from whence there arose a considerable *Fungus*.

IN consequence of the Disease, the Leg was become wasted, he was incapable of putting his Foot to the Ground, he rested very little, his Appetite was bad, his Pulse quick and low; the whole Ankle and Foot were greatly enlarged.

FROM these Circumstances, and all Attempts to relieve him having failed, it was judged adviseable to Amputate the Limb; which I did this Morning in the usual Place below the Knee, and in the same Manner as has been already described.

WHEN the Leg was cut off, bits of Agaric were placed upon the Mouths of the several Arteries, as in the preceding Cases, and the same kinds of Dressings and Bandage applied over them; the Patient was immediately removed to Bed, and in a few Minutes after, the Tourniquet was let quite loose.

UPON slackening the Tourniquet, the Patient complained of a Convulsion in his Stump, which was succeeded by a Discharge of Blood through the Dressings from the *Arteria Tibialis Antica*.

SEEING this, I tightened the Tourniquet, upon which the Bleeding ceased. I kept the Tourniquet moderately tight for a Quarter of an Hour, and then loosened it again. The Patient upon its being loosened, complained of a Return of the Spasm in his Stump, and there presently ensued a second Discharge of Blood from the same Vessel. On this account, I tightened the Tourniquet again, and compressed the Femoral Artery; upon which the Bleeding immediately ceased. I kept the Ligature moderately tight for about a Quarter of an Hour, and then loosened it till it had no degree of Pressure upon the Artery. From this time, the Bleeding stopped, and did not return again.

UPON the whole, I judge that the Quantity of Blood which was lost in consequence of the Operation did not amount to eight Ounces; and of this I am very certain, because I had placed a Bason under the Stump for the Reception of the Blood, which amounted to about three Ounces; and allowing there was the same Quantity, or a little more, absorbed by the Dressings and Rollers, the whole could not amount to more than I have supposed; which

which Evacuation, after an Operation of this kind, is more likely to be serviceable, than injurious to the Patient, when he has not been much reduced by the Disease.

H E rested very well the Night after the Operation, he had scarcely any symptomatic Fever, and the next Morning was perfectly easy.

F R O M this time he continued to go on very well, without the least interruption, or return of the Bleeding.

H E was dressed on the 4th Day, when the whole of the Agaric was removed, and only the common Digestive applied to the Wound; I examin'd whether I could Discover the Extremities of the Vessels, or any Pulsation in the Wound, but could not.

H E was dressed again on the sixth Day; he remains very well, has had hardly any Fever or Uneasiness, and his Wound is in a perfect good State.

O N the 7th and 8th Days he was very well, and has a fair prospect of a speedy Recovery.

R E M A R K.

U P O N examining into the Condition of the Foot, after it was amputated, a great Part of the
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Capsular Ligament of the Ankle Joint appeared to be destroyed. The superior Part of the *Astragalus*, and inferior part of the *Tibia* were deprived of their Cartilages. The Integuments and neighbouring Tendons were greatly thickened, and adhered inseparably to each other. The *Membrana Adiposa* had the Appearance of a *Cartilage*. The *Tarsal*, and *Metatarsal* Bones were much enlarged.

N. B. THE Reason of my discontinuing the use of the Agaric from *December* 1752, to *May* 1754, was owing to my not being able to procure such as I believed might be depended upon. But since I have had it in my power to procure the genuine Species of Agaric, I have always used it; and have never as yet met with one Instance of its failure; nor have I ever been under a necessity of applying it a second time after any Operation whatsoever, except that Instance which has been taken notice of in the Introduction to these Cases.

BESIDES the particular Operations of which I have already given an Account, I could treat of several others, wherein I have applied the Agaric with equal Benefit: But I look upon it as unnecessary to give a Detail of its Effects
upon

upon Vessels of less consequence than those I have already spoken of: concluding it must necessarily be allowed, that whatever Styptic is powerful enough to suppress an *Hæmorrhage* from the larger Vessels, must, *cæteris paribus*, be sufficiently powerful to suppress an *Hæmorrhage* from the smaller, provided it can be applied and retained upon the Mouths of the divided Vessels with equal advantage; and it is probable that the Application of the Agaric will prove not only of great use after most Operations where the Needle and Ligature may be advantageously used, but particularly so in stopping the Bleeding from those Vessels which are divided in the lateral Operation for the Stone, as well as the Bleeding from any other wounded Vessels, which, from their deep Situation cannot be secured with the Needle and Ligatures.

F I N I S.

Vessel of less consequence than those I
 already spoken of; concluding it must
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 the larger Vessel, and, certainly, far
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 the wounded Vessels, which, from their
 Situation cannot be secured with the
 and Ligature.