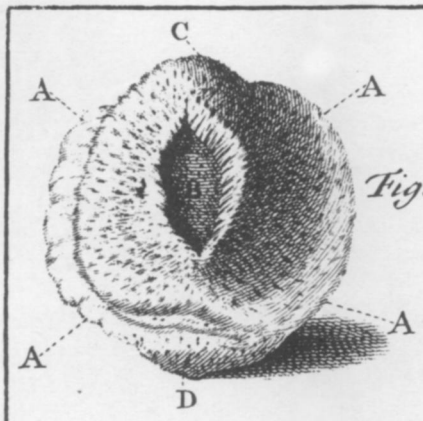


Fig. 1. p. 521.

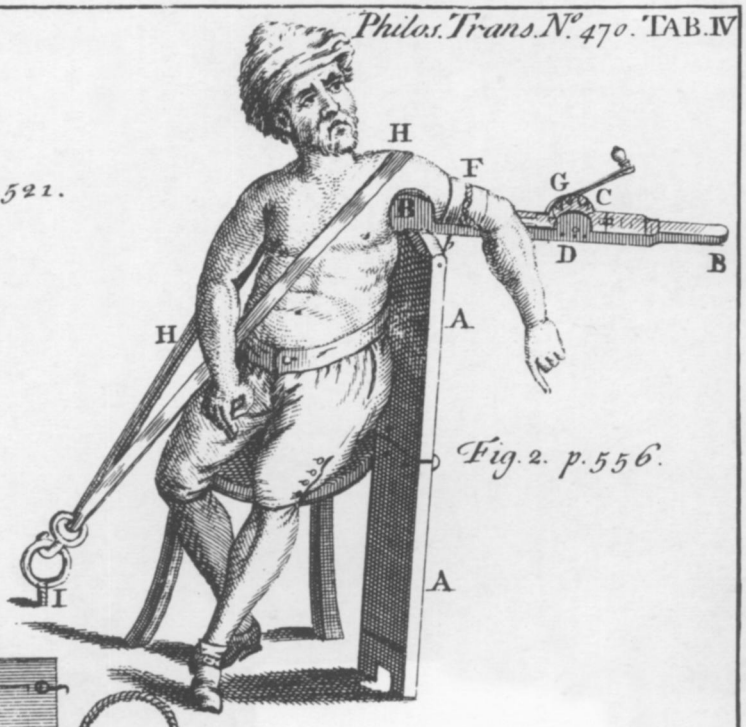
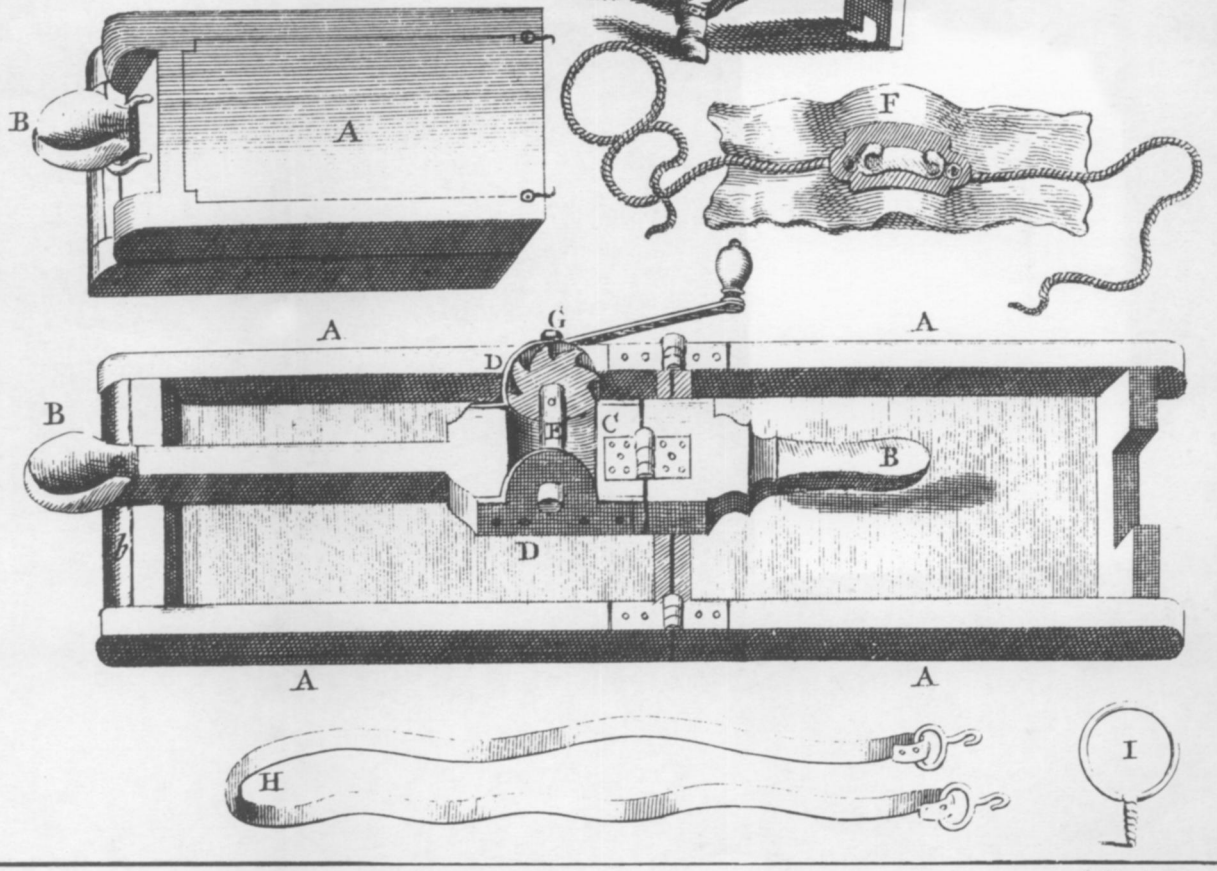


Fig. 2. p. 556.



The ROYAL SOCIETY's whole *Troy Pound* Weight weighed, at a Medium, leſs than the Eight *Ounces* and Four *Ounces* of theſe Standards, taken together, by Two *Grains* and Three-eighths.

That the ROYAL SOCIETY's *Averdupois Pound* weighed in *Troy* Weight by theſe Standards, 14 *Ounces* 11 *Penny Weight* 16 *Grains* and Seven-eighths; or 7000.87 *Grains*.

That the ROYAL SOCIETY's Pile of 16 *Ounces Troy*, was lighter than 16 *Ounces* of theſe Standard Weights, by Four *Grains* and Three-fourths.

And laſtly, That the ROYAL SOCIETY's Eight *Ounces* and Four *Ounces* together, taken from their Pile, weighed lighter than their ſingle *Troy Pound* Weight, by Five-eighths of a *Grain*.

X. *The Deſcription of an* Inſtrument *for reducing a* diſlocated Shoulder; *invented by Mr.* John Freke, *Surgeon of* St. Bartholomew's Hoſpital, *and* F. R. S.

GENTLEMEN,

Read June 23. 1743.

I Should not have preſented this to you, but to ſhew in how ſmall a Compaſs the whole Power which can be made uſe of in reducing a diſlocated Shoulder can be contracted. If therefore a Machine for this Purpoſe be not portable, it matters but little to an afflicted Patient Ten Miles off, how good an Inſtrument is out of his Reach.

This

This Machine (ſee TAB. IV. Fig. 2.) which conſiſts of Two Boxes *A*, joined at the Ends by Two Hinges, contains, when folded together, every thing that can poſſibly be wanted in the Operation before-mentioned; and it may ſo eaſily be made uſe of, without the Aſſiſtance of any other Operator than the Surgeon employed, that I may venture to affirm, a Patient may be ſet down, the Inſtrument applied, and the Shoulder reduced, in One Minute, ordinarily ſpeaking.

The Length of this Inſtrument, when ſhut up, is One Foot Eight Inches, its Breadth Nine Inches, and Thickneſs Three Inches and a Quarter. When it is opened, it is kept ſo by Two Hooks fixed on the Backſide of it; and when one End of it ſtands on the Ground, the other ſtands high enough to become a *Fulcrum*, or Support of a Lever *B B*, which is fixed on a Roller *b*, by a large Wood Screw, which turning ſideways as well as with the Rowler, it obtains a circumrotatory Motion, ſo that it will ſerve to reduce a Luxation either backward, forward, or downward.

The Roller on which the Lever is fixed, is juſt the Diameter of the Depth of one of the Boxes, into which are driven Two Iron Pins, the Ends of which are received by the Two Sides of the Box, which are an Inch thick.

The Lever is Two Foot Four Inches, and is cut off and joined again by Two Hinges *C*, to fold up ſo as to be contained in the Boxes. On the Backſide of it is a Hook, to keep it ſtrait; the other End of it is to hang over the Roller about an Inch and half, which is to be excavated and covered with Buff Leather, for the

the more eaſy Reception of the Head of the *Os humeri*.

Two Iron Cheeks *D D* are ſcrewed on each Side of the Lever, to receive through them an Iron Roller *E*, which has Two Holes through it, to receive Two Cords coming from a Brace *F*, fixed on the lower Head of the *Os humeri*; for on no other Part of the Arm above the Cubit can a Bandage for this Purpoſe be uſeful; for, if the Surgeon applies it on the muſcular Part of the Arm, it never fails ſlipping down to the Joint, before you can extend the Limb.

The Iron Roller has a ſquare End, on which is fixed a Wheel *G*, within the Cheek, notched round, which works as a Rotchet on a Spring Ketch underneath the Lever, by which it is ſtopped, as you wind it with a Winch; and may at Pleaſure be let looſe, as there ſhall be Occaſion for it, by diſcharging the Ketch.

I come now to deſcribe the Brace *F*, which, compared with common Bandages, is of more Conſequence than can eaſily be imagined by unexperienced Perſons. It conſiſts of a large Piece of Buff Leather, big enough to embrace the Arm, ſewed on Two Pieces of ſtrong Iron curved Plates, riveted together, one of them having an Eye at each End, to faſten Two Cords in; the other is bent at the Ends into Two Hooks, which are to receive the Cords, after they have croſſed over the Arm above.

In order to keep the Patient ſteady in his Chair from coming forward, or letting the *Scapula* riſe up, on depreſſing the Lever, after the Limb is drawn forward by the Winch, there muſt be fixed over the Shoulder a Girth with Two Hooks at the Ends of it,

long

long enough to reach to the Ground on the other Side, where it muſt be hooked into a Ring *I*, to be ſcrewed into the Floor, for that Purpoſe.

XI. *A Letter from* Pierce Dodd, *M. D. Fellow of the* Royal College *of* Phyſicians, London, *and Phyſician to* St. Bartholomew's Hoſpital, *to the* Preſident *of the* ROYAL SOCIETY, *concerning a Perſon who made* bloody Urine *in the* Small-pox, *and recovered.*

SIR,

Read June 23. 1743. MAking bloody Water is univerſally eſteemed as terrible a Symptom as any that can happen in the *Small-pox*; and all who have wrote concerning that Diſtemper, do unanimouſly agree, that it is a certain Forerunner of approaching Death. Dr. *Cade*, indeed, ſays, in his Letters to Dr. *Freind*, concerning Purging in that Diſtemper, that he has ſometimes cured this Symptom, by the Help of *Camphire*, and a copious Quantity of Acids; but then he adds, that this Relief was only temporary; and that, to confeſs the Truth, he never knew any body, that made that ſort of Urine, who ever ſurvived the 16th Day from the Eruption: And there is nobody whom I know, that has been converſant with this Diſtemper, but has conſtantly experienced, ſooner or later, the like Fatality in conſequence of it. I mean, when this ſort of Urine has pro-