

Holes in the Board, the one having the red hot Iron in it, the other the Candle.

Now if, of the refracted Rays of the Candle in the first Case (*Fig. 25.*) those which diverge from each other, so as to fall into each Eye, cause the same Sensations respectively, as the Rays which come from a red hot Iron and those which come from a blue Candle; it is evident that the Candle in the first case affords red-making and blue-making Rays after Refraction, and that those Rays are differently refrangible; the red *b R* (*Fig. 25.*) the least refrangible, as declining less from the Perpendicular $\omega \omega$; and the Purple as *b P* declining most from the said Perpendicular.

The same will (*ceteris paribus*) be found true in the intermediate Rays; and to be certain that the Experiment is as I have related it, the Planes *af* and *fd* of the Barr may be covered with Paper.

IV. *An Account of what appear'd on opening the big-belly'd Woman near Haman in Shropshire, who was suppos'd to have continued many Years with Child. Communicated by Dr. Hollings M.D. from Shrewsbury.*

A Marry'd Woman, near *Haman* about Three Miles from *Shrewsbury*, about the 40th Year of her Age, had then first the common Reasons to believe she was with Child: at the Time of her Account she had the usual Signs of Labour, and a good Midwife, tho' mistaken, assur'd her it was so, but that the Child was so big she could not be delivered without bringing it away in pieces. She not submitting to that, her Pains went soon off, and she continued without any other Disorders Nine Months longer, when

when she had again the Signs of Labour; and the same Midwife assur'd her as before, and she persisting in her former Resolution, her Pains, after a Day or two went off. Soon after her Belly swell'd to a surprizing Size, by which she got Subsistence for her Family by being seen as a Shew. I saw her first above twenty Years since, when her Belly was almost even with her Chin, the Weight of it so great, that she was oblig'd to support it with a Stool. She could not stand without the help of a Rope from the Cieling, which assisted her in changing her Posture of sitting. She slept commonly with her Arms folded on her Belly, and her Head rested between them. She had no swelling in her Legs: every other Part emaciated as usual in the like Cases. Thus this poor Creature liv'd without any other considerable Complaint above Thirty Years, the most remarkable Circumstance, I think, in her Case. She died in *May 1715*, when this appear'd to be an *Ascites*.

I need not mention the State the common Teguments must necessarily be in from so great a Distention, which had distorted many of her Ribs, and forc'd the Diaphragm so high, that it was surprizing to find her breathing could be so long continu'd. The Water was all contain'd in the Duplication of the *Peritoneum*, 13 Gallons besides a Quart that was spilt: it was saltish, with some little fat upon it, and towards the latter Running ting'd with Blood as usual. There was not any Water in the Cavity of the *Abdomen*, except what was contain'd in a kind of Bladder of the Shape I have sent, *Fig 31*. which lay a-cross the *Fundus Uteri*. This was divided by a Cartilaginous Substance into two Cavities; in one there was a Pint and a half, in the other three Parts of a Pint of Water. I believe it was this (I know not how) impos'd on the Midwife. The *Uterus* was of the natural Size without any Alteration, except that the *Os Tinca* and *Collum minus* were fill'd with a gritty Substance, hard as Stone, which I take to be the Humour

ſeparated there, and coagulated by Time. Mr. *Cooper Tab. 15. Fig. 4.* ſays he found the ſame Parts fill'd with a glutinous Matter, which he thinks is uſeful to prevent Abortion; which if vitiated, Impregnation is hinder'd.

The Liver and other parts contain'd in the *Abdomen*, were forc'd into an incredible ſmall Compaſs (and by that Preſſure a little chang'd in Shape) to perform their Office ſo long; to which the Muſcles of the *Abdomen*, diſtended ſo as to be ſcarce diſcernible, could give but little, if any, Aſſiſtance.

The Awe that People have here for dead Bodies, tho' never ſo prejudicial to the Living, would not ſuffer her Friends to let me make any farther Enquiry; ſo that I can ſend no Account of any other Part. The ſame Error hindered me examining another Woman, who died here about a Week after, of an *Aſcites* which ſhe had had Forty Years, any farther than to be ſatiſfied ſhe had Seven Gallons of Water contain'd between the Duplicatures of the *Peritoneum*, and none in the Cavity of the *Abdomen*.

IV. *Methodus ſingularis quâ Solis Parallaxis ſive diſtantia à Terra, ope Veneris intra Solem conſpiciendæ, tuto determinari poterit: propoſita coram Regia Societate ab Edm. Halleio J. U. D. ejuſdem Societatis Secretario.*

PLurima ſunt maxime quidem paradoxa, omnemque fidem apud vulgus ſuperantia, quæ tamen adhibitis Mathematicarum Scientiarum principiis levi negotio enodantur. Ac ſane nullum problema magis arduum ac difficile videbitur, quam eſt *Solis à Terra diſtantiam* vero proximam determinare; quod tamen obtentis accuratis

qui.



