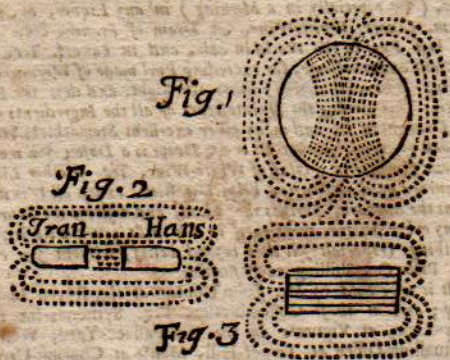


An Account of the Loadstone.

That according to a late Promise, you may the better therefore apprehend the Solution of the various Effects of the Loadstone, We shall first as briefly as possible, give you an Explication of the Generation of it, which according to our Modern Philosophers is this :

The Earth, together with its Vortex, in which is contain'd the Moon, together with all the interjacent fluid Matter of the Heavens, being continually rouled about upon its Axis in the space of 24 hours, does by the continual motion and attrition of one particle against another rubb off little particles, which by their motion become still more fine and subtle, and consequently require more space than before, this fine dust (therefore if I may so call it) which is by the motion of the Vortex rubb'd off, striving to make it self room about the superficies of the Vortex, is hinder'd and repuls'd by those parts of the Suns Vortex which do immediately inclose it, and by that fulness which is in the Universe, so that it is constrained to move down to the Center of its own Vortex : and that it cannot do, but only about the poles thereof, where the motion is not so rapid as about the Equator, and consequently not so capable of making resistance against it ; these particles therefore moving towards the Center of this Vortex, wherein the Earth is placed, are by the continual pressure of new similar particles, which are continually descending in lines parallel to the poles, forced to go past the Center, and to move quite thro' the Earth, those which entred by the North pole out at the Southern one, and those on the contrary, which entred by the South-pole out at the Northern one ; these particles therefore when they go to pass out at the opposite Pole, meeting the subtle matter, which does there descend towards the Center, is of necessity forced back, but finding the pores through which they moved before fill'd by other particles moving in the same manner as they did before, they are forced to turn their Course, and to move along thro' and about the Spongy Superficies of the Earth towards the same pole whereby they at first entred, and so are moved continually in a kind of circular motion. In this matter which



moves on this fashion (Fig. 1.) consists all the Efficacy of a Loadstone, and whatsoever has pores fitted for such a motion of the subtle matter, is a Loadstone potentially, and would be one actually, if furnish'd with matter to move in that manner through its pores, so that the Earth it self is but one great Loadstone, whose Operations one might with Astonishment behold, were one but remov'd just out of its Sphere of Activity. But to come more par-

ticularly to the Loadstone ; having first granted this motion of the subtle matter of the Vortex of the Earth, you will easily assent to this, that the particles which move through the Bowels of the Earth, when they light of a Body fit to receive the Action, will also move through it, and make it self passages parallel to the poles of the Earth, and that if that Body be of any great solidity, as the Loadstone is, it will retain those pores after it be taken out of the Earth, which pores being full of that subtle matter aforesaid which strives to go out at each pole of the body, and being hindred by the matter of the Vortex, which meets it as soon as got out of the Body, it is forced to move it self circularly along the superficies of the same, till it come to the Pole at which it entred at first, and there reentering continues its motion as before, just in the same manner as the subtle matter of the great Vortex of the Earth moves. Now why the Loadstone should acquire these parallel pores, and this determination of motion more than any other Bodies which are in the Entrails of the Earth, may be because of the Natural Ordination and Determination of its parts, as being fitter to receive the actions of those particles than any other equally hard and solid Body, for that it should be very solid so as to retain that conformation of parts, and determination of pores after it be taken out of the Earth, is also requisite, as well as that it should at all have them, otherwise it would immediately lose its faculty of Attraction, (as it seems to be) its pores being too pliable to retain their acquired determination.

Having premised thus much of the Production of the Loadstone, We'll now come to the Solution of the Phenomena's thereof, and first of the Reason of its Attraction of Iron or Steel, the Reason whereof is this :

As Steel is but a more perfect sort of Iron, so the Loadstone is but a more perfect sort of Steel, as has been Experimented by melting a Loadstone, and converting it into pure Steel : So that in Iron and Steel there is the same parallel pores as in the Loadstone, but being stop't by some terrene particles, it hinders them from having the like Qualities with the Loadstone. Now by applying the Loadstone to either Iron or Steel, the Matter which continually moves about its superficies getting into the pores of the Iron, &c. opens them, making it self thereby free passages thro' them, so that thereby the Iron, &c. becomes a true Loadstone it self, having all the Qualities of that wherewith it was touch'd : But that you may conceive how the Iron comes to approach to the Loadstone, if put near it, suppose a Loadstone in a little Boat just so big as to sustain it from sinking, near to which you hold a piece of Iron, &c. the Matter which goes out of the Pole of the Loadstone next to the applyed Iron, which before by the Circumambient Matter was repulled and forced to move circularly about the superficies of the Stone, meeting with the Iron as it goes out of the Loadstone, and finding pores fit for its reception, does keep on its Course thro' the Iron : Now the particles as they pass out of the Loadstone into the Iron, (Fig. 2.) do expulse all the Air which was between their two Bodies, and hindred their motion which by reason of the fullness of all things, is forced to turn its Course circularly, part along the superficies of the Stone, and part along the superficies of the Iron, till it come to the Extremities of each, where when it comes, it must of necessity force them together, as having no Air between them to impede their coming together, and the Matter which freely moves out of one Body into the other, rather facilitat-

ing

