

PHILOSOPHICAL TRANSACTIONS.

July 26. 1675.

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An extract of a Letter, written by a Friend to the Publisher out of the Country, July 24. 1675; relating to the Contents of the Tract next foregoing.

I Am very much obliged for the last packet which came safe, and I was not a little transported with Joy in the perusal of Honourable Mr. *Boyles Essay Instrument*, as he hath expressed the five principal uses of it, which obliges Mankind (that hath a regard for Honesty or Justice; or hath any concernment for *Coins*, or *Metals*) to return him grateful Acknowledgments. Few of us are not sometimes cheated with counterfeit Money, and I think there is scarce a House-keeper which is not abused by false Metals. We are all at the mercy of *Pewterers*, and, in the Country, we begin to be in no better case in our dealings with *Goldsmiths* and *Silversmiths*. Long since I took notice, how light and Silver-like the Pewter was, which descended to us from

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our great Grandmothers ; but as soon as (to follow the fashion) we changed it, the *weight* and the very *colour* was altered. And, as they have had the wit to lead us on to change the fashion of our *Pewter*, as oft as we change the fashion of our Hats, our *Pewter* is in every change more and more embased : And, if our *Silver-smiths* hold on their degrading mixtures, I shall question, whether our *Silver-plate* may not shortly come down to approach our Fore-fathers *Pewter* : I mean in the Country, where 'tis never or seldom tried.

But, *Sir*, since our honourable Philosopher hath discovered the pure Gold, and digged out the Oar ; I hope, you and others of the *R. Society* will find out some ingenious and docible persons, who, for reasonable gain to themselves, and for common good, will furnish us with store of these Instruments, fitted, and ready prepared for all the uses.

I have marvelled, That the want of willing Persons to execute, and to furnish for Common practice the excellent discoveries and instructive Instruments, which some great Philosophers have lately brought to light, have not discouraged the Inventors themselves.

Let me offer to you two or three *Instances*. If the same Mr. *Boyles Statical Baroscope*, described and published in your *First Vol. N. 14. p. 231* ; or perhaps, if the *Mercurial Baroscope* had been more generally spread in the hands of many Sagacious Gentlemen, I conceive, we should have heard less noise against the Gravity and Gravitation of the Air. I cannot see what place the *Statical Baroscope* would give, either for the *Funicular* or for the *Hobbian* Objections, or yet for the *Difficiles Nuxæ*. Both the said sorts of *Baroscopes* do shew to the eye the Gravitation of Air from the heaviest to the lightest, in all changes, to every degree ; and mutually explain and confirm each other : And the small *Hydrostatical Instrument* may make some resemblance of the same or like importance, in *Liquids*. I guess, that in a very long *clear Glass* one may see, whether the *Bladders* of those *Fishes* which have the thinnest and clearest film, do expand and contract, as they ascend and descend with the *Hydrostatic Instrument*.

My next Instance may be the *Celestial and Aerial Magnets*, as proposed, and to some effects discovered by Mr. *Boyle*. But this will hardly be thoroughly investigated by any other than the *Sons of Art*. We see, with what confidence some men pretend to *Astrology*,
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even in trifles; yet how lazy or unwilling the whole Tribe is to make proof, either of that force or kind of *Subterranean Steams*, or of *Celestial* or *Ethereal Influences*; no, not of the Moon, or any Planet or Constellation, to any considerable accurateness. The Sun indeed will not permit all his Power to be concealed from the dullest of Mankind; but certainly, as the Temperate weather of the *Spring* differs, in efficacy, from the Temperate weather of the *Autumn*; the Sunshine of the *East*, from the Sunshine of the *West*; *May dew*, from the *dew* of *August*; the keen *winds* of *March*, from *winds* of the same keenness in *January*, &c. so one would be apt to think, the Increase or Decrease of the *Moon*, the *Perigee* or the *Apogee*, and perhaps the *Libratures*, lately discovered, as the *Aspects* of other *Planets*, and those *Constellations* to which all the Old *Georgical* Writers do attribute so much, may have their peculiar effects, if duly and luckily examined. We can hardly imagine, that at *Farnham*, and other places, where many hundreds of Acres of strong-sented *Hopps* are fully ripe, be given no peculiar indication besides odour in the Air; or when large fields of *Beans* and *Pease* are in full blossom, that they have no effect, besides the *Odour*. And for *Mineral* and other *Subterranean Steams*, the *Baroscopes*, with comparing other circumstances, may seem to indicate, when they ascend with more than ordinary impetuosity, and when rebated. In all my Observations, I alwaies found the Air *lightest* in the greatest Storms, and a little before, and at the beginning of great falls and continued Rain.

Thirdly, I instance the *Statical Hygroscope*, which is so fully expressed and directed by the same Mr. *Boyle*, that 'tis easie for an ordinary Capacity, with a little diligence, to make considerable Discoveries by it, for the near concernments of Mans health.

Many other *Instances* I could name, which, if we had such a Man as Mr. *Sellar*, who could employ Workmen to perfect the Instruments, and to sell them off; it would (doubtless) procure us many Operatours, and many free Discoveries in some points of *Philosophy*, of which we have yet heard but little Tydings.