

mention'd from him in *Numb. 4 pag. 67*, of these *Transfections*.

Prepare (*sait he*) two Glasses, the one exactly flat on both sides, the other flat on the one side, and convex on the other, of what Sphere you please. Let the flat Glas be a little broader than the other. Then let there be made a Cell or Ring of Brass, very exactly turn'd, into which these two Glasses may be so fastned with Cement, that the plain surfaces of them may lye exactly paralell, and that the Convex-side of the Plano-convex-Glas may lye inward ; but so, as not to touch the flat of the other Glas. These being cemented into the Ring very closely about the edges, by a small hole in the side of the Brass-ring or Cell, fill the interposed space between these two with *Water, Oyl of Turpentine, Spirit of Wine, Saline Liquors, &c* ; then stop the hole with a screw: and according to the differing refraction of the interposed Liquors, so shall the *Focus* of this compound Glas be longer or shorter.

But this (adds the *Proposer*) I would only have look't upon, as one instance of many (for there may be others) of the *Possibility* of making a Glas, ground in a smaller Sphere, to constitute a Telescope of a much greater length: Though (not to raise too great expectation) I must add, That of *Spherical* object glasses, those are the best, which are made of the greatest Sphere, and whose substance hath the greatest refraction.

Observations About Shining Worms in Oysters.

These Observations occur in the *French journal* of *April 12. 1666.* in two letters, written by *M. Auzout* to *M. Dela Voye* ; whereof the substance may be reduced to the following particulars.

1. That *M. Dela Voye* having observed, as he thought, some

some shining Worms in Oysters; M. *Auzout*, being made acquainted with it, did first conceive, they were not Worms (unless they were crushed ones) that shin'd, as having not been able then to discern any parts of a Worm; but only some shining clammy moisture; which appeared indeed like a little Star of a blewish colour, and stuck to the Oyster-shell; being drawn out, shone in the Air its whole length (which was about four or five lines,) and when put upon the *Observers* hand, continued to shine there for some time.

2. That M. *Auzout* afterwards, causing more than 20. dozen of Oysters to be open'd at Candle-light, really saw, in the dark, such shining worms in them; and those of three sorts. *One* sort was whitish, having 24. or 25. feet on each side, forked; a black speck on one side of the head (taken by him for a *Crystallin*) & the back like an Eele, stript off her skin. The *second*, red, and resembling the common *Glow-worms*, found at Land, with folds upon their backs, and feet like the former; and with a nose like that of a dog, and one eye in the head. The *third* sort was speckled, having a head like that of a Sole, with many tufts of whitish hair on the sides of it,

3. That, besides these, the *Observer* saw some much bigger, that were grayish, with a big head, and two horns on it, like those of a Snayl, and with 7. or 8. whitish feet, but these, though kept by him in the night, shin'd not.

4. That the two first sorts are made of a matter easi'y resolvable, the least shaking or touch turning them into a viscus and aqueous matter; which falling from the shell stuck to the *Observers* fingers, and shone there for the space of 20. seconds: and if any little part of this matter, by strongly shaking the shell, did fall to the ground, it appear'd like a little piece of a flaming Brimstone; and when shaken off nimbly, it became like a small shining Line, which was dissipated before it came to the ground.

5. That

5. That this shining matter was of different colour; some, whitish, some, reddish; but yet that they afforded both, a light which appear'd a violet to his eye.

6. That it is very hard to examine these worms entire (especially the white ones) because that at the least touch they doe burst, and resolve into a glutinous moysture; whence also if it were not for their feet, that are discover'd in their matter, none would judge them to be Worms.

7. That among those, which he observed, he saw two more firm, than the rest, which shone all over; and when they fell from the Oyster, twinkled like a great star, shining strongly, and emitting rays of a violet-light by turns, for the space, (as touch't above) of 20. seconds. Which Scintillation the *Observer* imputes to this, that those worms being alive, and sometimes raising their head, sometimes their tayle, like a Carpe, the light increased and lessened accordingly; seeing that, when they shone not, he did, viewing them by a Candle, find them dead.

8. That forcibly shaking the Oyster-shells in the dark, he sometimes saw the whole shell full of lights, now and then as big as a fingers end; and abundance of this clammy matter, both red and white, (which he judges to have been Worms) burst in their holes.

9. That in the shaking he saw all the Communications of these little Vermiculous holes, like to the hole of Worms in Wood.

10. That in more than 20 douzen of Oysters he shook no shell (10. or 12. excepted) but it emitted light: And found some of this light in sixteen of the Oysters themselves.

11. That this light occurs more frequently in big, than small Oysters; in those that are pierced by the Worm, oftner, than

in those that are not, and rather upon the Convex-side, than the other; and more in fresh ones, than in the stale.

12. That having somewhat scaled the Convex-side of the shell, and discover'd the Communication of the holes, wherein the often-mention'd viscous moysture, that has any form of insects, is found; he smelt a scent, that was like the water of a squeezed Oyster.

13. That the Worms give no light, when irritated, but if they do, the light lasts but a very little time, whereas that which appears in those, that were not angred before, continues a great while; the *Observer* affirming to have kept of it above 2 hours.

So far the *Journal des Scavans*; which intimates withal, that if the *Observers* had had better *Microscopes*, they could have better examin'd this matter.

But since the curious here in *England* are so well furnish with good ones, 'tis hoped, that they will employ some of them for further and more minute Observations of these Worms; it being a matter, which, joyned with other Observations, already made by some excellent persons here, (especially Mr. *Boyle*) upon this subject of Light, may prove very luciferous to the doctrine of it, so much yet in the dark.

Some Observations Of the Effects of Touch and Friction.

The Operations and Effects of *Touch* and *Friction* having been lately much taken notice off, and being lookt upon by some, as a great *Medical Branch*, for the curing of many diseases and infirmities; it will perhaps not be unreasonable to mention (here also) some Observations relating thereunto; which may give an occasion to others, to consider this subject more, than has been done heretofore, and to make further