

PHILOSOPHICAL TRANSACTIONS.

Monday, May 8. 1665.

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Some Observations and Experiments upon May-Dew.



THAT ingenious and inquisitive Gentleman, Master *Thomas Henshaw*, having had occasion to make use of a great quantity of *May-dew*, did, by several casual Effayes on that Subject, make the following Observations and Tryals, and present them to the *Royal Society*.

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That

That *Dew* newly gathered and filtered through a clean Linnen cloth, though it be not very clear, is of a yellowish Colour, somewhat approaching to that of Urine.

That having endeavoured to putrefy it by putting several proportions into Glass bodies with blind heads, and setting them in several heats, as of dung, and gentle baths, he quite failed of his intention: for heat, though never so gentle, did rather clarify, and preserve it sweet, though continued for two months together, then cause any putrefaction or separation of parts.

That exposing of it to the Sun for a whole Summer in Glasses, that hold about two Gallons, with narrow mouths, that might be stopp'd with Cork, the only considerable alteration, he observed to be produced in it, was, that Store of green stuff (such as is seen in Summer in ditches and standing waters) floated on the top, and, in some places, grew to the sides of the Glass.

That putting four or five Gallons of it into a half Tub, as they call it, of Wood, and straining a Canvas over it, to keep out Dust and Insects, and letting it stand in some shady room for three weeks or a month, it did of it self putrefy and stink exceedingly, and let fall to the bottom a black sediment like Mudd.

That, coming often to see, what Alterations appeared in the putrefaction, He observed, that at the beginning, within twenty four hours, a slimy film floated on the top of the water, which after a while falling to the bottom, there came another such film in its place.

That if *Dew* were put into a long narrow Vessel of Glass, such as formerly were used for Receivers in distilling of *Aqua Fortis*, the slime would rise to that height, that He could take it off with a Spoon; and when he had put a pretty quantity of it into a drinking Glass, and that it had stood all night, and the water drained from it, if He had turned it out of his hand, it would stand upright in figure of the Glass, in substance like boyled white Starch, though something more transparent, if his memory (*saiſt he*) fail him not.

That having once gotten a pretty quantity of this gelly, and put it into a Glass-body and Blind-head, He set it into a gentle
Bath,

Bath, with an intention to have putrefied it, but after a few days He found, the head had not been well luted on, and that some moisture exhaling, the gelly was grown almost dry, and a large *Mushrom* grown out of it within the Glafs. It was of a loose watrish contexture, such an one, as he had seen growing out of rotten wood.

That having several Tubs with good quantity of *Dew* in them, set to putrefy in the manner above said, and coming to pour out of one of them to make use of it, He found in the water a great bunch, bigger then his fist, of those Insects, commonly called *Hog lice* or *Millepedes*, tangled together by their long tails, one of which came out of every one of their bodies, about the bigness of a Horsehair: The Insects did all live and move, after they were taken out.

That emptying another Tub, whereon the Sun, it seems, had used sometimes to shine, and finding, upon the straining it through a clean linnen cloth, two or three spoonfulls of green stuff, though not so thick nor so green as that above mentioned, found in the Glasses *purposely* expoed to the Sun, He put this green stuff in a Glafs, and tyed a paper over it, and coming some dayes after to view it, He found the Glafs almost filled with an innumerable Company of small Flyes, almost all wings, such as are usually seen in great Swarms in the Aire in Summer Evenings.

That setting about a Gallon of this *Dew* (which, he saith, if he misremember not, had been first putrefied and strained) in an open Jarre-Glafs with a wide mouth, and leaving it for many weeks standing in a South-window, on which the Sun lay very much, but the Casements were kept close shut; after some time coming to take account of his *Dew*, He found it very full of little Insects with great Heads and small tapering Bodies, somewhat resembling Tadpoles, but very much less. These, on his approach to the Glafs, would sink down to the bottom, as it were to hide themselves, and upon his retreat wriggle themselves up to the top of the water again. Leaving it thus for some time longer, He afterwards found the room very full of Gnats, though the Door and Windows were kept shut. He adds, that He did not at first suspect, that those Gnats had any

relation to the *Dew*, but after finding the Gnats to be multiplied and the little watry Animals to be much lessened in quantity, and finding great numbers of their empty skins floating on the face of his *Dew*, He thought, he had just reason to perswade himself, the Gnats were by a second Birth produced of those little Animals.

That vapouring away great quantities of his putrefied *Dew* in Glafs Basons, and other Earthen glased Vessels, He did at last obtain, as he remembers, above two pound of *Grayish Earth*, which when he had washed with more of the same *Dew* out of all his Basons into one, and vapoured to siccity, lay in leaves one above another, not unlike to some kind of brown Paper, but very friable.

That taking this Earth out, and after he had well ground it on a Marble, and given it a smart Fire, in a coated Retort of Glafs, it soon melted and became a Cake in the bottom, when it was cold, and looked as if it had been Salt and Brimstone in a certain proportion melted together; but, as he remembers, was not at all inflamable. This ground again on a Marble, *he saith*, did turn Spring water of a reddish purple Colour.

That by often calcining and filtering this Earth, He did at last extract about two ounces of a fine small *white Salt*, which, look'd on through a good *Microscope*, seemed to have Sides and Angles in the same number and figure, as *Rochpeeter*.

The Motion of the Second Comet predicted, by the same Gentleman, who predicted that of the former.

Monfieur *Auzout*, the same Person, that not long since communicated to the World his *Ephemerides* touching the course of the former *Comet*, and recommended several Copies of them to the *Royal Society*, to compare their Observations with his Account, and thereby, either to verifie his Predictions, or to shew, wherein they differ, hath lately sent another *Ephemerides* concerning the Motion of the *Second Comet*, to the same end, that invited him to send the other.

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