

XXXI. *An Account of a new Plant, of the Order of Fungi.*  
 By Thomas Woodward, Esq; communicated by Sir Joseph  
 Banks, Bart. P. R. S.

Read June 10, 1784.

*Plantæ novæ Descriptio — an Genus novum?*

Radices paucae; tenues; albidæ.

Volva ovata; duplex, mucilagine interposita; subalbida.

Stipes, e volva interiore surgens, sublignosus; cavus;  
 cortice lacerato vestitus; subfuscus.

Capitulum, stipitis summitati infidens, reflexum; subtus  
 campanulatum, glabrum; superne pulverulentum, et, e  
 pulveris crassitie, globiforme; volvæ ruptæ summita-  
 tem, minime adhærentem, in se gerens.

Pulvis sphaericus; semipellucidus; luteo-fuscus.

THIS extraordinary vegetable production arises from a volva, which is buried six or eight inches deep in dry sandy banks; and, consequently, it is extremely difficult to detect it in its earliest state. At its first appearance above ground, the powdery head is covered with a loose campanulated cap, which does not adhere by any the smallest filaments; and which, I suppose, to be the upper part of the volva, as both always appear ragged when taken up. When the plant is taken up immediately on its appearing above ground, the stem is about six or eight inches long; and, as well as the volva, replete with

with mucilage, making it much heavier than when it has attained its full growth. This is the state to which the description given above refers. The dust is now perfectly formed, and is dispersed by the slightest touch, or by the wind. A great alteration soon takes place, as it now proceeds very rapidly, and in a few days attains the summit of its growth, which is from nine to fifteen inches, more than half being generally buried in the ground. The stem becomes woody, though hollow, the bark still more ragged, and the whole plant much lighter, both volva and stem being now quite dry, and free from mucilage. The wind and showers soon disperse the greatest part of the dust; and at length the stalk appears with a naked, coriaceous, campanulated pileus, and considerably bleached, in colour and appearance not unlike a dry stalk of hemp. In this state some of them are now to be found (Aug. 28, 1783) with plants of this year rising near them.

Mr. HUMPHREYS, of Norwich, who first found this very extraordinary plant, met with it only in the state last described, and without discovering the volva; so that no judgment of it could be formed. It has been taken by some persons for a decayed or abortive agaric; but that opinion could not be maintained by any one who had seen it in its recent state.

I first met with it in February or March 1783 in its dry and withered state; but as it was suspected, though with little appearance of reason, to be a decayed *Agaricus procerus*, I wished to examine the root carefully, in order to observe whether it was bulbous. The bulb of the *Agaricus procerus* is scarcely hidden under the surface, and I was much surprised at the depth to which I was obliged to search for the root of  
this

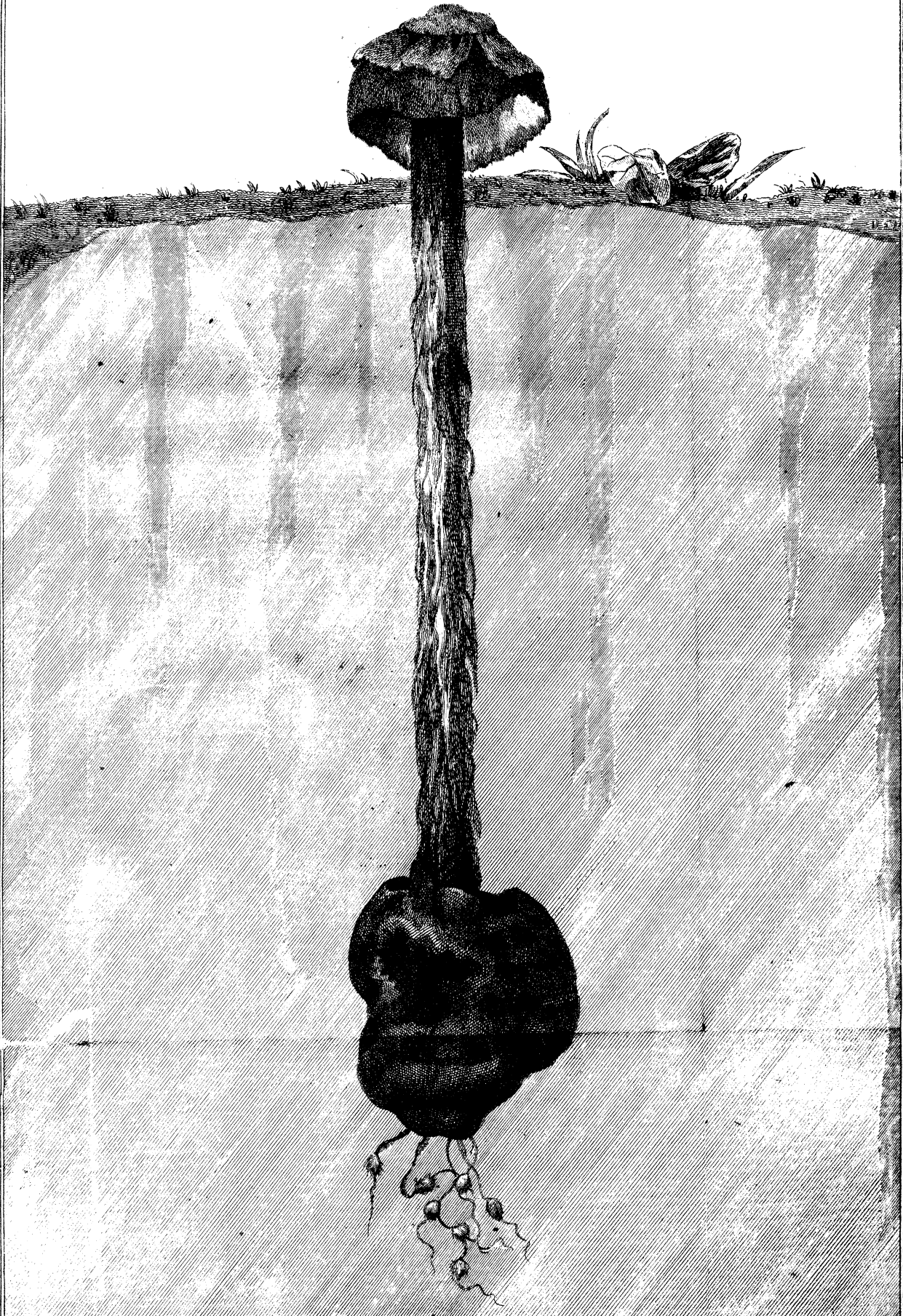
this plant; at length, however, removing the earth carefully to the depth of seven or eight inches, I met with it, and to my great pleasure and surprize, on raising the plant, I discovered the volva, which was so unlike the fugitive one of the agaric, that I was immediately convinced it must be something new.

An account of this was directly sent to Mr. DICKSON, of Covent-Garden, an able botanist, and diligent enquirer after the class Cryptogamia. Mr. DICKSON, who had before seen it in the state in which it was found by Mr. HUMPHREYS, but could make nothing of it, though thoroughly convinced it was no agaric, immediately requested that I would watch the spot, and endeavour to detect the plant in its earliest appearance. I communicated this to my neighbour Mr. STONE, a most diligent and skilful botanist, who first restored the *Lycoperdon coliforme*; and we determined to examine the spot carefully together, from the month of August downward. About the middle of August we first discovered a plant just arisen, which was sent to Mr. DICKSON, and a full description of which is before given; but though we have daily visited the spot since, we have never been able to find it again in so young a state; for so rapid appears to be its growth, that we have found plants of two or three inches height above the ground, the stems of which had lost part of their mucilage, where the day before none had been visible. We have three or four times attempted to discover the volva in its earliest state, by removing the earth carefully near the old stems of the preceding year; but this has been without success: and there is little hope of succeeding in it, as the volva lies very deep in the ground, and the plant arises at such various times.

This plant agrees with the genus *Phallus* in its volva, which has a double coat replete with mucilage; and its stipes crowned with a reflexed pileus. But it more nearly approaches the genus *Lycoperdon*, by its head covered with a thick dust, contained in a substance of a spongy appearance, and by the form of the dust, which agrees perfectly with that of most of the true lycoperdons, when examined in the microscope. To this genus it must at present probably be referred, though the total want of an exterior coat prevents its agreeing with it so perfectly as it ought.

The *Mucor* \* *septicus* of HUDSON and LIGHTFOOT (*Mucor ovatus* of SCHÆFFER); the *Mucor* \* *butyraceus* of SCHÆFFER (1794.), not taken notice of by either HUDSON or LIGHTFOOT, but which I have often found here; and the *Lycoperdon* \* *epidendrum* of LIGHTFOOT, which I suppose to be what HUDSON calls *Lycoperdon epiphyllum*, as he has referred to the same plate of SCHÆFFER (1793. *Mucor fragiformis*); have all some affinity with the fructification of this plant; and the more so, if we suppose the head to be at first covered with a mucilage, which afterwards turns to a dust; but this will hardly be admitted, as the plant sent to Mr. DICKSON had the dust perfectly formed, though the volva and stem were both replete with mucilage. But we cannot admit it to agree with any of these last mentioned plants, as they have all an exterior coat, though very fugitive, of which this seems entirely destitute. We may add, that they are all very fugitive productions;

\* I cannot help observing that, in my opinion, HALLER has done more rightly in making these into a new genus (*Filago*), than our botanists, who have jumbled them with the genera *Lycoperdon* and *Mucor*, to which they have no great affinity any more than the *Sphæria* of HALLER, likewise very improperly ranked with the *Lycoperdons* and *Clavariæ*.



whereas this, though soon arriving at maturity, is of a woody and permanent structure.

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P. S. In a letter Mr. DICKSON received from Mr. WOODWARD, Feb. 12, 1784, he informs him, that he is quite convinced by some late observations, that the above-mentioned plant frequently comes to a state of perfection before it reaches the surface. The only difference to be observed is, that the dust in that case is of a darker colour, which he supposes is owing to its not being exposed to the air.

