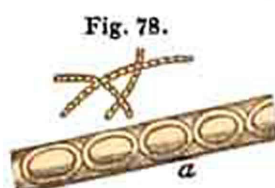


tion now reigns where stately forests of pine and oak once flourished, such as might now have supplied all the navies of Europe with timber.

Sources of bog iron-ore.—At the bottom of peat-mosses there is sometimes found a cake, or “pan,” as it is termed, of oxide of iron, and the frequency of bog iron-ore is familiar to the mineralogist. The oak, which is so often died black in peat, owes its colour to the same metal. From what source the iron is derived has often been a subject of discussion, until the discoveries of Ehrenberg seem at length to have removed the difficulty. He had observed in the marshes about Berlin, a substance of a deep ochre yellow passing into red, which covered the bottom of the ditches, and which, where it had become dry after the evaporation of the water, appeared



Gaillonella ferruginea.
a. 2000 times magnified.

exactly like oxide of iron. But under the microscope it was found to consist of slender articulated threads, which are the shields, partly siliceous and partly ferruginous, of what he considered an infusory animalcule, and called *Gaillonella ferruginea*.* There can be little

doubt, therefore, that bog iron-ore consists of an aggregate of millions of these organic bodies invisible to the naked eye.†

Preservation of animal substances in peat.—One interesting circumstance attending the history of peat-mosses is the high state of preservation of animal substances buried in them for periods of many years. In June, 1747, the body of a woman was found six feet deep, in a peat-moor in the Isle of Axholm, in Lincolnshire. The antique sandals on her feet afforded evidence of her having been buried there for many ages: yet her nails, hair, and skin, are described as having shown hardly any marks of decay. On the estate of the Earl of Moira, in Ireland, a human body was dug up, a foot deep in gravel, covered with eleven feet of moss; the body was completely clothed and the garments seemed all to be made of hair. Before the use of wool was known in that country the clothing of the inhabitants was made of hair, so that it would appear that this body had been buried at that early period; yet it was fresh and unimpaired.‡ In the Philosophical Transactions we find an example recorded of the bodies of two persons having been buried in moist peat, in Derbyshire, in 1674, about a yard deep, which were examined twenty-eight years and nine months afterwards; “the colour of their skin was fair and natural, their flesh soft as that of persons newly dead.”§

Among other analogous facts we may mention, that in digging a pit for a well near Dulverton, in Somersetshire, many pigs were found in various postures, still entire. Their shape was well preserved, the skin, which retained the hair, having assumed a dry, membranous appearance. Their whole substance was converted into a white, friable, laminated, inodorous, and tasteless substance; but

* See above, p. 372.

† Ehrenberg, Taylor's Scientific Mem. vol. i. part iii. p. 402.

‡ Dr. Rennie, Essays, &c., p. 521.,

where several other instances are referred to.

§ Phil. Trans., vol. xxxviii. 1734.