

mals, is composed in part of Iron secreted by Infusorial animalcules of the Genus Gaillonella. This Iron may be separated from the siliceous shields of these animals, which retain their form after the extraction of the Iron. He has also detected similar ferruginous and siliceous remains of Infusoria in similar ochreous substances, from the Ural, and New York, and also in a yellow earthy substance formed on the surface of the mineral water of the salt works at Colberg and Dürrenberg. This substance is used for iron colour in house painting at Colberg. The iron secreted by these animalcules, and connected with their siliceous shields, forms after death a nucleus to which other iron is attracted, from a solution of this metal in the water which these animals inhabit.

In another communication, Prof. Ehrenberg announces that certain indurated and heavy portions of the Polierschiefer of Bilin, called Saugschiefer, are also the remains of Gaillonellæ, cemented and filled with amorphous siliceous matter derived from these infusoria; and that nodules of Semiopal, which occur in the same Polierschiefer, are also composed of Silex derived from infusorial remains that have been dissolved and formed into siliceous concretions, having dispersed through them numbers of infusorial shields, partially dissolved, together with others that are unaltered. Ehrenberg also thinks he has found indications of microscopic organic bodies of a spherical form, (some, perhaps, allied to the existing genus Pyxidicula,) in semi-opal from Champagne, and also in semi-opal from the Dolerite of Steinheim near Hanau, and from the Serpentine of Kosemitz in Silesia, and in precious opal from the Porphyry of Kaschau. In the white and opaque bands of a few chalk flints, he has also found spherical and needle-shaped microscopic bodies, which he considers to be of organic origin; these are most abundant in the white siliceous crust which forms the exterior of the flints, and in the mealy siliceous powder sometimes found within their cavities, but are not distinguishable in the black interior of the nodule. The existence of living marine species of Infusoria, renders it probable that animals of this class existed also in the early seas in which the stratified rocks were deposited. The fact that living Infusoria have the power of secreting Silex and Iron, places their fossil siliceous and ferruginous remains, nearly