

found converted into pyrites ; they resemble small fungi with a stalk and rounded head. Mr. Mantell has, recently, discovered the Hippurite in chalk : it had not been found before in England.

The vegetable remains in chalk are very few, and appear to belong to species of fuci ; but, according to M. Brongniart, in the Isle of Aix, near Rochelle, there is a considerable bed of lignite in the lower bed of chalk, which, he says, may have been formed of peat, composed of decayed fuci and other marine plants.

Before concluding this brief account of the organic remains in chalk, it will be proper to notice an important discovery that has been lately made by Dr. Morton, in the United States of America. It had been asserted by M. Humboldt, that neither oolite nor chalk has been found in South America, and such was generally believed to be also the case in North America. At the time when M. Humboldt visited South America, it was not known or even suspected, that chalk and oolite might undergo a change of mineral characters, and be converted into crystalline rocks, resembling primary and transition limestone. I believe I first discovered that the calcareous rocks in Savoy, which were described by the French geologists as primitive and transition limestones, were in reality lias, oolite, and chalk ; and about the same period Dr. Buckland made a similar discovery of the true character of the calcareous beds in the Alps, which had been mistaken for transition rocks. It is therefore probable, that many of the calcareous beds in America, may represent the chalk and oolite of Europe. Dr. S. G. Morton has ascertained that there are extensive beds of marl in New Jersey and Maryland, and extending into other states, which contain the characteristic fossils of the chalk formation, particularly baculites, scaphites, ammonites, belemnites, echinites (the ananchytes ; ) also bivalve and univalve shells of the same epoch, together with the mososaurus and plesiosaurus. In some parts this formation is covered by tertiary strata. Mr. Mantell, whose accurate knowledge of the chalk formation in England will not be disputed, has received specimens of these organic remains from America, and refers them decidedly to the chalk formation, though he considers that some of them are analogous to the superior chalk beds at Maestricht, which are wanting in the chalk formations of France and England. See Silliman's Journal, February, 1832.

Dr. Morton is about to publish a more full account of his discoveries.

Between the epoch when the chalk was deposited, and the period when it was covered with the tertiary strata, there appears to have been a considerable interval, during which the surface of the extensive mass of chalk was deeply furrowed and excavated, before a new series of strata were deposited upon it, destined to support a new creation of animals of a superior class, altogether different from those which have left their remains in the subjacent strata. In some situations, however, the tertiary strata appear to rest conformably on