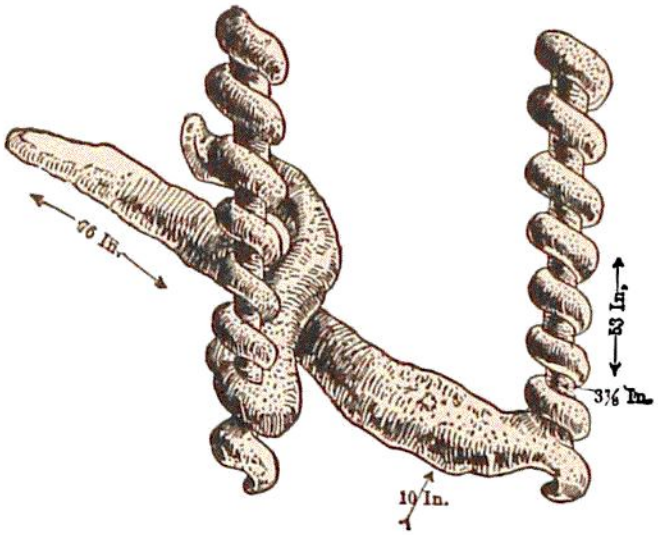
Since Rodents have been described from the same beds, and a skeleton of one has been found at the base of one of the spirals, there has seemed to be strong reason for regarding them as the core of a fossil burrow; and this has appeared to be confirmed by the fact that the skeleton belonged to a Rodent that was of the right size to have made the spiral cavity. But according to the latest investigations of E. H. Barbour (published in November, 1894), the spiral stems or fillings have a cellular structure, as if of vegetable origin. The oblong cells average one thirty-second of an inch in diameter, but vary from one sixty-fourth to one eighth, and even to one fourth. The exterior is made of these tubules variously intertwined. The whole of a spiral and its long transverse continuation at base have the cellular structure. "Each and every well-cut section shows parenchymatous tissue, no matter from what specimen, or from what portion of an individual specimen, the section is made; there has not been an exception to this." The final conclusion therefore is that the fossil having the spiral form, together with its basal portion, was probably some kind of plant, and that it grew around the inclosed skeleton.

1544.



Two views of a specimen of Dæmonelix. E. H. Barbour.

Characteristic Invertebrate Species.

EOCENE.

1. Midway. — *Enclimatoceras Ulrichi* White, *Ostrea Pulaskensis* Harris, *Ostrea præ-compressirostra* Har., *Pecten Alabamiensis* Aldrich, *Yoldia eborea* Conrad, *Cucullæa macrodonta* Whitfield, *Cadulus turgidus* Meyer, *Caricella Leana* Dall, *Voluta Showalteri* Aldrich, *Volutilithes rugatus* Conrad, *Volutilithes limopsis* Con., *Leucozonia biplicata* Aldrich, *Neptunea constricta* Aldrich, *N. Matthewsensis* Aldrich, *Pseudoliva unicarinata* Aldrich, *Murex Alabamiensis* Aldrich, *Turritella Alabamiensis* Whitfield.

2. Lignitic. — Maryland and Virginia: *Ostrea compressirostra* Say, *Cucullæa gigantea* Conrad, *Crassatella alæformis* Conrad, *Dosiniopsis lenticularis*, *Cytherea ovata* Rogers, *Panopæa elongata* Conrad, *Pholadomya Marylandica* Conrad, *Turritella præcincta* Conrad. Alabama: *Ostrea compressirostra*, *O. thirsæ* Gabb, *Cucullæa gigantea* Con., var., *Crassatella tumidula* Whitfield, *Dosiniopsis lenticularis*, *Pholas alatoidea* Aldrich, *Voluta Newcombiana* Whitfield, *Pseudoliva tuberculifera* Conrad. Upper beds, Alabama: *Fusus interstriatus* Heilprin, *Pleurotoma moniliata* Heilprin, *Lævibuccinum lineatum* Heilp., *Pseudoliva scalina* Heilp., *Corbula Aldrichi* Meyer, *Cardium Hatchetigbeense* Aldrich.

3. Lower Claiborne. — *Ostrea Johnsoni* Aldrich, *Anomia ephippoides* Gabb, *Yoldia Claibornensis* Conrad, *Trigonarca pulchra* Gabb, *Crassatella antestriata* Gabb, *C.*