

gile branches, and distant, obtuse serrations. Two individuals only have been obtained, but the form and habit are so precisely alike, and so distinctive in both of these, as to mark it a very well characterised species.

*Locality and Formation*.—Island of Orleans; Hudson River Group.

*Collectors*.—J. Richardson, and E. Billings.

#### GRAPTOLITHUS INDENTUS.

*Description*.—Fronds consisting of two simple branches, diverging at the base from a slender radicle, and continuing above in a nearly parallel direction: branches narrow, slender; serratures very oblique, somewhat obtuse, truncated above almost rectangularly to the line of the rachis; about twenty-four in the space of an inch; a depressed line reaching from the serrature to near the base or outer margin of the branch where it terminates in a small node; surface of branches striate.

This species resembles the *G. nitidus* in form, except that it is less divergent, the divergence from the base being at an angle of about thirty-six degrees for half an inch or more, after which the two branches continue nearly parallel. Though it is probable that this character may vary in some degree, it seems nevertheless to mark the species, and in numerous individuals of *G. nitidus* I have seen none with parallel or converging branches. The serratures in the two species differ in some degree in form, and the proportional distances, thirty-two and twenty-four, form a very characteristic distinction. A single fragment of a branch measures six inches, but the full extent when perfect is not known.

*Locality and Formation*.—Point Lévy; Hudson River Group.

*Collectors*.—Sir W. E. Logan, and James Hall.

#### GRAPTOLITHUS NITIDUS.

*Description*.—Frond composed of two simple branches, diverging from a small radicle; branches narrower towards the base, gradually expanding towards the extremities, which in perfect specimens appear to be rounded, and the last serrations a little shortened; serratures small, shorter at the base, and becoming gradually developed as they recede from this point; acute at the extremities, almost vertical to the line of the rachis, and making an angle of about sixty degrees, the two sides being almost equal in length; about thirty-two in the space of an inch. A well-defined groove