further examination might disclose its rhizomes, leaves, or fructification.*

2. Lepidodendron. (Fig. 3.)

A single species of this genus is found rather plentifully in the beds containing the plants just described, and is distinct from any that I have observed in the Coal-formation. The specimens observed were all of small size and fragmentary, nor was their state of preservation very good, though most of them were

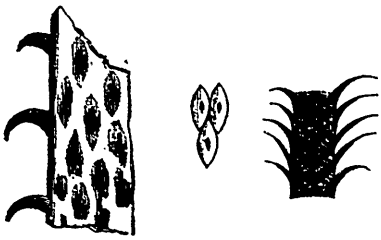

Fig. 3 *a* Fig. 3 *b* Fig. 3 *c*

Fig. 3. *Lepidodendron Gaspianum.* *a*, decorticated stem and leaves; *b*, areoles; *c*, small branch and leaves.

accompanied by the leaves. In specimens about two inches in diameter, the areoles are two lines in length and one in breadth, and placed closely together. They are elliptical, acuminate, with central leaf-scar, the form and markings of which could not be perceived. The leaves are thick at the base and short, slightly ascending, and then curving downward. The branches are slender, straight, and very uniform in thickness in the portions observed. This plant may be identical with the *L. Chemungense* of Hall, from the Devonian rocks of New York; but I am not aware that any specimens of that species hitherto observed show the leaf-scars or leaves; and, when these are obtained, should the present species prove distinct, I would name it *L. Gaspianum*†. Its characters, as above stated, are represented in figs. 3 *a–c*.

* It is possible that some of the fragments, from the Devonian of the Thüringerwald, included by Prof. Unger in his order *Rhachiopterideæ* may be allied to *Psilophyton*. (See Denkschr. Kais. Akad. Wissen. Wien, vol. xi. p. 139.)

† *L.* (*Sagenaria*) *Veltheimianum*, another ancient and widely distributed species, resembles the above in the form of the areoles and position of the scars; but the leaves and young branches differ, and my specimens show no median furrow in the areoles. *L. nothum* (Unger) also seems closely allied.