

a characteristically marine fauna. The same fauna has been detected over a wide region of the north of Asia from Spitzbergen to Japan, the western regions of North and South America, in New Zealand, and in Southern Africa.

**LIFE.**—The flora of the Triassic period appears to have been closely similar to that of the Permian. It consisted mainly of ferns (some of them arborescent), equisetums, conifers, and cycads. Among the ferns, a few Carboniferous genera (*Sphenopteris*, *Pecopteris*, *Cyclopteris*) still survive, together with *Glossopteris*, *Tæniopteris*, *Caulopteris*, and other old genera, but new forms have appeared (*Anomopteris*, *Acrostichites*, *Clathropteris*, *Lepidopteris*, *Merianopteris*, *Neuropteridium* [*Crematopteris*], *Sagenopteris*). The earliest undoubted horse-tail reeds occur in this system. Here they are represented by the two genera *Equisetum* (Fig. 377) and *Schizoneura*. The latter genus died out in the Jurassic period, but the former is still represented by twenty-five living species. The conifers are represented by *Voltzia*, the cypress-



Fig. 377.—*Equisetum columnare*, Brongn. ( $\frac{1}{2}$ ).

like or spruce-like twigs of which are specially characteristic organisms of the Trias (Fig. 378), and by *Albertia*. But the most distinctive feature in the flora of the earlier Mesozoic ages was the great development of cycadaceous vegetation. The most abundant genus is *Pterophyllum*; others are *Nilssonia*, *Zamites*, *Podozamites*, *Ptilophyllum*, *Otozamites*. So typical are these plants that the