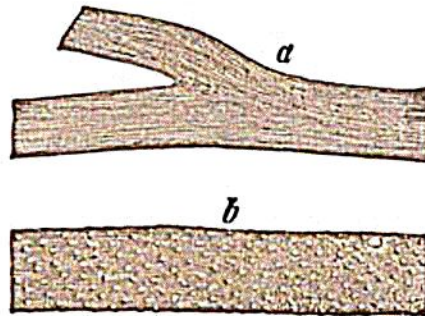


Fig. 55.

a. *Smooth-stemmed species.*b. *Tubercled species.*

(Natural size.)

species when best preserved. The surface of the tubercled one will perhaps remind the Algologist of the knobbed surface of the thong or receptacle of *Himanthalia lorea*, a recent fucoid, common on the western coast of Scotland, but rare on the east. An Orkney specimen lately sent me by Mr. William Watt, from a quarry at Skaill, has much the appearance of one of the smaller ferns, such as the moor-worts, sea spleen-worts, or maiden-hairs. It exists as an impression in diluted black, on a ground of dark gray, and has so little sharpness of outline, that, like minute figures in oil-paintings, it seems more distinct when viewed at arm's length than when microscopically examined; but enough remains to show that it must have been a terrestrial, not a marine plant. The accompanying print (fig. 56) may be regarded as no unfaithful representation of this unique fossil in its state of imperfect keeping. The vegetation of the Silurian system, from its upper beds down till where we reach the zero of life, is, like that of the Old Red Sandstone, almost exclusively fucoidal. In the older fossiliferous deposits of the system in Sweden, Russia, the Lake Districts of England, Canada, and the United States, fucoids occur, to the exclusion, so far as is