

the appendages exposed, as in the examples, *Lign.* 90, figs. 1, 2; and in the shells that are empty, these processes occasionally remain distinct, or are coated by a thin pellicle of calcareous spar, or pyrites.

In the smooth *Terebratulæ*, the laminations of the shell are full of minute perforations, which may be seen by a lens of moderate power; the appearance of this structure, when highly magnified, is shown fig. 2^a, *Lign.* 90.* The plicated *Terebratulæ* (as *Lign.* 89, figs. 1, 2,) do not possess this organization.

SPIRIFER (*containing spiral processes*). *Lign.* 90.—In the Silurian, Devonian, and Carboniferous limestones, there is a profusion of several genera of *Brachiopoda*, whose peculiar forms render them easily recognisable. Among these, the Spirifers are the most interesting, on account of their spiral calcareous processes, which in the recent state supported the ciliated *brachia*, being often preserved. A specimen, in which part of the upper valve of the shell has been removed, and one of the spires exposed, is figured *Lign.* 90, fig. 3. (*Wond.* pp. 474—476).† Three other related genera of

* An interesting Memoir on the Microscopical Examination of Shells, has recently been communicated to the Royal Society by Dr. Carpenter.

† See an admirable Memoir on the Anatomy of the *Brachiopoda*, by Professor Owen. *Zoological Trans.* Vol. I. p. 145, *et seq.*