

fossil species, in consequence of its protruding a series of buds from the axillæ of many of the scales around its trunk. These buds explain analogous appearances at the axillæ of many fossil scales on *Cycadites megalophyllus*, and *Cycadites microphyllus*, (see Pl. 60, Fig. 1, and Pl. 61, Fig. 1,) and form an important point of agreement in the Physiology of the living and fossil Cycadeæ.*

lowing spring the buds began to protrude. Similar buds appeared also in the same conservatory on a plant of the *Zamia spiralis* from New Holland. In vol. vi. p. 501, Horticult. Trans. leaves are stated to have protruded from the scales of a decayed trunk of *Zamia horrida* in a conservatory at Petersburg.

I learn from Professor Henslow, that the trunk of a *Cycas revoluta*, which in 1830 produced a Cone loaded with ripe drupæ, in Earl Fitzwilliam's hothouse at Wentworth, threw out a number of buds, from the axillæ of the leaf-scales soon after the Cone was cut off from its summit. In Linn. Trans. vol. vi. tab. 29, is a figure of a similar cone which bore fruit at Farnham Castle, 1799.

It is stated in Miller's Gardener's Dictionary, that the *Cycas revoluta* was introduced into England about 1758, by Captain Hutchinson; his ship was attacked, and the head of the plant shot off, but the stem being preserved, threw out several new heads, which were taken off, and produced as many plants.

* In the fossil trunk of *Cycadites microphyllus*, Pl. 61, Fig. 1, we see fourteen Buds protruding from the axillæ of the leaf stalks, and in Pl. 60, Fig. 1, we have three Buds in a similar position in *Cycadites megalophyllus*.

In Pl. 61, Figs. 2, 3, exhibit transverse sections of three Buds of *Cycadites microphyllus*. The section of the uppermost bud, Fig. 3, g, passes only through the leaf stalks near its crown. The section of the bud, Fig. 3. 'd, being lower down in the embryo trunk, exhibits a double woody circle, arranged in radiating