

lent ; the distinction between stem and leaves tends to disappear ; and the whole weed, accustomed at times to long drought, acquires the habit of drinking in water greedily at its rootlets after every rain, and storing it away for future use in its thick, sponge-like, and water-tight tissues. To prevent undue evaporation, the surface also is covered with a thick, shiny skin—a sort of vegetable macintosh, which effectually checks all unnecessary transpiration. Of this desert type, then, the cactus is the furthest possible term. It has no flat leaves with expanded blades, to wither and die in the scorching desert air ; but in their stead the thick and jointed stems do the same work—absorb carbon from the carbonic acid of the air, and store up water in the driest of seasons. Then, to repel the attacks of herbivores, who would gladly get at the juicy morsel if they could, the foliage has been turned into sharp defensive spines and prickles. The cactus is tenacious of life to a wonderful degree ; and for reproduction it trusts not merely to its brilliant flowers, fertilised for the most part by desert moths or butterflies, and to its juicy fruit, of which the common prickly pear is a familiar instance, but it has the special property of springing afresh from any stray bit or fragment of the stem that happens to fall upon the dry ground anywhere.

True cactuses (in the native state) are confined to America ; but the unhappy naturalist who ventures to say so in mixed society is sure to get sat upon (without due cause) by numberless people who have seen ‘the cactus’ wild all the world over. For one thing, the prickly pear and a few other common American species, have been naturalised and run wild throughout North Africa, the Mediterranean shores, and a great part of India, Arabia, and Persia. But what is more interesting and more confusing still, other desert plants which are *not* cactuses, living in