

CACTUSES.

BEFORE the full burst of spring, when as yet there are few flowers, or none over which we may linger in the garden, lovers of flowers may turn their attention to such tasks as the indoor cultivation of cactuses. In our last paper we spoke of *Mamillaria* cactuses, but now in the long cold evenings we may mix our garden lore with stirring tales of travel, and pictures of the mind painted with glowing colours, such as Kingsley used when he told of the virgin forests in *Westward Ho*, with stories of adventure such as those with which the Moor of old won the tender heart of Desdemona—

“Wherein I spoke of most disastrous chances;
Of moving accidents by flood and field;
Of hair-breadth ‘scapes i’ the imminent
 deadly breach.

Wherein of antres vast and deserts idle,
Rough quarries, rocks and hills whose
 heads touch heaven.”

But what have cactuses to do with travel and adventure, may perhaps be asked? The answer is, that growing as they do in wild tropical countries, and especially in Mexico and South America, that home of romance and wonder, they have formed the colouring of many a wonderful story. Their curious shapes and long strong spikes, as well as their lovely and brilliant flowers, make them a striking feature in any landscape.

Maximilian tells of them in his travels in Brazil. As they passed through the great forests, the horses and mules were often maimed by the long spines which ran into their hoofs.

The six-angled upright cereus or torch-thistle (*le cactier de surinam*) will grow forty feet high if unchecked in its growth. If cut it branches out from the angle directly below the part at which the incision was made. This species has a white flower as large as the hollyhock, and was the first to become

fera. The Indians cultivate them in “nopaleries” for the sake of the insect. The female insect when dried constitutes the cochineal of commerce.



FIG. 2.—GRAFTING WITH THE RING.

On landing at Cape Town, travellers have often been struck by the beauty of the cactuses found there, and if they draw forth admiration in that land of colour and brilliance, how much more do they delight us in South Australia, where the eye tires so soon of the dusky green of the great gum-trees, and the long weird needle-like foliage of the shea oak. The colonist, home-sick for the tender green of the English hedge-rows, looks with disgust at the wire fences that skirt the fields, with their scanty stink-weed, or coarse couch-grass. It forms a pleasant feature when we meet with a prickly-pear hedge (*Opuntia vulgaris*), whose curious yellow fruit and long aloe-like fingers remind us even of lovely Italy, and that meal at scirocco-time, described with a vividness, that is almost creative, by Browning in his “Englishman in Italy”—

“ . . . Supping in state,
We shall feast our grape-gleaners (two
dozen, three over one plate)
With lasagne so tempting to swallow
In slippery ropes,
And gourds fried in great purple slices,
That colour of popes.
Meantime, see the grape-bunch they’ve
brought you;
The rain-water slips,
O’er the heavy blue bloom on each globe,
Which the wasp to your lips
Still follows with fretful persistence.

* * * * *
Next sip this weak wine [its stopper,
From the thin green glass flask, with
A leaf of the vine;
And end with the prickly-pear’s red flesh,
That leaves thro’ its juice,
The stony black seeds on your pearl teeth,
Scirocco is loose.”

But the strangest tales of these fleshy plants with their strange camel-like way of hoarding up moisture against a scorching day, come to us from a traveller who has seen rough times, subduing Dacoits and enforcing British justice in the wild Burmah country, off which

“ . . . the flying fishes play,
An’ the dawn comes up like thunder outer
China ’cross the bay.”

He speaks of the thick leathery skin of the cactus, almost like the “mussack” of the Indian “bhusti,” and the sharp thorns that prick the noses of goats and cattle. The poetical Easterns give strange appropriate names to these plants. One kind has little prickles set all over it in small bunches, which stick into one’s fingers and cause an irritation like caterpillar’s hairs. This is called “tiger’s tongue” by the Burmans. Another species has larger leaves with thorns an inch to an inch and a half long, sharp as needles, and hard and transparent like horn at the tips. Each thorn springs out of a little fluffy base. The officials used to use them for pins in the offices in Upper Burmah after the annexation, to pin files together, before things got into working order. One man was out on a pig-sticking expedition, and got thrown into a clump of this thorny cactus. He was unable to move until folk came and cut him out and carried him to a hospital where over three hundred spines were picked out of him.

These cactuses have a beautiful tube-shaped flower which springs out of the edge of the leaves, but the fruit is no good.

Another kind that is found in Burmah is the one which the natives call the “steeple,” because it grows like the seven-storeyed steeples of the monasteries—those steeples which symbolise the seven-fold path of salvation of the Buddhist religion. This and the flat-leaved kinds are planted round villages to keep out cattle thieves and Dacoits. It is part of the duty of a village head-man in Upper Burmah to make his hedge strong and thief-proof, and he often plants a cactus hedge, as nothing can get through it when it grows thick.

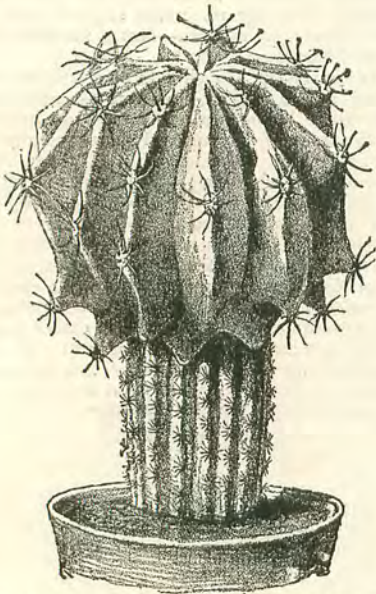


FIG. 1.—ECHINOCACTUS ELECTROCANTHUS.

common in English green-houses. It flowers seldom, usually in July, and may be trained on a trellis work of sticks, and kept throughout the winter in a warm inhabited room. It is upon plants of this genus that the cochineal insect feeds, especially on *Opuntia cochinelli-*



FIG. 3.—ASTROPHYTUM MYRIOSTIGMA.

A native of India died lately with all the symptoms of snake-poisoning, and asserted that he had been bitten by a cobra. On examination it proved that the cobra had never touched him, but that in springing back he had run a cactus thorn into his foot and

had died of imagination, the thorn having been quite harmless.

The other kind of cactus we have in Burmah, says our traveller, grows like some sort of horned creature or a sea-weed tree, covered with barnacles, and coralline growths. It

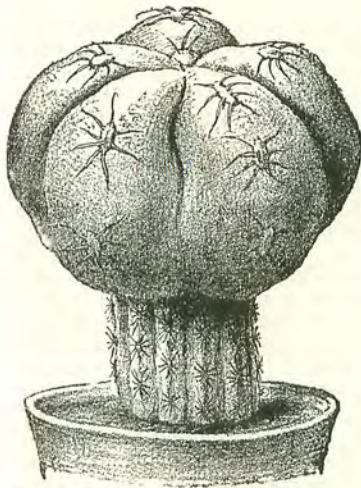


FIG. 4.—ECHINOCACTUS DENUDATUS.

stands like a candelabrum, stiff in any ordinary breeze, ungainly and void of grace, the very type of a curmudgeon, and yet not without the beauty that we feel in things which have made a brave and successful struggle against unfavourable environment.

Other tales come to us from hunters on the Rio Grande that forms the boundary between Texas and Coahuila in Mexico. The prickly pear cactus greatly complicates the shooting of the blue quail in the early chilly winter's dawn. Where prickly pear is, there is blue quail in those parts, for its succulent leaves constitute the food and drink of this bird. The spines so torment the poor dog that it is better to do without retrieving altogether than to spend so much time picking needles out of him at every covey. These brushes with their light leaves and dark fruit form the great feature of the chapparal thicket with its wild long-horned cattle, and blue or bob-white quails.

So much for tales of travel. Let us now turn our attention to the art of grafting cactuses in pots. Grafting is not an easy operation, but it is less difficult with cactuses than with many other plants. Certain kinds are apt to be weak when grown from seeds or slips, and then it is better to propagate by grafting. Care must be taken to choose suitable cactuses on which to graft fine ones. Such are *Cereus spectriatus*, *C. peruvianus*, *C. macrogonus*, *C. rostratus*, or quick growing pillar cactuses, also various kinds of *Opuntia*, or fig cactuses, and *Peirescia calandrinifolia* and *aculeata*. The fruit of the latter, under the name of Barbados goose-

berry, is used in the West Indies as an article of diet.

On the two last the beautiful *Epiphyllum* cactus may be grafted, which blossoms towards Christmas time. It is well to have the *Peirescia* kind ready from slips for grafting. To carry out the process cut off the *Peirescia* slip to the height desired, and make an incision in the centre of the surface to the depth of about one-third to half an inch, then cut off a branch of the *Epiphyllum* with several leaves, making the incision downwards right to the heart of the wood on both sides of the stalk. This branch must then be put into the fissure in the *Peirescia* and held fast either by a pin or a cactus thorn which is stuck right through the two which are to be united. Supports will be needed after a short time's growth. The grafted cactuses in the pictures which accompany this paper are drawn from the graftings successfully performed by Herr Mundt, of Pankon near Berlin. The grafts consist of thick fleshy kinds of cactus applied to the stem or stock of *Cereus* or pillar cactuses.

Care must be taken before applying the cactus ball to the *Cereus* stock to cut or break off the ball very gently. A fairly shallow hole must be made in the graft with a sharp pen-knife, and it must then be put into the stock and the join smeared with grafting wax. Put a little wadding on the top of the ball, and pass a binding of bast under the pot, tying it at the edge of the surface of the pot, as may be seen in Fig. 2. The graft looks very like the cork of a champagne bottle. When you



FIG. 5.—ECHINOOPSIS AMOENA.

have grafted quickly-growing cactuses on *Peirescia* stocks they will in a short time require props to support their weight.

Herr Mundt's favourite stock was two to three year old seedlings or slips of grass-green *Cereus* cactuses. Blue-green kinds such as

Cer. azureus or *Seidelii* do not answer for this purpose. Seedlings sown at the end of March may be grafted as early as July. Success depends on the stock and the graft being both of young green growth.

If the spines on the ball grow low down,

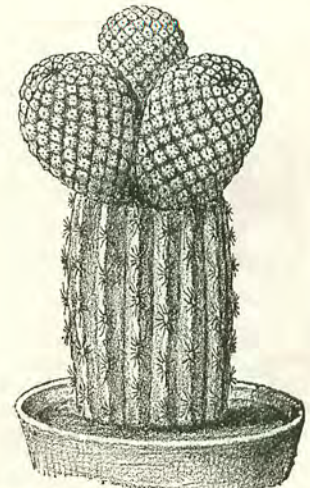


FIG. 6.—PELECYPHORA ASSELIFORMIS.

this sometimes causes a severing of the graft from the stock. To prevent this, press a ring down over the thread as described in Fig. 2. The pots with the graftings must be kept in a warm shady room for some time, and must not be watered for at least a week.

Fig. 3 represents the dotted star-cactus, sometimes called Bishop's Bonnet (*Astrophytum myriostigma*). This cactus has no spines, but when it is young it has bristles covered with thick wool, which disappear with its growth. The flower-buds grow several close together on the crown and are woolly and of slow growth. The flowers have no scent and are a yellow straw colour, appearing at the end of winter or the beginning of spring. The hedgehog cactus (*Echinocactus*) is a very interesting kind which resembles the foregoing in some respects, but has long spines.

In Fig. 4 we see the bare-headed hedgehog cactus (*Echinocactus denudatus*) which has spines sticking to the surface of a yellow or white shade. Fig. 1 is the amber-spined hedgehog cactus (*Echinocactus electrocanthus*). One of the most beautiful sorts of cactus is the sea-urchin cactus or *Echinopsis*. It has curious shapes, usually ball-like, and long-tubed magnificent blossoms.

In Fig. 5 we have the lovely sea-urchin cactus (*Echinopsis amoena*); Fig. 6 resembles it in being three-headed. It represents the comb-like centipede cactus (*Pelecyphora asseliformis pectinata*). The centipede cactuses are very ornamental plants without prickles, and have knobs that are not unlike the bundle of rods enclosing the axe which was carried by the Roman lictors.

