

WESTERN AUSTRALIAN WILDFLOWERS.

No. 6.—THE "ROSETTE" SUNDEWS.

(By C. A. GARDNER, Government Botanist.)

In England, when the stormiest months of winter are over and the low, slanting rays or the returning sun give their gentle warmth to the sleeping earth, the fresh pale green tips of snowdrops, followed by their modest green-white flowers, gladden the heart with promise of returning spring. Other white flowers follow; and then as the year advances comes the crocus in regal gold and purple, to be succeeded in turn by all the wondrous wealth of daffodil, violet, primrose, and bluebell.

In Western Australia we have no true winter. The sleeping period for plants is a long dry summer, but with the return of the mild wet weather we experience a feeling of freshness akin to that of spring when—

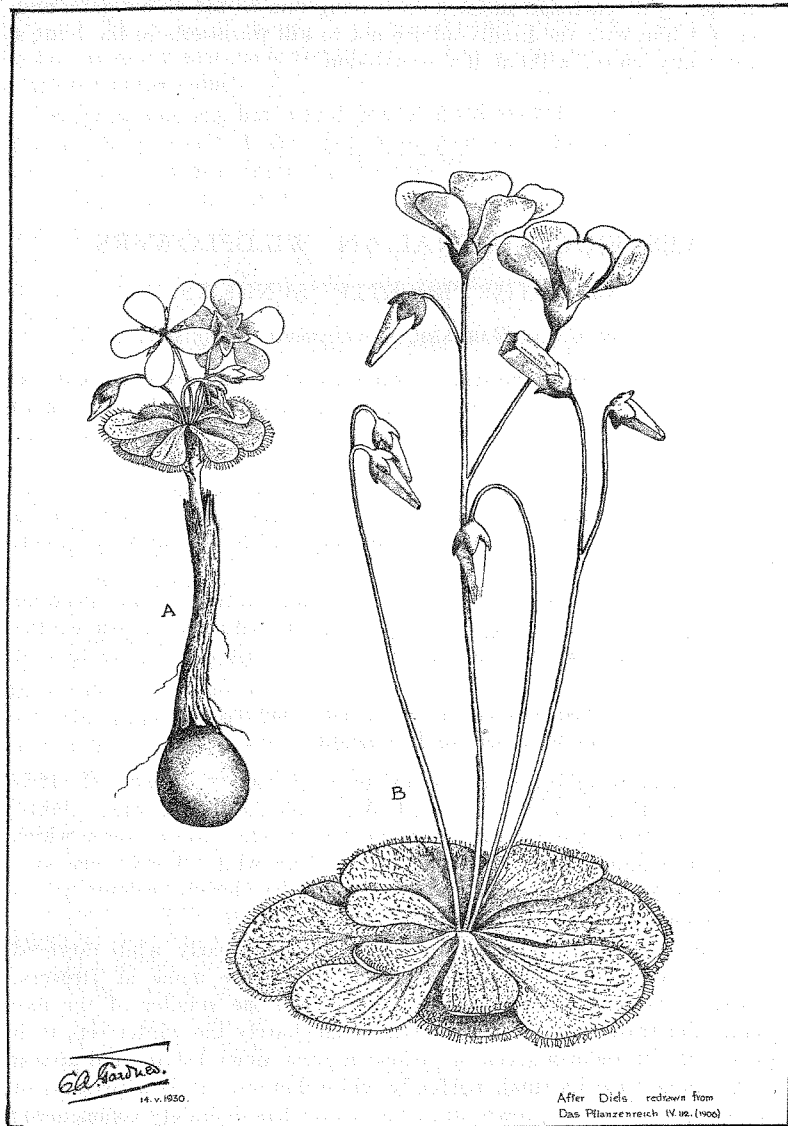
"The dull earth out of her sleeping
Is wakened to life again,"

and the land is again made glorious by a pageantry of blooms. It is therefore fitting that, in the South-West, among low-growing plants, the harbinger of this pageantry should be a modest white flower which somehow reminds us of the snowdrop. Our white flowers are succeeded by yellow, and these in turn by all the glorious colours which have made our flora famous throughout the earth.

This month I propose to deal with these early white-flowered sundews which are known to botanists under the name of *Drosera*. Those of you who live inland will have seen the smaller of the two plants illustrated—*Drosera rosulata*. Immediately the winter sets in it puts forth its reddish-green or yellowish-green dewy leaves, and almost at the same time its small perfectly white flowers. It is a promise of spring, for it never appears until the winter has definitely commenced: no summer rains, however late, can promote its growth. Excluding the shrubs and trees, it is the earliest of the wildflowers of the West.

We have in this country quite a number of sundews. They may be divided into two classes: those with leaves in a rosette which lies upon the soil, and those which produce stem leaves, and are usually climbers. The climbing species are the more showy with their large parcels of white, yellow, pink, or purple blooms; but I propose to deal with these as a separate class at some future time.

Among the rosetted sundews there are two types: those with large flat leaves, and with white flowers which appear early in the season; and those whose flowers are reddish, or at least spotted with colour,



Sundews.

(A). *Drosera rosulata*, Lchm. (B). *Drosera macrophylla*, Lindl.

Both about natural size. The illustration has been redrawn from the Monograph by Diels in "Das Pflanzenreich," IV., 112, 124 (1906).

and appear in the later spring. These latter plants have small compacted leaves in rosettes, but the leaves are much smaller, and concave, or very narrow, and the stalks support usually several blooms. The

early rosetted sundews have larger flat leaves, and always white flowers. Our illustration shows two typical forms—the large-leaved one (*macrophylla*), and one of the lowliest of all the sundews.

All sundews possess leaves which bear glandular hairs, that is, hairs with sticky heads. They are insectivorous plants, or plants which entrap and feed upon small insects. The sticky hairs secrete a glistening fluid which flies and other insects mistake for honey. By alighting on the leaf the insect produces an irritation in its surface which causes the sensitive hairs to bend downwards, fastening the insect to the leaf. The sticky fluid smothers the insect, which is unable to escape. Then the sticky glands secrete a juice which partially decomposes the victim, and the leaf in this way absorbs food which is taken up by the plant.

The sundews are not dependent upon insects for their existence, and can live quite well without them, but the food obtained by capturing them is of benefit to the plants. The climbing sundews with their cup-shaped leaves and longer tentacles are better enabled to catch insects than those with flat leaves; and it is interesting to observe sand-flies and other small insects being trapped in them.

The sundews may readily be distinguished by their sticky-hairy leaves. There is only one other plant in Western Australia with such leaves, that is not a true sundew. It is *Byblis*, a plant with long grass-like dewy leaves and large violet flowers. None of our sundews in the South-West possess such leaves.

The calyx has 4, 5, or 8 segments, and as many petals. These petals are always delicate and soon wither after the flowers are gathered. The stamens are the same in number as the petals. The ovary (seed-box) has one cell with many seeds. The styles on the top of the ovary are 3 to 5 in number, and may be simple, or much branched. There are eighty-four species known to botanists, of which number forty-six occur in Western Australia, and these for the greater part are to be found in the South-West of our State.

The name *Drosera* is taken from a Greek word meaning dewy, in reference to the sticky hairs.

The sundews must not be confused with the remarkable pitcher plant found along the south coast. This is a very different plant belonging to quite another family, and will be dealt with separately.

FOUNDATION DAY.

An Old Story told in a New Way.

"What puzzles me," said little-brother-John to big-brother-Kay, "is why some people say Proclamation Day and others say Foundation Day."

The two boys had been instructed by their respective teachers to find out all they could about the founding of their State, for on the morrow, special lessons were to be given on this great event.