We were received at Banka Banka Station as if we were the owners of the place. Lunch was served by the cook; the food included tomatoes grown on the station and a remarkable variety of vegetables. In the garden at the station there is a wonderful patch of cauliflowers; and there are cabbages, turnips, pumpkins, and other vegetables; bananas, oranges and dates are also grown, water being supplied by a windmill.

The two-way method of raising water, by horse and power, as at Kelly's Well (between Barrow Creek and Tennant Creek) is termed a double whip. (One bucket goes down while the other comes up.) Bores (sub-artesian) are frequently operated by windmills and sometimes by petrol engines, and some smaller bores by man-power whips. The last mentioned are privately owned by the smaller holders. The wells and bores on both stock and mail routes are usually owned by the Government.

(To be continued.)

WESTERN AUSTRALIAN WILDFLOWERS.

No. XXXVII. "THE SOUTHERN CROSS."

(*Xanthosia rotundifolia*, D.C.)

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

There is a plant found on the loamy or gravelly soils of the Albany district, from King George's Sound to the Stirling Range, which, although a small and insignificant shrub, is conspicuous when in flower because of its curious white and violet inflorescences, each of which is as a rule cruciform in plan, and, with its four arms terminating in petal-like bracts and clusters of flowers, bears a striking resemblance to the conventional form of the constellation Crux—the Southern Cross. Seen on the background of the dark green shrub amongst which it grows, these inflorescences undoubtedly resemble constellations, being star-like in their striking lustre, and making the common name one which is singularly appropriate.

The species is a shrub belonging to the same family as the carrot, the parsnip, parsley and celery. The points of similarity are not evident until we closely examine the flower, when it will be noticed that the inflorescence is a compound umbel, with usually four rays, each bearing a small umbel, and an unstalked umbel in the centre. The umbel of each ray is subtended by three petal-like white bracts, sometimes suffused with violet on the lower side, while there are four narrower and more pointed. Each bundle of flowers is known as a "partial umbel" to distinguish it from the main, or "compound umbel" of the whole inflorescence. Each flower is on a rather short stalk or "pedicel," and there are usually 10-15 flowers in each partial umbel. The flower has a short calyx-tube and five lobes, which are ovate in outline, but slightly cordate or heart-shaped at the base. Alternating with the calyx-lobes are five petals, which slightly overlap in the bud. Inside the petals there is a floral disc with two prominent glands at the base of the two styles (see Fig. E). There are five stamens alternating with the five petals, each of which consists of a slender filament and a two-celled anther. The anthers protrude considerably beyond the petals. The two styles are distinct, and curve inwards towards the apices. The ovary is inferior and two-celled, and the calyx-tube enlarges as the flower

The Southern Cross.

EXPLANATION OF PLATE.

A, Habit of plant. B, Leaf. C, An inflorescence. D, Flower (enlarged). E, Flower in section showing the styles and epigynous glands. F, Flower after the fall of the petals and stamens. G, Fruit.

Albany, W.A., October, 1933. Icon. origin.

matures, becoming flattened and almost oblong in outline. Each ovary-cell contains one ovule, suspended from the top of the cell. The fruit is much compressed laterally and notched at the base, and consists of two carpels which separate at maturity, leaving a persistent central axis (carpophore). Each carpel has prominent ribs which curve inwards at the base. The seeds are greyish black and somewhat compressed.

The leaves of the species are alternate, and somewhat varied in outline, but mostly orbicular and acutely toothed and leathery in consistence. The larger leaves are usually found at the base of the branches.

Xanthosia derives its name from the Greek xanthos, yellow; on account of the colour of the hairs on some species. The specific name of rotundifolia refers to the rounded shape of the leaves.
