

WESTERN AUSTRALIAN WILDFLOWERS.

No. XXII.—The Manna Wattle.

(*Acacia microbotrya*, Benth.)

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

The spirit of winter is again over the land. With the advent of the warm and gentle rains Nature awakens from her summer torpor and actively prepares for the season to come. The sap again courses through the veins of the plants which have remained almost dormant through the summer, and all the vegetation assumes a brighter green. Even down in the soil the seeds feel the call to life, and soon the first leaves will be seen. For some plants this life will be only of seasonal duration, and after seeding, they will die; while for others this winter means the birth of a life extending over a thousand years. Yes, the forest giant which commences life this year, if allowed to live, will see many remarkable changes in the history of man, and each succeeding winter will be as another day in its life when it will witness the keen competition of its contemporary brethren and the decline of the ancients. The plant of short duration will make rapid progress through winter's careful nursing, and soon we shall have the warm days of August and September, when Nature spreads her feast of colour in indescribable hues and riotous profusion.

The first plant to announce this glad event is one which, curiously enough, commenced active preparation shortly after Christmas. During the early days of January the Manna Wattle forms its small flower-buds which are then just visible; but in the early days of May the small, wonderfully fragrant blossoms are opened, and with this golden standard Nature announces the new birth. This precursor of the winter announces its advent by its scent as well as by its royal standard. It is the most highly scented of the Wattles; but to appreciate it to the full one must go into the bush in which it grows while the foliage is still wet with rain, for then one may take copious draughts of its fragrance.

The Manna Gum is a species of *Acacia* which does not develop true leaves, except in the young state, when its pinnate feathery leaves may be seen adorning the seedling and young plant. After about six months it loses these leaves, and its successors, the "phyllodes," are developed. These are shown in the accompanying plate. They are the midribs and leaf-stalks of the true leaves (which are not developed) and are flattened and broad to perform the function of assimilation. In colour they are a bluish-green, and inconspicuously nerved, with the exception of the midrib. The pale yellow flowers are developed in small and dense racemes of small globular yellow flowers, and each cluster or raceme somewhat resembles a small bunch of grapes; hence the name *microbotrya*. (Mikros means small, and botrys, a bunch of grapes.) Each flower-head consists of from 20-30 flowers, each having a thin 5-lobed calyx and five oblong-spathulate petals. There are numerous long stamens and a single ovary in the centre. The pod is dark purple, flat, and contains fairly large black seeds.

The Manna Wattle is fairly common in the Eastern Districts as far east as Burracoppin. Thence it extends southwards to Ravensthorpe and the Stirling Range, and it is not infrequent around Moora and to the north. It is best developed in red loamy country carrying Jam trees and Salmon Gums, where it is a small bushy tree of 10-15 feet in height.

Apart from its ornamental value, the tree is useful because of its gum, and its bark.

The gum is much used as a substitute for gum arabic, and is also of exceptional value as an adhesive when dissolved in water. Heating the water hastens the solubility of the gum. This gum is most valuable if it can be obtained free from



THE MANNA WATTLE (*Acacia microbotrya*), Benth.

A. Branchlet, showing phyllodes ("leaves"), and racemes of flowers; B. Flower head (cluster of flowers); C. Flower (A. = stamens; P. = petals; K. = calyx).

Tammin, May, 1931.

Icon origin.

impurities and tannin discoloration. It would be interesting to ascertain if clear gum can be obtained in quantity by a process of removing the bark from around the places from which the gum exudes. When perfectly clean it is a pale yellowish-white in colour, and almost indistinguishable from gum arabic.

The bark is valuable for tanning, containing a relatively high percentage of tannins, and is much used locally for tanning hides, imparting a good colour to the leather.

The Manna Wattle is a plant which should be preserved wherever possible, and grown around homes in clumped effects. It is a hardy species which well repays any efforts at propagation.

For details of the flower see accompanying plate.

[Our senior readers might try to obtain clear gum by the means suggested above. Mr Gardner would, I am sure, like to hear about the results of such an experiment.—EDITOR.]

EMPIRE DAY.

Shall we not, through good and ill,
Cleave to one another still?
Britain's myriad voices call,
"Sons, be welded each and all

Into one imperial whole—
One with Britain, heart and soul—
One life, one flag, one fleet, one throne,"
Britons, hold your own.

—Tennyson.

For Honour's Sake.

I am sure you all know the story of England's greatest sailor, Lord Nelson. When he was quite a young boy he and his brother William were one day riding to school. The snow lay thick on the ground, and in parts the drifts were so deep that they thought it advisable to return home. After hearing their story their father said, "Make another attempt, and if the snow is too deep you may return; but remember, boys, I leave it to your honour."

The road proved so dangerous that they had every excuse for turning back, but Horatio urged his brother on. "We must go on," he said, "it was left to our honour."

This sense of honour or duty distinguished all Nelson's actions through life, and on his last glorious day, the day of his death, he sent this impelling and never-to-be-forgotten message to all under his command: "England expects every man will do his duty."

What a fine message for Empire Day! The boys and girls now at school will in a few years be called upon to man the Ship of State. The call will go forth to them as to their sires: "England expects every man will do his duty."

We must remember that it is not the size of a country, nor the number of people in it, that makes a nation great; it is the people themselves.

Not gold, but only men can make
A people great and strong;
Men who, for truth and honour's sake,
Stand fast and suffer long.

In the Antarctic snows there are some rough wooden crosses bearing the inscription: "To seek, to strive, to find, and not to yield." Beneath the crosses sleep those "heroes of peace" who gave their lives in building up the glorious traditions that we love and honour.