

WESTERN AUSTRALIAN TREES.

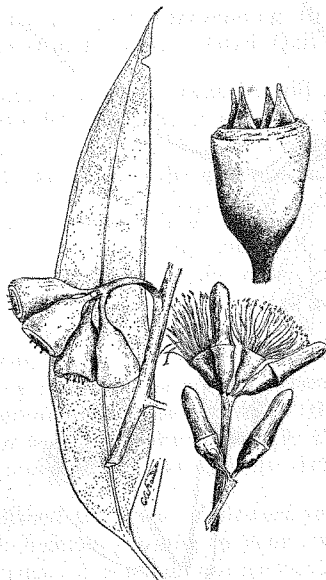
No. 13.—THE BROWN MALLET (*Eucalyptus astringens*).

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

The Mallets of Western Anstralia are well known throughout the commercial world on account of the valuable tannins produced from the bark of these trees. The Mallet bark industry flourished in this State at the commencement of the present century, when large and valuable shipments were sent overseas, the total value of the exports being some millions of pounds. At the present time comparatively little bark is "stripped" since the areas of Mallet have been fairly systematically exploited. There are three Mallet trees—the Brown Mallet, the Blue Mallet, and the White Mallet. Of these the Brown is the most valuable, and occurs almost everywhere mixed with the Blue Mallet, which it closely resembles in its bark. The White Mallet on the other hand has a very different bark, and is much more scarce, seldom if ever growing in tree form in areas of any extent.

The Brown Mallet attains a height of 50 to 60 feet, but trees of more than 30 feet are rarely seen in the living state. Occasionally one sees the gaunt skeletons of former giants of this species standing desolate among the young regrowth, relics of the days before the Mallet Bark collector entered the domain of the Mallet and ruthlessly destroyed all individuals which were of an age to yield bark of value.

The trunk of the tree is straight with branches arising at an acute angle, and is 12 to 30 inches in diameter and up to 30 feet in length. The bark is a rich brown when new, paling to a silver grey or



THE BROWN MALLET.
(*Eucalyptus astringens*.)
Leaves, flowers, buds, and fruit.

brown with age, and splashed with patches of purple bark. The rich brown colouring is best seen about September. In fracture the

bark is a deep yellow, and gummy. During the winter and spring it is very soft, and easily removed from the wood, and is very astringent to the taste. The heartwood is a pale cigar-brown, dense and hard, and straight grained. The leaves are a dark glossy green, lanceolate and irregularly veined.

The flowers are white in lax drooping umbels, and very closely resemble the Swamp Yate which was described last month. The operculum may be more sharply pointed. The buds and flowers are typically smaller than those of the Swamp Yate, and the fruits are always smaller with narrower, less prominent valves not so conspicuously exerted.

The Brown Mallet was until recent years considered as a form or variety of the Swamp Yate, and on botanical grounds the species are very difficult to separate. In the field, however, they are very different, because of the bark and habit of growth, and also because of the nature of the soils in which they are found. The trees never occur in association.

STORIES FROM THE FRENCH.

Owing to limited space we are compelled to hold over the third part of "The Little Chap." This will appear in the next number of your magazine.

THREE FOREST INSECTS.

(By B. A. O'CONNOR, B.Sc. in Agric., Department of Agriculture.)

MARRI BORER.

(Tryphocharia hamata.)

One of the most destructive groups of forest insects in this and other countries is the "longicorn" group. The insects belonging to this group are long-horned beetles whose larvae bore in forest trees, and do great damage, reducing the value of the affected timber, and often killing the trees. Some of the beetles attack living trees, others prefer dead or dying ones, and in many cases the grub cuts a channel round a branch to cause the top part to die, thus making a suitable home for itself. It is an amazing fact that these larvae can live on dead wood, which most animals cannot digest. It is thought that they have special bacteria in their intestines which enable them to make use of their unpromising food material. The extent of the operations of wood-boring insects can be gauged by the number of logs in our wood heap which are found to contain large channels. It is surprising how many you may find when you are chopping up firewood.