

the tobacco is to hang. In breadth, the rooms are 27 feet with a centre walk-way of 3 feet. On every row of posts across the breadth of the barn, cross-pieces must be put up at 3-ft. intervals, upon which the bamboo rails are to hang. The ends of the barns may be thatched to within 6 feet of the ground, that is, as far as the wattling, and two or three shutters, which can easily be opened or closed as required, should be made in the side thatching. For each room 125 to 130 bamboo rails are required, so for one acre, 300 bamboo rails are more than enough. The extra rails are always handy in case of breakages and if the crop is extra large. With large-sized plants it is best to space them at 1-ft. intervals on the rails; in this case 125 rails per room are necessary and these will hold 6,000 plants. One corner must be set aside to make room for a watchman and the "press", wherein the tobacco will be stored for fermentation, as explained previously.

PRODUCER GAS UNITS.

Apart from their importance in a time of national emergency, producer gas units cost so little to run that they are considered a sound investment at all times.

The making of producer gas consists essentially in drawing air through a bed of red-hot charcoal and in the following article in this issue, a clear and simple explanation of the use of producer gas for all types of road-transport vehicles is given.

Charcoal, for the production of producer gas, is usually made by completely carbonizing pieces of hardwood. Charcoal made from coco-nut shells has not been used to any extent, although it is being tested by a prominent firm in Rabaul with very satisfactory results.

Following the article on "Producer Gas" in this issue is an article on the preparation of high-grade charcoal from coco-nut shell. Wood charcoal is prepared in a similar manner.

From exhaustive tests, carried out in New South Wales, it has been found that two very suitable producer gas units are those manufactured by the following companies, from whom full particulars may be obtained:—

Harkness and Hillier, 155 Parramatta-road, Five dock, New South Wales, and

The Powell Gas Producers (Aust.) Ltd., 142 Parramatta-road, Camperdown, New South Wales.

In reply to recent inquiries, these units were quoted as follows:—

The H. and H. Producer Gas Units—

	£	s	d.
Truck unit, less sales tax	85	0	0
Trailer unit, for attachment to cars	135	0	0
Chassis trailer fitting	1	10	0
	<u>136</u>	<u>10</u>	<u>0</u>

The Powell Gas Producer Unit—

	£	s	d.
Type A (suitable for engines up to 27 h.p. and load up to 4 tons)	85	0	0
Less fitting charges	10	0	0
	<u>75</u>	<u>0</u>	<u>0</u>

	£	s	d.
Type B (suitable for trucks over 27 h.p. and loads of 5 tons and over)	94	0	0
Less fitting charges	10	0	0
	<u>84</u>	<u>0</u>	<u>0</u>

In supplying these units to New Guinea, they would be accompanied by plans and descriptive matter enabling them to be installed locally.—R.C.H.