COCONUT RESEARCH INSTITUTE

LEAFLET No. 20

HOW TO MAKE A BARBECUE

Leaflet No. 15 of this series of pamphlets gives the plan, description and details for constructing a copra kiln of 3,000 coconut capacity on a coconut estate. A barbecue is part and parcel of a copra kiln. The split nuts before going into the kiln have to be spread out for a few hours sun-drying, and the absence of a barbecue to lay out the nuts tends to increase the percentage of grade 2 and grade 3 copra. The pre-war cost of building such a barbecue as given in the above-mentioned leaflet is Rs. 500. A barbecue of this size was actually built on Ratmalagara Estate in April, 1951, and below is given the plan, details of construction and the present cost of material and labour.

Details of Building

A concrete foundation 30′ × 30′ internal, and 18″ deep and 12″ broad is brought up to ground level. A low surrounding wall, 15″ high and 12″ broad is built on this foundation. On the side closest to the copra kiln and the side opposite also, two openings each 2′ broad are left in the middle. Outside the retaining wall, a drain 6″ × 9″ is built right round, leaving a berm of 4″ breadth. The drain is sloped off to carry all water into a catchpit 4′ × 4′ × 4′ at one corner of the barbecue. The area of 900 square feet, so enclosed, is filled up with gravel, well rammed, domed and sloped off from the centre outwards so that the two lower edges are at ground level, and the centre 4″ above. A layer of bricks is laid in sand over this and is finally cemented over with a 3″ layer of cement. Expansion joints 1″ broad, are left at a distance of 2 feet from the walls and also at right angles across the centre of the barbecue. In order that coconut water does not seep through the

expansion joints and start fermentation when it reaches the bricks below, a I" layer of cement, 4" broad, is first laid below the expansion joints which are later filled with bitumen-cement-lime mortar. The edges of the drains and the floor are rounded off to ease the flow of water. Thus all coconut water or rain falling on the barbecue runs down to the sides and then along the walls through the openings into the drain outside.

Carters transporting nuts to the barbecue should be ordered not to back their carts on to the barbecue as the surrounding walls will be damaged. Some sort of a stop at the point of unloading would be useful. The curers should be instructed to sweep the floor after the nuts have been taken to the kiln. Draught bulls relish a drink of coconut water from the catch pit.

COST OF CONSTRUCTION

Materials used and their cost :—

Cement/Lime/Sand mortar 1 : 2 : 8
Cement/Sand mortar 1 : 5

	Rs. C.	Rs. C.	Rs. C.
8,500 bricks @ Rs. 37.50 per 1,000	318.75		
4½ cubes sand @ Rs. 10 per cube . .	45.00		
1½ cubes coarse sand @ Rs. 12 per cube	18.00		
20 bags cement @ Rs. 10 each : -	200.00		
30 bushels lime @ Rs. 1.25 each . .	37.50		
6 cart loads gravel @ Rs. 2 per load	12.00		
2½ gallons tar	7.00	638.25	
Masonry and labour :—			
Building foundation—3,400 bricks	54.00		
Building surrounding wall, drain etc., and cement plastering . .	144.75		
Levelling foundation and cementing 900 sq. ft. with exp. joints, etc....	180.00		
Building catchpits and feeder drain	20.00		
Labour excavating and filling foundation	20.00	418.75	1,057.00

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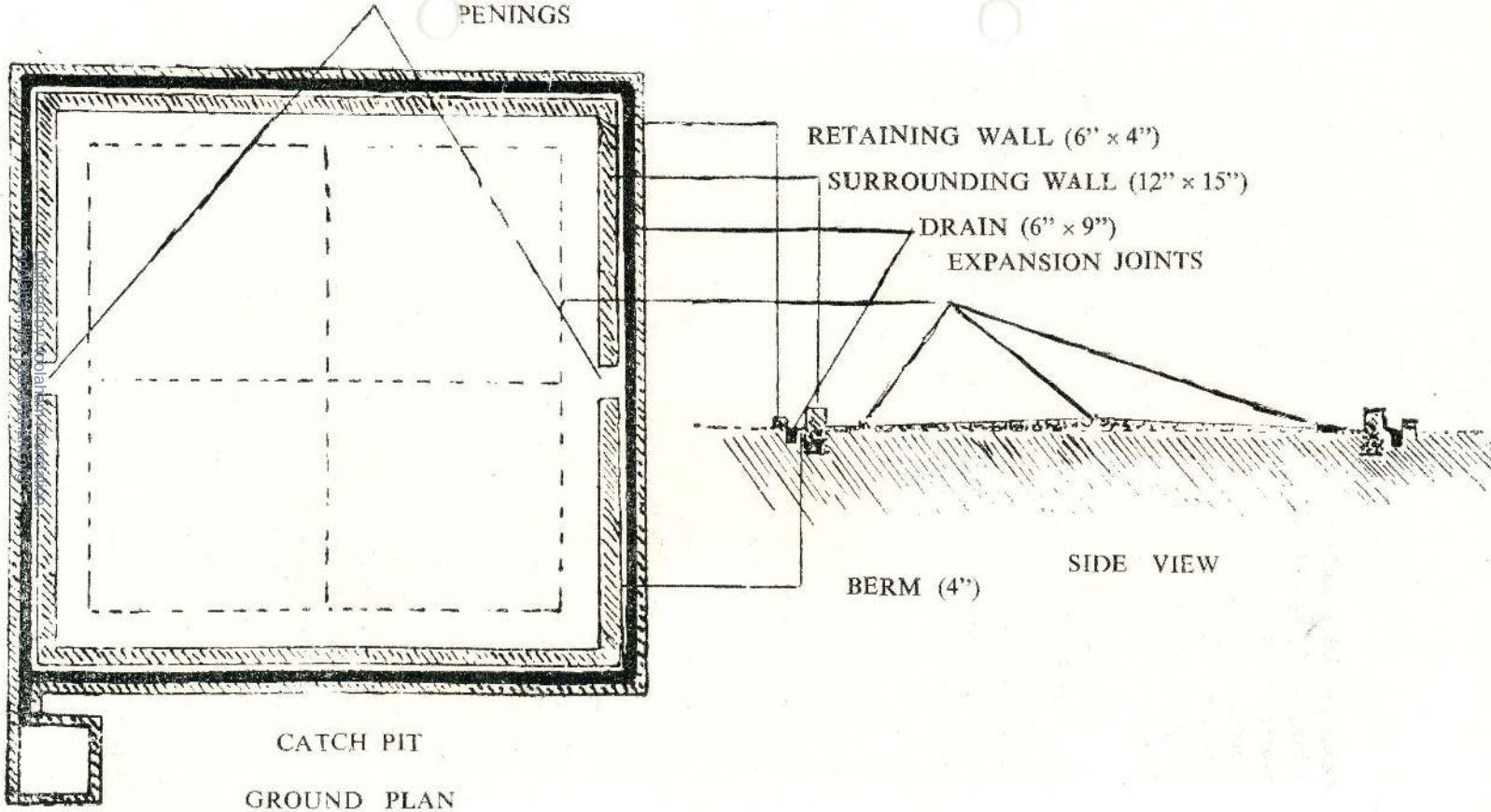
PENINGS
RETAINING WALL (6" × 4")
SURROUNDING WALL (12" × 15")
DRAIN (6" × 9")
EXPANSION JOINTS
SIDE VIEW
BERM (4")
CATCH PIT
GROUND PLAN