

A ROTARY RACK FOR DOING THE WEIL-FELIX REACTION

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INSTEAD of the ordinary rectangular rack, a circular rotary rack has been used by us. The experimental tubes are rotated alongside the control tubes. The light comes from below after being reflected from a black surface. The readings are very clear and can be quickly made without disturbing the tubes.

The rack consists of two circular plates of wood (figure 1) about 7 inches in diameter, and perforated near the margin by a double (or triple)

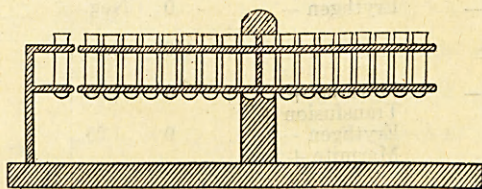


Fig. 1a.—Lateral aspect.

row of holes to fit the test-tubes, $\frac{1}{4}$ inch apart. The holes in the lower plate are smaller than those of the upper ones to prevent slipping of the test-tubes. The distance between the plates is 1 inch. Any size can be made to suit requirements. The circular plates are mounted on a stand 2 inches high, and which is fixed on a rectangular wooden

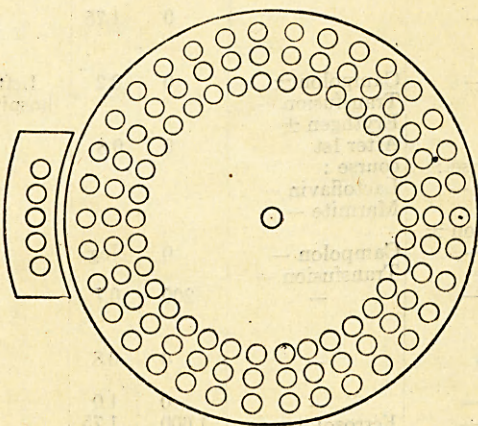


Fig. 1b.—Upper aspect.

base about 8 inches square. The base is painted black on the upper surface to facilitate readings, or readings can be made by slightly tilting the rack. The control tubes are kept on a stand fixed on the base by the side of the rotating circular plates and perforated by five holes for test-tubes for Rv, Vi, Ao, Bo and To.

(Concluded at foot of next column)

TOXICOLOGY OF YOUNG SHOOTS OF COMMON BAMBOOS (*BAMBUSA ARUNDINACEA* WILLD.)

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THE young shoots or sprouts of common bamboos (*Bambusa arundinacea* Willd.) are used as food and taken in most parts of India either as pickles or as a curry. During the rainy season they begin to come out from the roots of mature bamboos and then become available in the vegetable stalls in the bazar. They are taken by all classes of people and have lately become popular even among the European residents in Calcutta. Cattle are also fond of these shoots and the owners of bamboo clumps always try to protect the young shoots by fencing off the clumps during the rains when bamboos begin to sprout. The shoots are always found covered with coriaceous sheaths which fall off when they grow larger and maturer. They are soft and edible when they are about 20 to 25 inches in height.

Fatal cases of cattle poisoning by bamboo shoots are of frequent occurrence in Bengal as the village people know well to their cost. Cases of human poisoning are also known to the toxicologists of this country, but the actual poison which causes symptoms of poisoning or death has not yet been traced and there is much speculation about its chemical nature. The fact that the shoots are cooked by boiling in plenty of water accounts for the rareness of poisoning in man.

In a previous investigation it was established that hydrocyanic acid, present in the form of a cyanogenetic glucoside in *Sorghum vulgare* (called *juar* in Hindi and *gama* in Bengalee) at certain stages of its growth (Bagchi and Ganguli, 1941), is responsible for quite a large number of deaths of cattle in Bengal and Bihar and possibly in other provinces. As both sorghum and bamboo belong to the same natural order, *Gramineæ*, it was thought worth while extending the scope of that investigation to include bamboo shoots with a view to finding out if both contained the same cyanogenetic glucoside which liberates free hydrocyanic acid under certain conditions.

(Continued from previous column)

The experimental tubes can be arranged in groups respectively of Rv, Vi, Ao, Bo and To; or the different tubes can be arranged in the same series as the control tubes. More than one test can be done on the same rack, so that it is labour-saving.