NOTES

AN INEXPENSIVE LYSIMETER

A study has been started at the Kentucky Agricultural Experiment Station on the effect of Kentucky bluegrass and certain legumes, grown separately and together, on soil nitrogen economy. It was thought desirable to determine nitrogen leaching. Inexpensive lysimeters were constructed for this purpose. Details of one of these are shown in Fig. 1.

They were made from ordinary 55-gallon steel drums. The drainage water collecting in the reservoir in the lower part of the drum is removed by connecting the water removal tube to a bottle and partially exhausting the air in the bottle. The cover for the reservoir, which also is the bottom of the soil-containing part of the lysimeter, is made from the removed top of the drum. It is supported by the wall of the reservoir and by a small concrete column in the center of the reservoir. Small holes in this cover permit drainage.

The cost of making and installing 22 of these lysimeters, using the soil to fill them which was removed from the openings where they are placed, was about $130.00.—P. E. KARRAKER, Kentucky Agricultural Experiment Station, Lexington, Ky.

A SIMPLE SOYBEAN SEED COUNTER

In conducting germination and other important tests where seed counting is essential, a simple, quick yet accurate mechanical counter is almost imperative. Such a counter has been devised by Claude Greenham of the Agronomy Department at Purdue University Agricultural Experiment Station. The Greenham soybean seed counter, as shown in Fig. 1, was made from a piece of ½ inch planed walnut lumber cut 6¾ x 5½ inches in size. One hundred holes, equally spaced 5½ inch from center to center were then bored into one surface by means of a 8½ inch reamer. The holes are 2/8 inch deep and taper to a point at the bottom. A hole of this size and shape will accommodate the seed of most soybean varieties. The corners of the edges of the counter were rounded so as to permit easy operation when taking samples. This type of counter can easily be adapted for counting other seeds; especially the larger, more globular shaped ones.

The Greenham counter is quickly and simply operated. By repeated tests it has been shown to be capable of counting 10 times as fast as the average person can count. Furthermore, when the count-