

Oregon Agricultural College Experiment Station

Oregon Experiment Station Trap-Nest

By

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In pedigree breeding it is necessary to know as accurately as possible the number of eggs each hen lays. The only certain and practical method of obtaining such a record is by the use of trap-nests. Had it not been for the trap-nest, the Oregon Station could not have conducted its experiments to increase egg production, and its strains of White Leghorns and

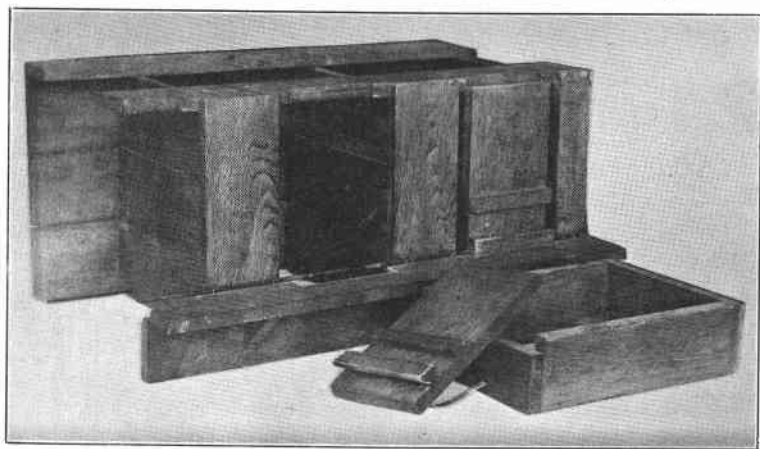
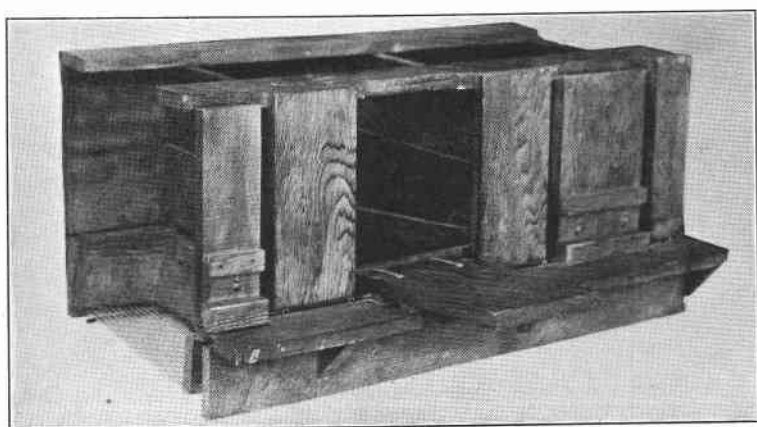
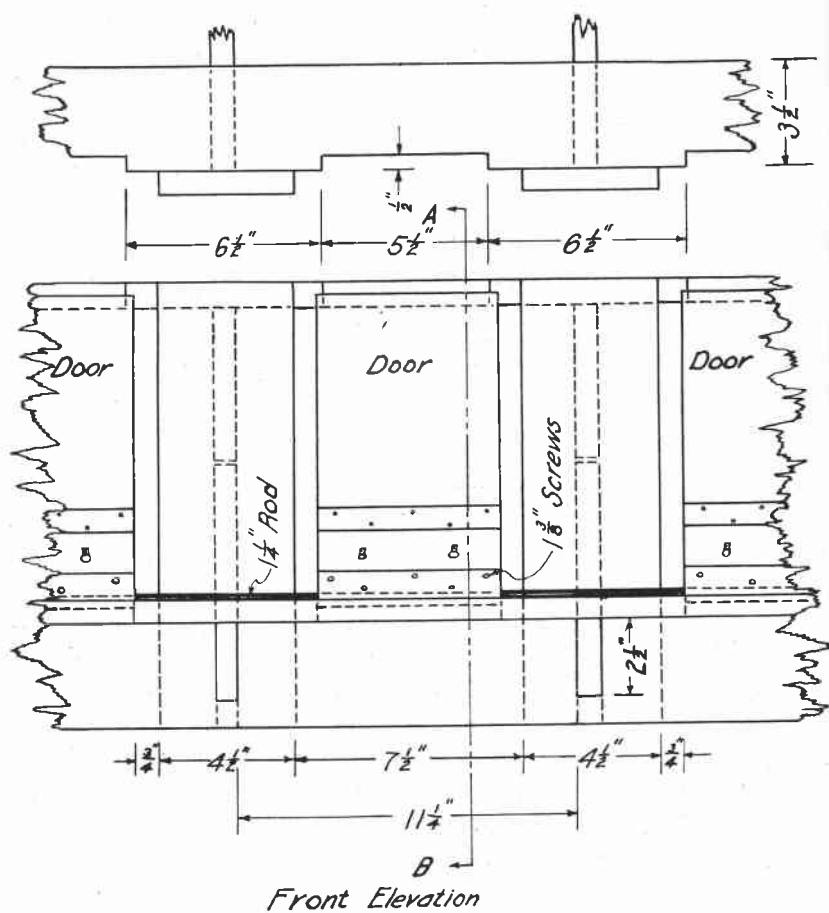


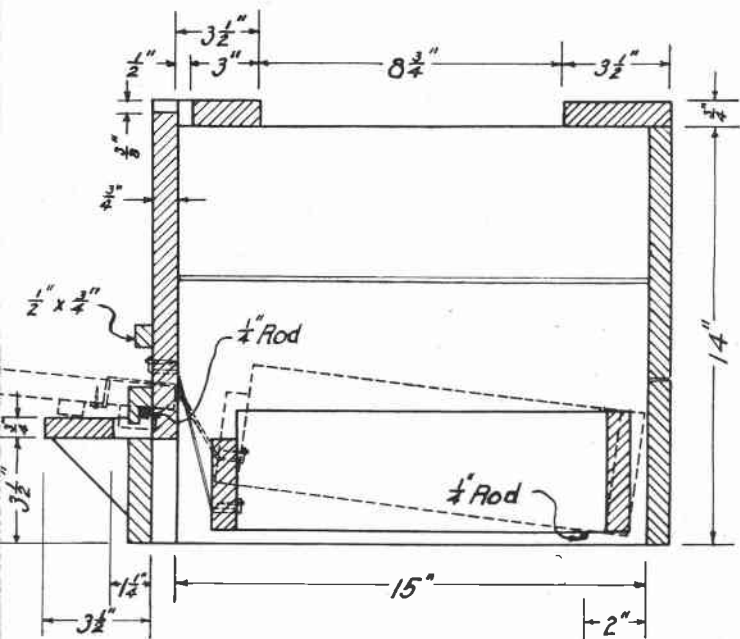
Fig. 1. Portion of group of nests cut and arranged to show construction. Note the cleat on the door and the notch in the running board, both outlined with chalk.

Barred Plymouth Rocks would not have reached the high records in egg production that they have attained. It is not deemed advisable to recommend the use of trap-nests to any except those desiring to follow up the records by careful, pedigreed breeding work.

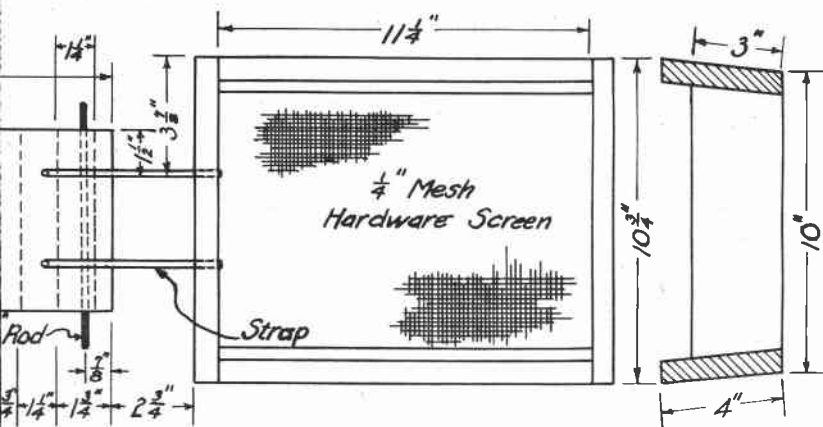
The Oregon Station has been trap-nesting and pedigree breeding since 1908. The nest employed for most of this work was of the double compartment type. Such a nest is objectionable in that it is often quite inconvenient for the attendant to release the hen.



Photograph of O. A. C. single compartment trap-nest. Figs. 3, 4, 5. Front
 ation, section, and plan of trap, O. A. C. single compartment trap-nest.



Section A-B



Plan of Trap

Two years ago the Station placed a single compartment nest on trial, and the results have been satisfactory. It is, therefore, the type of nest now recommended. The accompanying pictures and working plans are of this single compartment trap-nest.

The dimensions of this nest have been made such that it is adaptable for use with birds of either Leghorn or Plymouth Rock size. With but slight exception, all the lumber used in its construction is of standard sizes, which eliminates the necessity of ripping. It is important that all lumber be dressed on both sides.

To get the desired height and still use stock lumber, it is necessary to use two boards for the sides. Their total width when dressed is about 13 $\frac{3}{4}$ inches. As shown in the plan and pictures, the boards are so placed that their outer edges are exactly 14 inches apart. This will allow a small crack between them, which serves to give some ventilation as well as to take up the unevenness that may exist in various boards. In the back of the nest the wide board is placed on top and the narrower one at the bottom. In the partitions these are reversed so as to prevent the crack from coming in the same place on both. When the joints are broken in this manner, no additional supports from top to bottom are needed in the rear.

The door is exactly 6 inches wide when dressed, and, therefore, is not stock lumber. It has been determined, however, that this is the right width, for if it be wider, and Leghorns are being trapped, occasionally two birds will get on the same door at the same time and both enter the nest. If the door be made narrower, the cracks beside the door will be so wide a hen can get her head through when attempting to get out of the nest. The cracks at the sides of the door must be there, for if they are not, and a hen enters the nest diagonally, the door will close and catch her foot, in which event her leg is likely to be broken.

The door and the nest box are connected by means of two strips of belt lacing. In fastening the lacing to each, drill holes in the boards and pass it through, placing the tack in the opposite side as shown in the pictures and drawing. If so fastened it will never pull loose. The rear of the nest box rests on an iron rod $\frac{1}{4}$ inch in diameter. The front is suspended by the laces from the door. The door pivots on another iron rod by means of a cleat from which one corner has been planed (Fig. 1). This cleat fits down into a slot in such a manner that the door cannot be moved from side to side or pulled out when open. The cleat should be well fastened to the door with screws or clinched nails. This arrangement of rods and cleats makes it possible to remove both nest box and door for cleaning.

It will be noted that in the board against which the top of the door closes, there is a slit. This is to prevent the door from closing on the hen's tail.

It is recommended that $\frac{1}{4}$ inch mesh wire known as fruit-drier cloth be used for the bottom of the nest box. There are fewer broken eggs with a wire bottom, and it is cleaner.

These nests may be placed under the dropping boards or tiered one row above another at the end of the house. They may be built singly or in groups. It has been found that groups of six nests are satisfactory. For building a group of six nests, the following bill of materials may be helpful:

Lumber	
1 pc.	1"x10"x16" Finished
5 pcs.	1"x 5"x12" Finished
2 pcs.	1"x 4"x14" Finished
1 pc.	1"x 4"x10" Finished
1 pc.	1"x 8"x 6" Finished

Hardware	
12 ft.	of $\frac{1}{4}$ " iron rod
28"	of wire fruit cloth 30" wide
3 yds.	belt lacing
Small staples	
1 lb.	6d finishing nails