Automatic waterers for day old chickens

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Cover Page Footnote
We wish to express our thanks to Mr. and Mrs. K. Moore of Glen Forrest and Mr. and Mrs. J. Cameron of Kalamunda, whose enterprise and co-operation made this article possible.
ONE of the most tedious and time consuming tasks on a poultry farm is the provision of water to chicks from day old up to the age of three or four weeks. Most poultry farmers use half-gallon glass fonts with metal bases for the first few weeks, until the chicks are old enough to use the automatic watering system usually situated along one wall of the brooder house. This cumbersome glass font system can be replaced by the cheap and easily installed automatic watering system described below. This system has already been adopted by several local poultry farmers.

Just before this year's chicken season, progressive Glen Forrest poultry farmer Mr. Ken Moore, noticed an advertisement for automatic chick waterers in an American poultry journal and decided to adopt a similar idea for his stock. Mr. Moore has used this system, which we shall refer to as the "funnel system," on two large batches of chickens with complete success. Three other farmers have since installed similar systems, and all are highly satisfied with the results.

THE SYSTEM

The funnel system consists of a length of polythene pipe with plastic funnels fitted into it at one foot intervals. A cistern with a float valve at one end of the pipe, and an outlet at the other end maintain the water level in the funnels. Polythene piping is available at a cost of about 1s. 10d a foot. The four farmers using the funnel system have found one inch internal diameter piping to be satisfactory. The pipe runs the length of the brooder shed and is supported on short 3 in. by 2 in. blocks, to raise the level of the pipe from the cement floor to about the same height as the litter. This brings the funnels to a convenient drinking height for chickens.

The wooden blocks should be used at intervals of about two feet and the pipe clipped to every second block to avoid...
twisting, which interferes with the correct placing of the funnels.

It has been found that 120 ft. of piping, running the entire length of the brooder shed, can be operated satisfactorily on one cistern.

The pipe must be reasonably level throughout its length, so as to maintain a constant depth of water in the drinking funnels. If the floor of the shed is not level some packing should be placed under the wooden blocks.

To provide sufficient watering space for the chicks it was found necessary to space the funnels at one foot intervals along the entire length of the pipe. Funnel are of plastic and are approximately 2½ inches deep with a short spout. They are available in a variety of colours from hardware stores, priced at about 10d. each.

Holes bored in the polythene pipe to take the funnels should be just big enough to give a neat fit with the spouts. This is simply done because the spouts are slightly tapered.

A plastic cement adhesive should be used to hold the funnels firmly in place. The spout of each funnel should be roughened before the adhesive is applied.

When the funnels are in place along the pipe, the cistern is installed at the inlet end and adjustments made to the cistern float to define the level of water in the funnels. For best results each funnel should be two-thirds full. If a ball float is used the cistern need only be about 2 ft. long by 8 in. wide and 8 in. deep. Where a Francis float is used an ordinary 3 ft. watering trough as illustrated will suffice.

The outlet end of the pipe should extend about two feet beyond the far end wall of the brooder house. This enables the end of the pipe to be lifted above the level of water in the cistern to retain the desired depth in the funnels. Alternatively, the pipe may be extended only a few inches and a plug inserted.

**ADVANTAGES**

This system of watering provides far less opportunity for dirt to collect in the waterers than the font or trough system. Some sawdust may accumulate from time to time, but this is easily flushed out either by removing the end plug or lowering the outlet end of the pipe. This rapidly flushes all dirt from the system.

The automatic system can be easily adapted to all types of brooding methods. If surrounds are used around individual brooders of about 200 chick size, at least four funnels can be included within this space at day-old. The number increases

An ordinary three-foot watering trough with Francis float, which operates as a cistern for 80 ft. of polythene piping

The funnel system adapted to individual brooder units with metal surrounds
daily as the surrounds are expanded. In the case of a long continuous system of brooders all funnels can be used from day old.

Chicks take to the funnel waterers immediately. On one farm they were noticed to use the funnels within three minutes of being placed under the brooder.

A calculation of actual costs showed that the initial outlay for this system was no greater than that for the glass fonts and metal bases generally used. Other costs are much lower.

The funnel system has operated with great success for chicks up to the age of four weeks. Normally by this age the birds have been switched over to the permanent automatic water troughs. When the funnel system is not in use the polythene pipe, complete with funnels, can be conveniently raised and suspended from the rafters in readiness for subsequent batches of chickens.

The funnel system is simple to install in any brooder house, and because of the time-saving factor alone, should appreciably improve the efficiency of any farm.

The outstanding advantage of the funnel system is the tremendous saving in labour. Once the funnel system is set up then no further attention is required apart from occasional flushing to remove dirt. With the font watering system, at least two half-gallon fonts should be provided for each 100 chicks, which means that 20 or more fonts must be kept filled for a batch of 1,000 chickens. This takes a great deal of time, particularly as the chicks get older. The chicken season is always a busy period for the poultry farmer so any device such as automatic watering which saves time is invaluable.

Another important advantage of the funnel system is that it facilitates medication through the drinking water. When medication is required a drum of medicated water can be attached to the intake of the cistern.

ACKNOWLEDGMENTS

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