

Straw yard or hen yard system of running laying pullets, where each bird is allowed 6 sq. ft. of total floor space, usually made up of about 2 sq. ft. in the house and 4 sq. ft. in the yard.

Nevertheless crossbred pullets for egg production had come to stay.

During and since the war increased attention has been paid to the so-called hybrid vigour or heterosis which is developed when two separate breeds are crossed.

Experimental work and practice indicate that hybrid vigour tends to increase viability, particularly during the rearing stages, and also egg production. Further attention has been given to selecting inbred strains of purebred stock for ultimate cross-breeding with in many instances significant increases in egg production as compared with the production of the parent stock.

An endeavour is now being made to develop crossbred pullets of a comparatively low body-weight but with high egg production. Such birds give production comparable to other laying stock, but require less food, maintenance requirements being lower than for those birds with greater weight or body size.

The commercial egg producer in Britain sees an economic advantage in running crossbred pullets, which tend to rear more easily, give a reduced over-all wastage as adults, and lay more eggs than the average purebred birds available.

These crossbred pullets appear to be standing up to modern mass production methods better than average present-day purebred birds. Fortunately it is being recognised that it is essential to maintain high-quality purebred stock from which to breed the crossbred layers. Consequently, as was stated in the first article of this series, there has been no relaxation by specialist pedigree poultry breeders in their endeavours to raise the production and viability standards of the pure breeds. Though crossbred birds may be used extensively for straight table egg production, there is and always will be a place for the pedigree breeder of purebred stock.

## Intensive Systems for Egg Production

Before the Second World War most table eggs were produced by birds which were run under the semi-intensive, fold unit or free range systems. It is here that a limited number of battery cage or laying cage units had been established; sufficient in fact to indicate the value of this system for commercial egg production.

Then came the war and food supply difficulties made the feeding in battery cages somewhat of a problem. Since the end of the war there has been a marked change-over from the systems named to battery cages, deep-litter houses, and straw yards, all intensive systems of management. It is interesting to review why this change has taken place.

In the past in Britain as in New Zealand egg prices have fluctuated with the season of the year and the egg supply position. Prices have been low during spring and early summer during the egg flush period and high in winter when eggs are in short supply. Poultry farmers have always endeavoured to get winter egg production to catch the higher price at that time. In the past the main management aids to this end have been hatching future layers at the right time and the use of artificial lighting (electric lighting) during winter.

The introduction of laying batteries quickly demonstrated that increased winter egg production can be obtained with this system as compared with the semi-intensive system, even when