

THORNBUR BROS. LTD.

GENERAL INFORMATION

Thornbers produce well in excess of 20 million commercial egg production chicks each year and it is estimated that by the end of this season (June 1962) Thornbers' share of the potential market will be well over 30%.

Reading and Mytholmroyd are two of the seven commercial chicken hatcheries owned and operated by the Thornber organisation, others being located at

Glington, Northamptonshire.

Occold, Suffolk.

St. Mellons, Monmouthshire.

Stewarton, Ayrshire.

Ballina, Co. Mayo, Republic  
of Ireland.

Together these seven hatcheries have a total weekly setting capacity of 1,117,000 eggs, with <sup>Nr. Walsby.</sup> MYTHOLMROYD having a capacity of just under half-a-million eggs (440,000) and READING having a capacity of 140,000 eggs.

THORNBEE BROS. LTD.

TWYFORD HATCHERY, READING, BERKSHIRE

INCUBATION

*2nd Process:*

Eggs take 21 days to hatch and require two different sets of conditions during this period, these are

- (a) The setting period of 18 days when the temperature is controlled at 100°F. and the humidity at 85°F.

The eggs are mechanically turned once every hour and air circulation is used to keep temperature and humidity constant.

*1st Process*

- (b) The final 3 days are known as the "hatching" period when the temperature is still maintained at 100°F. but the humidity is increased to 90°F. Air circulation is still necessary but the eggs are no longer turned.

*2nd Process*

PICKING-UP THE HATCH

After 21 days the eggs have hatched and the chicks are ready for removal from the incubator. The racks within the hatching chamber are wheeled from the incubator close to small tables on which the trays are placed as they are removed from the racks. The chickens are examined and are counted into specially designed boxes having two compartments which each hold 25 chickens. Every box is marked with the number of chicks together with the variety and initials of the packer who examined and counted them. The tray, which now contains only the waste shells and any eggs which have failed to hatch, is replaced on the rack.

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NEWHOUSE HATCHERY, MYTHOLMROYD, YORKSHIRE

150 boxes

TRAYING OF EGGS

The eggs are drawn from surrounding supply farms (of which there are 145) housing Thornbears parent stock flocks. *for all hatcheries.* The birds on each supply farm are carefully examined by skilled staff and any birds considered unfit for breeding are eliminated. The birds are also blood-tested to ensure freedom from disease.

Eggs are collected twice weekly from supply farms by the Company's vehicles. Of an average 320,000 eggs - dependent upon the time of the year - are collected each week. There are two varieties of chicks produced by this Company and all eggs are marked with the supplier's identification and also the code number to denote their particular variety.

As the eggs arrive they are "de-boxed" and conveyed to the traying point where, using the "egg-compactor" devised by the Company's own technicians, they are lifted 48 at a time on to the incubator trays, three simple lifts of the head being all that is required to fill one tray holding 144 eggs. The filled trays are then placed into holding racks prior to being placed in the incubators.

THORNBUR . BROS. LTD.,

MYTHOLMROYD, HALIFAX, YORKSHIRE

INSTALLATION OF COMPUTER TO AID RESEARCH  
IN THE BREEDING OF EGG PRODUCTION  
CHICKENS

Thornbers are one of the World's largest poultry breeders and produce the nationally known '606' and '404' day-old chicks for egg production purposes.

The production of these chickens involves the use of over 250,000 birds annually in vast test programmes to produce the strain which has the characteristics required by the commercial egg producer. Some of the research cannot be coped with by human brains.

Thornbers have recently installed an Elliot 803 Electronic Computer at their Yorkshire headquarters. The computer has been specially designed to cope with the vital statistics of chicks and eggs. Into it the scientists have fed the facts of poultry life, such as what happens when strains are crossed and how new chicks are bred. The computer's memory - it can store up to half-a-million seven letter words and make 2,000 calculations a second - will be swelled by statistics about food costs, laying stamina, bird health, egg sizes and changes in public taste. The Computer will enable Thornbers to produce a better bird for egg production three times as fast.

Conclusion

~~Final Report~~

HATCHERY THROUGHPUT

When this hatchery is operating at full capacity, 28,000 eggs are hatched each day from Monday to Friday inclusive. The present level of hatchability is approximately 83% of all eggs set which means that some 23,240 chicks have to be removed from the incubators each hatching day. A staff of 14 will complete this operation in three hours. The conveyor belt removes the boxed chicks from the Hatching Room to the Sexing Room at the rate of 10,000 per hour.

They are then counted into several boxes, 50 in each, and are to await collection by the representative. He will then deliver by van the day old chicks direct to the customer.

The day old chicks are reared to 20 weeks when they start to lay their first eggs.