

Artificial Incubation.

(From an address delivered by Mr. A. M. Halstead at the New York State Fair at Elmira.)

My subject, which is probably new to most of my hearers, and which is almost unknown to the people of this continent, is one with which the Egyptians and Chinese have been familiar for two thousand or more years.

Reference to the mammals or egg-ovens of Egypt are found in records which antedate the Christian era, and the Chinese claim that the custom prevailed among them centuries before that.

With these nations, however, the practice partook more of the nature of a secret art, for it was confined to families who made it their business or trade; the father, or head of the family, inducting his successor into the mysteries of the business, and binding him by solemn oaths, not to divulge the secrets of the trade to any, save his successors.

It is only within the past quarter of a century that foreigners were allowed to see the inside of the ovens, but no persuasion or bribery has proved of any avail in gaining the desired information of the management and treatment of the eggs, and the minor details necessary to ensure success.

From the explanations of visitors we learn that the ovens were large rooms, entirely underground, from and into the sides of which were built arched chambers. These chambers were double, one above the other; the eggs were placed in the lower one, and a slow fire of dried camel dung kept up in the upper. The heat was regulated by the feeling of the attendant, whose long experience gave him almost an intuitive knowledge of the required temperature.

Of late years a number of such ovens have been constructed in Italy and the south of France. As the hatching season approaches, the overseers or managers come over from Egypt and take charge of the business, hatching chickens for the surrounding villagers, at so much per hundred, payable either in cash or eggs, and also selling the chickens obtained from the eggs thus taken in.

The certainty with which they conduct the business borders almost on the marvellous, for they will take one hundred fertile eggs from a customer, and return him seventy-five chickens, making their profit out of the twenty-five eggs. And here comes in another wonderful gift or insight, which we, with all our boasted enlightenment and civilization and our scientific aids, have not been able to attain. These men will take a basket of fresh eggs and passing them in succession rapidly between the eye and sun, will place them in two lots, one of which is of fertile eggs that will hatch, and the other non-fertile or not impregnated.

When the season is over the ovens are closed and the overseers return home.

The method in use among the Chinese is even more obscure than that of the Egyptians. We learn that the eggs are placed in shallow baskets and subjected to a certain heat for a few days, then removed to a different temperature and after a certain time again removed. Of the method of producing the heat and treatment of the eggs we know very little. Some writer has stated that they are covered with sand, which is kept warmed by large plates of iron or flat stones heated by fires under them, but we have no positive knowledge of the means employed.

With both nations, however, the constant oversight of an attendant was necessary; he lived in the ovens during the hatching season and gave his entire time and attention to the business.

So far as we know there has been no improvement by either the Egyptians or Chinese in the method in vogue centuries ago. The same system is still in use, and really, judging from the reports of its success, it would seem hardly possible to improve upon it.

The process seems simple enough, and possibly may be so to those who fully understand it, but when we consider the strict secrecy with which the whole operation is conducted, and the intimate knowledge which must have been acquired by the attendant in his constant attention to his duties, it is more than probable that there are many details in the business, which must be well known by the person in charge to ensure success. Another matter to be taken into consideration, in viewing the apparent simplicity of the Egyptian method, is the natural advantages in a climate of moist and uniform temperature, such as does not exist in any of the more civilized countries.

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A correspondent, writing from Nova Scotia, Oct. 4th, says:—"Our Provincial Exhibition came off at Truro, this week. There was a fine display of poultry of all kinds, but a great deal of dissatisfaction was expressed at the awards of the judges, for which there was good cause in a great many cases. This was, by all odds, the best display there has been at any of our Provincial Agricultural Shows. Our regular shows of the Poultry Association, of course, bring out a much finer lot of birds, as we have a much larger list than is used by the Board of Agriculture; but, taking all things into consideration, the display was good—sorry I cannot say as much of the management."

If farmers would raise poultry and eat more chicken meat, they would be healthier and make more money. Pork costs more money than chicken meat, and yet it hardly ever sells at a higher price. Hence, to eat or sell, poultry is the most profitable to the farmer.