

which hatches chickens by thousands, and gets them out on the exact day that you want them. Thousands of these machines are now in use, you may not be aware of it, but it is a fact nevertheless, the incubator of to-day is not an experiment, but the leading makes are the result of years of patient study and experimenting, and are now as nearly perfect as human hands can make them. "Necessity is the mother of invention" and when poultry raisers found that they could get any quantity of eggs in the winter time, but could get no broody hens to hatch them, they began to look about them for some means of accomplishing this desideratum. For many years the student of "Artificial Incubation" was regarded as a sort of harmless lunatic, so also was the inventor of the steam engine, but no one nowadays doubts the efficacy of steam power, and the incubator of to-day is just as great a success in its line, as the swiftest locomotive ever built. In Canada comparatively few incubators are in use, but in the United States there are many large poultry raising establishments that would have to go out of the business but for these useful machines, in other words, they are the result of the invention of the incubator, which opened up a new industry that could not possibly be carried on by any other means. To give some idea of the extent to which incubators and brooders are being used in the United States, I may mention that at one large establishment in New Hampshire they keep sixteen incubators in almost constant operation, having a capacity of six hundred eggs each, then there is the well-known poultry farm of Mr. James Rankin who annually raises thousands of chickens and ducks for the Boston markets by the aid of his "Monarch Incubators" and brooders, Messrs. W. H. Rudd & Son who also cater to the Boston market, and raise

thousands of Plymouth Rock chickens, do all their hatching and rearing by artificial means. In New Jersey there is a little town called Hammonton where the chief industry is raising "broilers" for the New York and Philadelphia markets; they are all hatched in incubators and raised in brooders, thousands of them being marketed annually, many other cases could be mentioned but these are sufficient to give some idea of what is being done in commercial poultry raising. I will not weary the reader with any further exposition of the matter, but I deem it necessary to a proper appreciation of what is to follow that we should thus hastily survey what is actually being done at the present time. At this juncture it may be well to consider the question of supply and demand. We have no official statistics in Canada relating to the consumption of poultry and eggs, but American figures will serve our purpose very well in making an approximate estimate of our consuming powers.

In an article on "Comparative Taxation" by Edward Atkinson in the Century Magazine, June, 1890, he says:—"The value of the entire product of pig iron in that year (1880) was less than one-half the value of the eggs and poultry which were supplied from all the barn-yards of the country. There is no census of eggs and poultry known to me except the assessors returns in Ohio, but perhaps one may take as a standard of general consumption that of the factory boarding houses of New England, in which men and women are boarded at from \$2.25 to \$3.00 per week, and in which the "mealers" so called, who dwell elsewhere but who come for their meals are supplied with twenty one meals per week at a cost of \$1.60 for women and \$2.50 for men.

"The annual value of the poultry

"and eggs consumed per capita under such conditions, and at these prices for subsistence, is \$6.44 per adult.

' Bearing in mind the relatively large consumption of the product of the hen-yards in the South, and perhaps in the West, this may be considered at least an average standard. Our present population of about sixty-five millions, counting two children of ten years or under equal to one adult, has the consuming power of sixty million adults; at \$6.44 each the consumption of poultry and eggs, in round figures, may, therefore come to \$386,000,000 per annum. At the present time this sum is equal to about three times the annual value of the product of pig iron, four to five times the annual value of the wool clip, six to seven times the value of the entire product of all our silver mines, and about equal to the value of the cotton crop. But we depend for a part of our supply of eggs on the hens of Canada, Denmark and Holland.

"Whether this standard of consumption of poultry and eggs is a fair one, each reader may judge for himself. The value of the egg product only of Ohio, computed from the product according to the data collected by the assessors of each town and city, is greater than the value of the wool of Ohio.

Mr. I. K. Felch in his excellent work "Poultry Culture" in estimating the consumption of eggs says, "if each person in the United States were to eat one egg, there would be \$1,000,000 worth consumed at average prices; and if each person were to eat an egg each day for a year, the consumption of this one article of food would amount in the aggregate to \$365,000,000. But some "doubting Thomas" will say that there are thousands of our people who do not eat an egg each day. Granting this to be true, we must face the fact that many other thousands eat from