

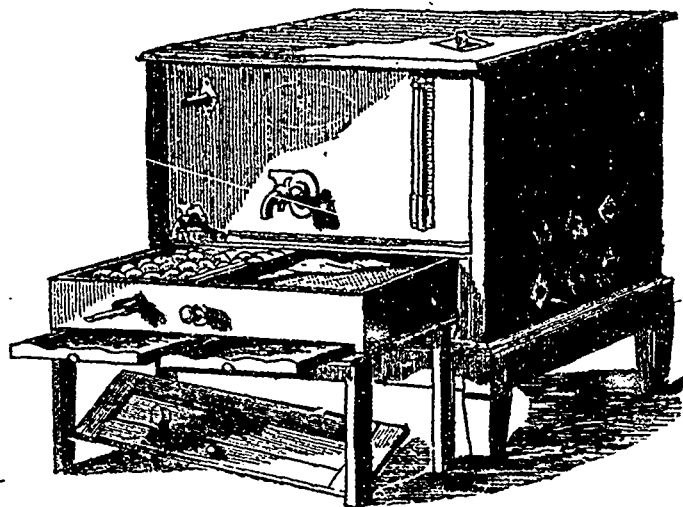
wheat tailings or screenings, and for the third meal granulated rye, for the fourth Kansas millet broken. This might be slightly heated in a steamer. With the second and fifth meal I would add chopped hay steamed, and roots of some kind yielding a fair amount of sugar, say from 4 to 7 per cent. Finely cut ensilage could also be added. The fifth meal might be rye or barley screenings run through the granulator, and the last meal of granulated corn. The finer parts of the meal made in the process of granulation would be used in the warmed mixtures. The fourth meal might be treated with pulped roots, so as to set up a slight ferment to soften the food. Except the addition of sand or finely broken mortar, I would treat chicks in the same way as calves and lambs.

If these chicks are intended for market they will be managed on four meals a day after one month old, and on less as they grow older, till they reach their tenth or twelfth week. During the last three weeks, I think the diet should consist of a morning meal of wheat and corn screenings, ground together and mixed with skim milk and slightly seasoned; at mid-day buckwheat, or Kansas millet, slightly steamed, but fed cold and mixed with pulped roots; and a liberal feeding of hay, clover and ensilage always, cut fine enough

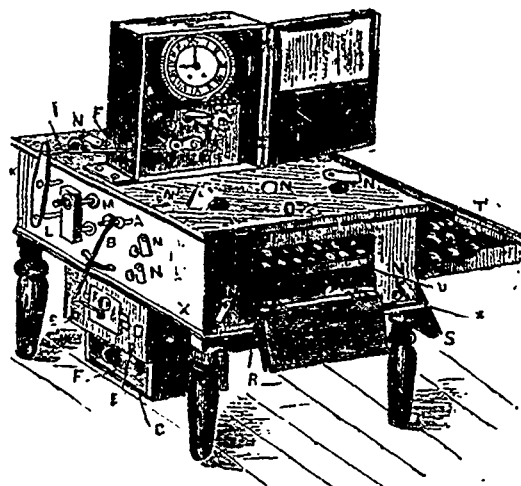
speed and simply flattening the oat, as is done with so-called cracked wheat for the breakfast table. The integument being broken, the birds can take out a much larger amount of nutriment than in swallowing the unbroken husk.

Now, as to what breed will produce the best results: I have no particular breed to recommend, but think the choice of one must depend mainly on the circumstances of the poultryman. The best general purpose bird is, no doubt, the Plymouth Rock, of which Americans are so justly proud. Langshans as heavy birds are worth attention, and will command it as the years roll on. If chickens be the main consideration, and plenty of them, and very early maturity, I should recommend a first cross with pure birds, say the Brahma (light) hen and White Dorking cock, or the Houdan. It seems to me that the Langshan hen and the Houdan cock would make a capital cross both for chickens and eggs. Such a cross would give as early maturity, of great weight and fine delicacy of flavor. I do not wish it to be thought that I undervalue other breeds which are useful in many respects, but I suggest these as most likely to fulfill the expectations of those who keep poultry for great profit.

In the matter of buildings and area of land, each man



CHRISTY'S INCUBATOR.



EUREKA INCUBATOR.

to be picked up like grass. The last ten days the birds should be confined in closed quarters, as we confine beves intended for the Christmas market. During the early weeks of chicken growth the trained eye of the poulterer will enable him to make some selection for the perpetuation of his stock, and for egg production as early as possible. As in every other kind of stock, the principle of natural selection should be rigorously applied, and the best only be allowed to survive. If this practice be rigidly enforced pullets will mature early, and eggs will be possible at five to six months old. Whatever will give early maturity and great weight with a fair quality of chicken meat two to three months old, will be the bird for the egg producer. For eggs I should use both linseed and cotton-seed meals alternately, so as to vary the flavor of the food; then use wheat screenings and corn last thing at night. The corn should be passed through a mill, so as to break each grain into about three to four pieces, rather than feed it whole. In England we call this process "kibbling," a method much used for beans and corn intended for horse feed. In using oats for poultry the best form has always seemed to be the crushed condition. This is accomplished by passing the grain through a pair of rollers running at equal

must be guided largely by the extent of his operations and the kind of trade he is likely to pursue. For those who have limited areas, and this applies to market gardeners, the grass supply should not be less than ten square yards per bird. Unlimited range is not desirable, and my preference is for at least 300 birds per acre of grass; and 400 of the light birds would not be too many. I have heard of an old couple who managed to keep 1,000 on two acres of land, the whole of which was under corn and roots. To keep these properly involved a great amount of labor. Except where land is very valuable, it is not necessary to pack on so many; and I doubt whether it could be done by any one who had not a strong interest in the concern. Where there is at least one acre of grass for 400 head of poultry and ten acres of cereals—two of wheat, two of oats, two of buckwheat, two of barley and two of corn—to this area must be added one for roots; and on this might be grown thirty tons of different kinds of sugar beets, turnips, Swedes, and the golden tankard mangol. This would supply two ounces per head per day for four or five months, and leave a supply for the stables. One acre of mixed clover, under proper management, should yield 5,000 pounds of fodder, which would provide 1½ ounces per head