

mark, fairly well. At times there was a slight fall of two or three degrees in temperature, when hot water was put into the incubator and the proper figure of 102 reached again. The temperature of the room in which the incubator was kept was not regular. The maker claims a regular temperature of 60 degrees for the proper working of the machine. An even temperature of the figure named is very hard to keep in an ordinarily constructed poultry house, which is always subject to more or less fluctuations of temperature. With artificial heat, except in the shape of hot water pipes, it is very hard to keep a regular temperature in a large poultry building.

DISEASES OF POULTRY.

The past year has been marked by the absence of the complaints of previous years, as to diseases of a fatal nature, among poultry in different parts of the country. Several cases of roup were reported and remedies asked for. In one case, the ailment which was described as diarrhoea, was traced to overfeeding. And overfeeding with too little exercise, particularly when the laying stock are in winter quarters, are causes of many of the ailments reported from time to time.

SOME NOTES ON FEEDING POULTRY.

HERE can be no doubt that chickens thrive better on cooked than on raw food; hence the value of prepared biscuit meals. The reason for this is not difficult to determine. Meals when cooked are more easily digested, and the various elements contained therein are more rapidly assimilated by the stomach. It is identically the same with human beings. I do not mean to say that we could not digest grain if it were eaten in a raw state; but this would need much greater exertion on the part of our digestive organs, and the result would be harder muscle, which is unnecessary to many at least. So is it with fowls and chickens especially. Were they at liberty, and kept under conditions where they would obtain a much greater amount of exercise, and compelled to find their own food, this strength of muscle would be essential to them. But as the chief portion of what food they consume during the whole term of their natural life will be artificially supplied, it would be a waste of material to produce muscle that can never be required. At the same time we must not carry this practice to an extreme; otherwise the muscles will be unduly flabby, and fail to perform properly their various functions. While, therefore, we may make soft, i.e., cooked food the basis, a certain proportion of hard grain for chickens is beneficial to maintain the frame and organs in proper

condition. These remarks do not apply to soft vegetables, roots, etc., which contain a large amount of moisture, and are soft, as they contain forms of nutriment which are lost to a considerable extent if cooked.

WHEAT—Probably more wheat has been fed to poultry during the last three or four years than was ever known before. At one time many people thought it almost a sin to give wheat to fowls, and there is a certain amount of this prejudice still existent, not only in regard to giving this grain to fowls, but to other kinds of stock. When, however, wheat fell down in value, so that it realized less, weight for weight, than Indian corn, it began to dawn upon the minds of growers that it was better to turn it into money in flesh than sell it at a ruinous price, or, as one farmer put it, he intended in future that his wheat should "walk to market." I have known people sell wheat and buy Indian corn for feeding stock, although taking the differences in weight per bushel, the latter was dearer. But this cannot continue, and so long as wheat is under 30s. per quarter (504 lbs.) it is one of the cheapest foods for poultry, containing as it does those elements which are essential to the formation of eggs and flesh. By reason of its pasty nature, however, wheat meal, or ground wheat, is unsuitable by itself for giving as soft food. It is too pasty or glutinous, and cannot be made into the crumbly mass which is the best form for feeding to hens. This can be to some extent obviated if it is coarsely ground, and mixed with about equal bulk of coarse bran or barley meal. But the form to be preferred is when given whole or simply crushed, that is, rolled, when it is equally suitable for fowls, young and old. Of course if any one will take the trouble to make the wheat meal into dough, roll it into paste about an inch thick, cut it into squares and bake hard, nothing can excell it as poultry food. These biscuits should be broken up and soaked in warm water, just as we would the ordinary biscuit meal of commerce. When wheat is to be used for poultry, there is no need to sift it, but the small grains, "tail wheat" as we call it here, will be just as good for the purpose as are the finer samples. Even if the latter are sold, the former can be utilized in the manner described.

INDIAN CORN—The use of maize increased in this country enormously during the time when wheat and other cereals were very high in price. With wheat at 40s. a quarter, and maize little more than half as much, it is scarcely to be wondered at if stock feeders chose the cheaper. I do not think it ever was as cheap as it seemed, that is, taking results into consideration, but upon that point it is useless to enter in these days when maize is, if anything the dear-