

den they will exterminate all wild pests. Young ducks are preferable of the two for this purpose.

There are poultry farmers who have regular contracts for supplying large houses in the city markets with fresh eggs in large quantities during the winter months, at prices which are always a good margin above the general supply to be met with.

Fowls that are kept on full feed with frequent changes of diet, will pass over the annual moult with little difficulty, and remain in flesh and health. Fine birds can only be obtained at the expense of healthful and nutritious food.

Leg weakness may be prevented or cured by giving in the food a teaspoonful of cayenne pepper and one of sulphate of iron (copperas) for every dozen fowls, once in two weeks, and continued until cured. The cause of this trouble is mostly too rapid growth.

One remedy for gapes is the following:—Take two hairs plucked from a horse's tail, put them straight together and draw a knot in the top, then cut off the points near the knot, introduce this into the windpipe—not the throat—and put it down to the end, say 3 inches; then twist the hairs between the thumb and forefinger and draw it out. There is no danger with this method and less uncertainty than with others.

The past season demonstrated that chicks raised in brooders grow faster, weigh more, and sell at a higher price, up to the age of three months, than do chicks raised with hens for the same period. At first, one would naturally be surprised at such a claim; but,

when we compare the advantages and disadvantages of the two methods, the chick in the brooder has all the chances in his favor. In the first place, he is never allowed to feel the effects of dampness. He knows nothing about being dragged through wet grass, or seeking a dry place during a rain-storm. Lice are enemies to which he is unaccustomed, and if he feels cold or chilly his stove is within a few inches of his scratching ground, while he can enjoy the heat of the sun without being exposed to the sweeping winds that blow from every direction. The water he drinks is of the proper temperature, and not covered with ice, and the food he receives is not only varied but given in a careful manner and in a clean condition. He has nothing to do for a living, is under the watchful eye of his master, and grows fast because he receives plenty of food, drink, and *heat*, which are the prime factors to success.

But the chick with the hen, if in winter, comes at a season when his dam cannot properly provide for his wants. If he leaves the warm covering, he becomes chilled. If his stronger brethren persist in roaming off, the hen follows them, in her anxiety, and drags the unfortunate ones with her. She tires them out, does not nestle when they desire, and, if her brood is large, she cannot cover them properly, especially when they are larger, and the consequence is that, though the chicks with the hen may grow rapidly the first few weeks, the time comes when a portion of the number perishes, or becomes stunted in growth, for want of sufficient warmth. There may be exceptions; for, if a brood of chicks with a hen, receive the proper care, they will thrive as well as those in brooders, but are more subject to lice, which never attack chicks unless they are in the neighborhood of adult fowls. But, where hundreds of chicks are raised, a much larger number can be made to attain a

marketable size, in the shortest time, in brooders than under hens.—*P. H. Jacobs.*

Be very careful about putting artificial heat in the poultry house. We have tried it and found it a "snare and a delusion." It will produce roup and a train of other evils. There is no need of fire if proper conditions are furnished. We construct our houses so that when the temperature outside is zero, or even lower, the temperature inside seldom falls below freezing point. In the North-West and in Canada, where extreme cold is experienced, a "dug out" is a proper house for the winter. Set it front to the South, and make a wind-break of some kind that the birds may get out in the sunshine on clear days. You might be surprised to see how fowls thrive in such quarters. Such arrangement will be better than having fire.

Those who wish to keep something ornamental as well as useful, should keep the Polish and Hamburgs. There are quite a number to select from. Of the Polish, we have the white-crested black, bearded golden, bearded white, bearded silver, buff laced, golden, silver and white. Of the Hamburgs, we have the golden spangled, golden penciled, silver spangled, silver penciled white and black. They are all rare setters, and lay fair sized eggs of white color.

It is a mistake to suppose that eggs for hatching should not be handled. On the contrary, proper and careful handling is just what they need, both before and during incubation. If the eggs are not at once put under the hen or in the incubator they should be turned every day. When placed in the incubator we find it best to turn them