

Among the contributory causes to the loss of physical vigour are the following: The greatest and most potent cause is soil-contamination, congestion and crowding of breeding stock upon limited areas, bringing with it lack of exercise, improper housing and feeding; in-and-in breeding, without selecting the most vigorous birds; the too-common use of pullets, instead of matured fowls, for breeding stock; forced egg yield by heavy feeding during the fall and winter; carelessness in keeping eggs for incubation; hatchling from eggs selected indiscriminately; faulty methods of incubation; the use of poor incubators and brooders; too rapid forcing on rich, easily assimilated food, with lack of exercise; general violation of the principles of sanitation and brooding, housing and range; failure to select breeding stock of recognized superior physical vigour; the use of birds that have been hatched too early—that were stunted in growth or hatched too late, and were not grown under proper conditions, and do not reach full size when breeding season commences. Now that artificial lighting is becoming more and more general, it should be noted that stock kept under such conditions should not be used for breeding purposes unless through unavoidable circumstances.

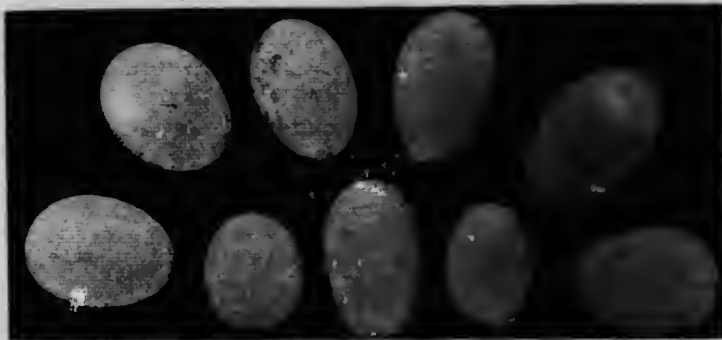
It is impossible to pass judgment on the merits of any particular variety or individuals of the breed without knowing how they have been bred and handled, but there are some physical characteristics that will aid any one in selecting breeders that are very apt to turn out to be of strong vitality and vigour, and only such should be placed in the breeding-yards.

HOUSING OF BREEDING STOCK.

The necessity of fresh air is being realized to a greater extent than ever before. Poultry-breeders are finding that to have the best success with their fowls they must be kept under as natural conditions as possible. Fresh air is of great value, especially at night. Besides keeping the birds in fresh-air houses, they should, if possible, be given free range, or at least 75 square feet per bird of yard-room.

EGGS USED FOR INCUBATION.

Together with the selection of the breeders, a careful selection should be made of the eggs laid by the breeding stock. A poor egg, even from one of the best breeders, should not be used. A poorly shelled, unevenly shaped egg, or one otherwise lacking in qualities which make up a good egg, should be discarded. The normal egg is one of average size, weighing a little above 2 oz., with a smooth



Eggs unsuitable for hatching purposes. Rough-shelled, deformed, undersized, double-yoked, mottled shelled, elongated, or globular eggs will give very poor results, being mostly infertile.

surface and an even shape, being slightly larger at one end than the other. An extra large egg or a small one should be rejected; the large ones are seldom fertile, and the small ones, if fertile, produce very small chicks. There is nearly always a