purpose yard, I would recommend three breeds from one of which to obtain one or more cocks. To name these in order of my own preference is not to disparage others, or even to assert their superiority to one another, for each is perhaps best under certain circumstances.

PLYMOUTH ROCKS —I have enjoyed this fine modern and thoroughly American breed very much. It has been fashionable, and is still so, but that does not hurt it. In fact, the only disadvantage is that it makes very fine birds rather high priced. The plumage is that of the old Dominique. The skin is yellow, the legs are clean, the body well shaped, and the fowl heavy. The hens are early layers of large brownish eggs, and the chicks are hardy, bearing the cold well, growing rapidly, showing more fat as broilers than most, and being solid and weighty for their size and age. The pullets lay early enough, and make good winter layers.(1) It is a disadvantage that when crossed upon barn-door fowls of no particular breed, and often also when crossed with established breeds, we get a good many *black* chickens, on account of a reversion to the Java—one of the original breeds used in the formation of the one we are considering.

COLORED DORKINGS—Have the characteristics of other Dorkings; but as little or no attention has been paid to plumage, and much to breeding for size, form, the fifth toe, and especially to its useful points, the useful preponderates decidedly over the ornamental in the composition of the breed. They are fine large birds with pale skins, white legs of ideal form for the table, good layers of large white eggs, and, in warm houses, winter layers. The pullets mature and begin to lay early, and both sexes, if kept apart, fatten quickly. The fat, like the skin, is pale. The chicks are not especially hardy, but with good care grow very fast, and as soon as they have lost the first feathers and gained their mature plumage, they are as hardy as any fowls, so far as my experience goes. The Dorking has been bred in England for centuries; hence its characteristics are prepotent, and the cock marks his chickens after his breed, giving them almost uniformly white skins, the fifth toe, and wellshaped bodies.

I prefer colored Dorkings to gray, silver-grays, cockoos or whites, because they are usually larger and hardier. The disadvantages of the breed are that there is a certain delicacy of constitution which has to be guarded against in our climate, and that the hens usually lay small clutches of eggs before becoming broody. Both these disadvantageous traits nearly or quite disappear when the blood is mingled with that of hardy common fowls.

GAMES.—This class of fowls are of many breeds,which vary greatly in size. It is important to select for our purpose large cocks, and it makes little difference what the plumage is. White games with yellow legs make a good cross with anything. Though the whites are perhaps the least gamey of the games, yet for cross breeding there are no better. In size, the games are much less than Dorkings or Plymouth Rock fowls, yet they have many advantages. They impart to their get their own compact, full-breasted, close knit bodies, their hardiness and great excellence as table fowls. They and their grade's blood are good winter layers and admirable as sitters and mothers if needed for these purposes. The best use of the game is to cross upon the Dorking, but in case games can be obtained and Dorkings cannot,do not hesitate to use game cocks with any large well-formed common or crossbred hens, and the results will be highly satisfactory.

FRENCH FOWLS.—Next to those I would place the Houdans, or in fact any of the French breeds. They are all nonsitters, but this peculiarity rarely shows strongly in the first cross; it is really of little or no disadvantage if it does. In fact, it is often an advantage, but it is hardly consistent with our idea of breeding strictly general-purpose fowls. Their form is excellent, they are as hardy as Dorkings, their eggs are large and white. The broilers are ready just about as early as any, and the chickens fatten in autumn very easily and well.

After the stock is secured, they should be kept confined to their roosts and surroundings until wanted, then given free range, and a chance to pick up grasshoppers and other autumn insects, and well fed besides once or twice a day to keep them growing and get them in good feathers and in condition to begin laying as early as the first of November. The cocks that they are to be mated with should not run with them until about that time. Meanwhile, we have time to get the chicken-houses in order, and everything prepared for winter.

M. C. WELD.

(1) Mr Cartwright's pullets, he tells me, hatched on the 12th April began to lay July 25th!!!

The Latest Knowledge about Gapes.

The gape worm may be termed the *bête noire* of the poultry-keeper—his greatest enemy—whether he be farmer or fancier. It is true there are some who declare that it is unknown in their poultry-yards—that they have never been troubled with it at all. These are apt to lay it down, as I saw a correspondent did in a recent number of the COUNTRY GENTLEMAN, that the cause is want of cleanliness, or neglect in some way. But I can vouch that that is not so. I have been in yards where everything was first-rate—where the cleanliness was almost painfully complete— where no fault in the way of neglect could be found—and yet the gapes were there; and on the other hand, I have known places where every condition seemed favorable to the development of such a disease, and there it was absent—this not in isolated cases, but in many. No, we must look elsewhere for the cause.

Observations lead me to the belief that gapes are more than usually troublesome during a wet spring or summer following a mild winter. This would tend to show that the eggs from which the worm (that is in itself the disease) emerges, is communicated from the ground, from the food eaten, or the water drunk , in the first instance, but it is more than possible that the insects themselves may pass from one fowl to another. All this we can accept as a settled fact, and also any description of the way in which the parasitic worms attach themselves to the throats of the birds, and cause the peculiar gaping of the mouth which gives the name to the disease.

Many remedies have been suggested, and my object now is to communicate some of the later ones—thus to give a variety of methods, so that in case of the failure of one, another will be at hand ready to be tried. It is a mistake always to pin the faith to one remedy, for the varying conditions found in fowls compel a different treatment. The old plan of dislodging the worms with a feather is well known, and need not be described again. But I may mention that in this country some have found the use of an ointment, first suggested by Mr. Lewis Wright, I believe, most valuable. This is made of mercurial ointment, two parts; pure lard, two parts; flour of sulphur, one part; crude petroleum, one part—and when mixed together is applied to the heads of the chicks as soon as they are dry after hatching. Many have testified that they have never found this to fail as a preventive, and if the success is to be attributed to the ointment, it would seem as if the insects are driven off by its presence, for the application to the heads merely, would not kill the eggs.

Some time ago Lord Walsingham offered, through the Entomological Society of London, a prize for the best life-history of the gapes disease, and this has been won by the eminent French scientist, M. Pierre Megnin, whose essay has been published by the noble donor. His offer was in the in-