

expended in their care. This would give a profit of about 100 per cent., even allowing a large price for the original stock.

We have seen many statements of the cost of keeping hens and they vary from 50 cents to \$1 per head, which may be looked upon as the extremes, and 75 cents per head may be considered not far from the real facts. At that rate for fifty hens, at an average of 25 cents per dozen for eggs, it would require only three dozen eggs per hen to pay the expense, which would be a small number. All above that number and all broilers sold or consumed would go to make up the profit.

WM. H. YEOMANS.

Columbia, Conn.

Report of the Poultry Manager of the Government Experimental Farm, Ottawa.

WET AND COLD WEATHER.

THE fall was marked by continuous rain, the month of October was unusually cold and both combined proved fatal to many of the tender varieties, which, pending the completion of the new house, were rather crowded in limited house room. Next to the Indian Games and Red Caps, the Black-Breasted Red Game, Bearded Golden Poland, and Dorking cockerels proved the most susceptible to the fall weather.

DIRIGOS.

Among the varieties enumerated the Dirigos are yet new to Canada breeders. This comparative stranger, which owes its origin to the enterprise of Mr. Summer Beale, New Hampshire, U. S., is the result of crossing a Canada Game Cock and White Plymouth Rock pullet (a sport) the progeny again crossed with a Light Brahma cock. The Dirigos make a large fowl, are hardy and excellent layers. In the new American Standard of Excellence they are classed as the Dirigo-Strain of White Plymouth Rocks.

WILD GESE.

The Wild Geese which occupy No. 5 pen have exhibited their characteristic hardiness in all seasons. They have been lively and have grown well in confinement. It remains to be seen whether they will breed in captivity mated to one of their own species, and with common geese, or others.

THE BEGINNING OF WINTER LAYING.

On the 12th of December the first egg in the new building was laid by a Wyandotte pullet hatched on the 29th May. The first hen to lay

was a Dirigo on the 16th of December. The Wyandotte pullet, which first laid on the 12th December, layed again on the 15th and was followed on the 16th by the first egg from the second Wyandotte pullet hatched on the same date as the first layer. Other pullets laid first eggs in the following order:—

Houdan, hatched 25th May, first egg 23rd Dec.
Silver P. Hamburg, hatched 25th May, first egg 24th December.

Black Minorca hatched June 5 1st egg 26th Dec
White Leghorn " " 7 " 30th Dec
Black Hamburg " May 25 " 2nd Jan
Andalusian " 18 " 4th "
Plymouth Rock " June 9 " 6th "
Buff-Cochin " May 18 " 16th "

THE SEXES.

THE journals have devoted no small space to the discussion of this subject; and in furnishing the *ultimatum* of many experienced and reliable breeders, that, though we have arrived at that state of perfection in mating where we can put together a certain pen of fowls and say they will produce a choice lot of pullets or extra fine cockerels of the breed in question, we cannot say with any degree of certainty what proportion the birds of the sex mated for will bear to the number actually reared from the pen. This is all any breeder has yet claimed to be able to accomplish, except one, who lays down certain rules which may be applicable in his flock and yet fail entirely in some equally as expert a breeder's pen, as all arbitrary rules must, for, as he admits himself, it depends largely on *knowing* your stock. What one should especially know of his stock to make this mating successful he does not venture to state. He says positively: "Those who know nothing of their stock can get more pullets than cockerels by using an adult cock with pullets, or *vice versa*—cockerel with hens. To produce nine-tenths cockerels (possibly all cockerels,) mate cockerel with pullets and have not over seven pullets in your breeding pen."

I like the approximate approach of this gentleman to the true principle, and regret he did not go on to give some logical explanation of his system, which, while it would doubtless tend largely to the object in view, need not necessarily so result without a knowledge of your birds, and the judicious use of that knowledge in picking the pen.

As to what is the principle that underlies all the work of nature in regard to sex, there has been and is still diverse opinions, even among men of mature wisdom. When that principle is