Thames, and to the old camp at Ambleside or Castle Hill near Keswick."

Both the colored and the Silver Gray Dorkings have undoubtedly sprung from the old grey variety, the colored being brought to their present form by a cross made by Mr. John Douglas, while the Silver Greys have been produced by careful selection of the light-colored and soundest silver-plumaged birds. That being so, the claim that the Silver Greys are the purer Dorking cannot be denied. It is certainly a very handsome fowl, having that square box shape which is so characteristic of the Dorking race, and in good specimens the plumage is rich in color. It is thought that as a rule the Silver Grey does not attain the same size as the colored, but I have often seen birds of one variety just as large as the other, and there can be no doubt as to the capacity for fattening of these fowls. It is often said that the Dorking is not a hardy fowl. This is, however, misleading. The Dorking cannot certainly be kept on any soil, nor in any place, and damp, cold ground(1) is fatal to it. But the fact that it is so largely bred in the north of Scotland, away in the extreme north of Ireland among the Cumberland hills, and in numberless places which are cold and exposed, shows that it is a hardy fowl in all respects save one—that it is unable to withstand damp, clay soils. No matter how cold the place may be, so long as it is dry and free from clay; it will do well, at least that is the experience in this country. It is a fair layer, as good as are any of the Dorking family, makes a capital sitter and an attentive "biddy," and, of course, is one of the finest fowls that can be found on the table. This is partially due to the readiness with which it will fatten, for without this quality it would be impossible to ripen the flesh as is now done. The flesh is exquisitely white, and very delicate in its texture. In fact, it is very difficult to imagine a finer fowl on the table than the Dorking, and it is equal to nearly all the best French varieties, though I am inclined to think that the La Bresse and La Flesche sometimes surpass it, though they would never do so if the same system of fattening was adopted here as in the districts of France where these two varieties of fowl are so largely bred. Nowadays there are vast multitudes of fowls sold in London as Surrey or Sussex, which have simply been fattened in those counties, but were never bred there and have not a trace of Dorking blood in their vein. But the system of fattening is so excellent that they make fair birds, though of course, not to be compared with the splendid fat Dorkings which the best poulterers supply.

The advice which must be tendered to those who think of keeping Dorkings is that they should first consider whether the place they have is suitable, for unless this the case, they are better left alone. Then second, the demands of the market or the needs of the poultry-keeper must be regarded. If the demand is for table fowls nothing could be better, provided that anything like a fair price can be obtained for them, as it would not pay to breed Dorkings to sell at three shillings a couple. If eggs are chiefly in demand, Dorkings would be of no use, as they are only moderate layers. The egg is large in size, and very fine in flavor, the shell being pure white. As a proof of the value of this variety of the Dorking it may be mentioned that it is growing rapidly in favor in France, where it is highly esteemed for its economic qualities. The other varieties of the Dorking are scarcely to be met with across the English channel.

The following are the points of color in Silver-Grey Dorkings:

COCK.—Head, silvery white; hackle pure silvery white, as free from stripes as possible; comb, face, carlobes and wattles, bright coral red; beak, horn or white; eye, orange; breast, thighs and underparts, black; Back, shoulder coverts, saddle and wing bow, pure silvery white; coverts, greenish black; primaries black, edged with white. secondaries, part of outer web forming "wing bay," white; remainder of feathers forming wing butt, black; tail greenish, glossy black; legs, feet and toe nails, white.

HEN.—Eye, beak, comb, face, wattles, legs, feet and toe nails, same as in the cock; head, silvery white, with slight grey marking; hackle, silvery white, clearly striped with black; breast, rich robin red or salmon red, shading off to grey on lower parts; back, shoulder coverts, saddle, wing bow and wing coverts, bright silvery grey, with minute pencilling of darker grey on each feather; the shafts of the feathers white; primaries, grey or black; secondaries, grey; tail, grey of a darker shade than body; quill feathers black. (1)

H—.England. STEPHEN BEALE

(1) The Weald is damp and cold enough in all conscience!
A. R. J. F.

NEW-YORK FARMERS' INSTITUTES.

AT LYONS—NITROGEN ON THE FARM.

Prof. G. C. CALDWELL of Cornell University spoke on this important topic, to the following effect:

The nitrogen question will always be important. Nitrogen is the constituent of the food of plants that is most easily lost by careless handling of manure, and costs most to replace when lost. The air is full of it, and it forms a necessary constituent of every animal body, in the albuminoids of which that body is so largely composed. The animal cannot make the smallest particle of an albuminoid out of its elements; the whole animal kingdom must go to the vegetable kingdom for these albuminoids. Most careful and trustworthy investigations have shown that agricultural plants cannot use the free, uncombined nitrogen of the air for the nitrogen of the albuminoids that they make; they require for their satisfactory growth, nitrogen in some form of chemical combination, such as nitrate of soda or sulphate of ammonia, or perhaps animal waste, all of which contain nitrogen in chemical combination.

Great quantities of nitrogen are carried off our farms every year in the produce sold, nearly all going to waste in vaults or sewers of towns and cities. It is estimated that the river Rhine, in Europe, carries enough nitrogen to the sea every 24 hours, in the form of chemical compounds, to make 220 tons of saltpetre, 400 lbs. of which would be a liberal dressing per acre as a fertilizer; and other rivers carry like quantities, in proportion to their size. Is nature doing anything to repair this loss, or must we buy back all this nitrogen in expensive nitrate of soda, at a cost of $50 or $60 a ton?

We find in every acre of fair soil at least 3,000 lbs. of nitrogen, and in some good soils as much as 30,000 or 35,000 lbs. Crops require less than a hundred pounds each year per acre; but of this large quantity which nature supplies for us, nearly all is what may be called tough nitrogen food—very hard to assimilate. Some crops can thrive on this food, but others cannot; clover, lucern and lupine are crops of the first kind, and wheat, rye and barley are of the second. This is not because clover does not need much nitrogen; it needs more than wheat does. But besides getting hold of enough of this tough nitrogen food for a good crop of itself, if the clover sod is plowed in at the right time it leaves so much tender nitrogen food in the soil, such as the wheat crop requires, that to grow clover is a good preparation for wheat, even if two good crops of hay are carried to the barn to feed stock and make manure for some other field. The clover is thus a feeder of the wheat crop.

Given, then, a good supply of even this tough nitrogen food

(1) I prefer the *coloured* Dorking as being the hardier bird.
A. R. J. F.