

This merits the attention both of the farmer and the government. Observe, what an important industry may arise from the use of lime. It would give employment to hundreds of persons, while the public wealth would be increased. I know of no industry that demands less capital, less expenditure in its conduct, less special knowledge. Our province is particularly suited to the development of it. Limestone of good quality occurs almost everywhere, and this diminishes the cost of freight. If its use were to become general, it could be produced, as in Europe, on a large scale, the mode of burning it perfected, and the cost greatly reduced. The use of it would, then, greatly repay the expense of making it, and our agriculture would by its means make another forward step in the march of progress.

I shall be asked, perhaps, if our land is as susceptible of improvement by lime as the soils of England and Belgium; I do not hesitate to answer in the affirmative that it is, and more so. In fact, great part of our soils is derived from the primitive rocks, granite and schistose, which are generally poor in lime. (1)

For the destruction of acidity in marshy places, lime is highly useful, provided they are sufficiently drained. In such soil it may be used in large quantities. (2) In ordinary soils 20 to 40 bushels of quick lime are enough for an acre if applied every 6 or 8 years. The stronger and the wetter the land, the larger should be the dose. I do not give these figures as an absolute rule; I may be permitted to say that in England and Belgium they are much more liberal.

Several ways of applying lime are practised. The simplest is to spread the lime in powder on the ploughed land by means of a broadcast machine and harrow it well into the land. Common machine will not spread fat lime. The general rule in Flanders is to drop the stone-lime in little heaps on the ploughed land, to cover them with mould until the lime is slaked, and then to spread and harrow it in. (Just as in England and Scotland. Ed.) Sometimes, composts are made of it with ditch cleanings and vegetable refuse. All these methods are good.

I met the other day, a Scotch farmer from Portneuf, who had used the sowing-machine to spread his lime for many years, and found it answer so well that many of his neighbours have imitated him.

Heather, fern or brakes, marsh-plants and specially all acid plants, like wild sorrel, indicate a soil poor in lime. And lime destroys them. It will also get rid of slugs and other injurious little beasts.

Some fertilisers contain a notable proportion of lime, so that their use is a sort of indirect liming. Such are:

Unleached wood ashes, which, per cent, contain, on an average, 30 of lime, 10 of potash, and 3.5 of phosphoric acid;

Leached ashes 20 of lime, 1.5 of potash and 1.5 of phosphoric acid,

Phosphates 20 to 50 of lime, and very variable quantities of phosphoric acid. Lastly, plaster and marl.

One great reason in favour of the

grain, &c., up to the works at Marley Tye, and loaded back with lime. The turnpike-keepers demanded a second toll as the load was a fresh one, the Welsh being celtic, got hot over it, and two or three toll-takers were killed. This was in 1816 or 17. Ed.

(1) All granitic soils demand lime with a loud voice. Hence, its use is universal in Cornwall. Ed.

(2) In Scotland, sometimes as many as 400 bushels are applied, at the beginning of a 19 years' lease. Ed.

use of lime from time to time in soils that contain but little of it is its instant lixiviation by water. The analysis of well water, as well as that of brooks and streams, shows that the lime held in solution, as bi-carbonate, exceeds in quantity all the other salts together, and this lime is derived from the soil through which the water flows.

Carbonate of lime among arable soil is insoluble in pure water, but is not so if the water contains more or less carbonic acid; in this case, the carbonate of lime forms a fresh combination with the carbonic acid, and is converted into bi-carbonate of lime, a very soluble salt which dissolves in water and makes it hard. Every one knows that hard water encrusts kettles, makes soap lather badly, and spoils all vegetables that are cooked in it (and though it makes bad porter, makes the best pale ales. Ed.)

An addition of quick lime softens water, and decomposes the bi-carbonate by restoring it to the original state of carbonate, when it forms a precipitate and settles.

Lime is liable to return to its primitive state of carbonate, as we observe in mortar, which hardens by absorbing the carbonic acid of the air with which it combines.

Lime-water becomes turbid and milky when breathed into through a tube, the carbonic acid exhaled from the lungs combines with the lime held in solution by the water, and converts it into carbonate of lime.

(From the French.) B. LIPPENS.

The Poultry-Yard.

The Dorking Fowl.

WHAT IT HAS BEEN AND WHAT IT NOW IS.

Before proceeding to speak of the different colors of the Dorking fowl, we must deal with the question of color, for this will have important reference thereto. It has already been shown that those regarded as purest in strain were white. In the days of Columella, white feathered fowls were known, for he states: "Let the white ones be avoided, for they are generally both tender and less vivacious, and also are not so prolific." The idea here

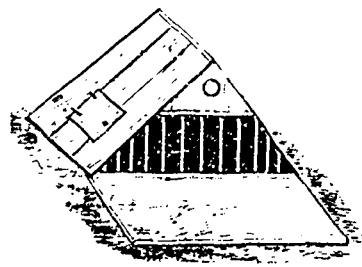


Fig. 1.

enunciated as to the greater delicacy of white fowls has been held until recent years, and was supported by Darwin. But in face of such breeds as the White Leghorn, and the White Wyandotte, it cannot be accepted any longer. All the later writers who mention the Dorking speak of it as white, but refer to others as offshoots.

The account of different colors known 40 years ago, as given in the revised Moulbray (1854) has already been quoted, and is identical with that in Wingfield and Johnson's work published a year before. In the Poultry Yard (1850) are the following interesting particulars: "The Dorking fowl is a short-legged, plump, round-bodied fowl, remarkable for having five toes—that is, a supernumerary hind toe. We have indeed seen some with one or two more supplemental toes, in a rudimentary condition, and which ap-

peared anything but ornamental. The pure Dorking fowl is of good size, and of a white color, but such are now seldom seen. During a recent visit of some weeks to Dorking, though we visited the market regularly, and explored the country round, on one or two occasions only did we meet with pure white birds. In all however, more or less white prevailed; but the cloudings and markings of the plumage were unlimited. Many were, as we observed, marked with bands or bars of ashy-grey, running into each other at their paler margins. Some had the hackles of the neck white, with a tinge of yellow, and the body of a darker or brownish-red color, intermixed irregularly with white; yet in all were the five claws present. Neither in form nor coloring is the Dorking breed attractive; it is too rounded on the body, and too low on the limbs to be graceful; but its flesh is in high repute, and vast numbers of these fowls are sent to the London market."

Evidently, breeding Dorkings was in an unsatisfactory condition forty years ago. Capt. Hornby, a very successful breeder and exhibitor, lamented his

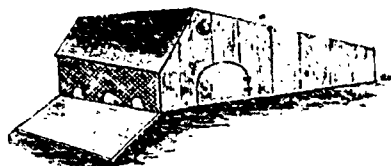


Fig. 2.

inability to get chickens true to the color of their parents, and stated that he had four spangled hens, but got scarcely any spangled chickens, and of these half were double-combed, though the parents were single-combed. This is emphasized by "Plastic," already referred to, who says (1) that in 1853 he wanted to recover the old brown-spangled sort, and paid Capt. Hornby four guineas for a sitting of eggs, from which he had "grey spangled, and at least two with four claws."

As throwing light from an impartial source as to the Dorking of forty years ago, I may be permitted to quote from a letter by M. A. B. Allen of New-York, (2) who says:

"I first visited England in 1841, and in looking over the poultry there this bird (the Dorking) struck me as being the Shorthorn of barn door fowls—that is, the best for general purposes—and I resolved to take some of them back to America with me. I accordingly selected two cocks and half a dozen pullets, and got them safely to my farm in the State of New-York. They were of brilliant variegated plumage, chiefly brown spangled, and partridge colors of the darker shades, and the cocks black-breasted. They had shortish white legs, five toes, and both single and double combs; the bodies were pleasant-shaped, long,

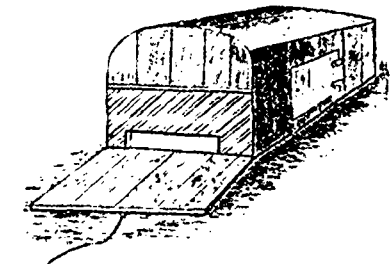


Fig. 3.

round, and full, with a deep breast, like a Shorthorn ox; the head was fine, well set on to a small, clean, graceful neck; they were thickly feathered, hardy and thrifty, excellent

(1) The Field, 1881.
(2) Live-Stock Journal, 1881.

layers, stony sitters and careful nurses. Well fattened, the hens weighed six to seven pounds each, the cocks nine to ten pounds; when caponised, they came up to twelve pounds. They were the best table fowls I ever ate. They had white skins and flesh, with little offal. (1)

"So far as I have been able to ascertain, I was the first importer of the Dorking fowl into America. Subsequently many other importations followed. Some of these were of larger

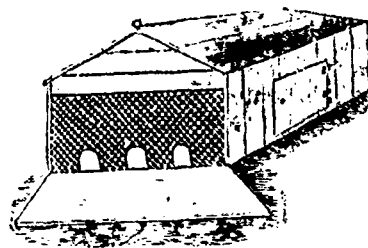


Fig. 4.

size than mine, but possessed the same characteristics. They varied in plumage from light or silver to dark grey, partridge colors to brown-spangled and almost black. Pure white Dorkings were also imported; but instead of being small, like Bantams (as suggested by a correspondent), they were nearly as large as the colored, but not quite so hardy."

From what we have now seen it may be taken as a fact, that by the middle of the present century the white Dorking, having been neglected by reason of its smaller size, was becoming scarce, and its place was being taken by others which bore more resemblance to the ordinary Sussex variety in which color was of no moment, and all colors to be met with. That there had been other crosses than this is undoubted. Malays, Spanish, and even Polish, with Cochins more recently, were all named as having been used for the purpose.

Let us see if we can trace back the

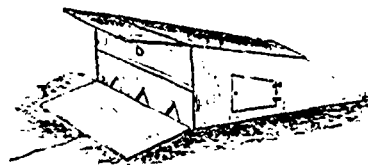


Fig. 5.

four breeds now known, namely, Whites, Colored, Silver-Greys and Cuckoos, to their original source,

WHITE DORKINGS.

This variety of the Dorking need not delay us very long, from the fact that we accept it as confirmed that it is the "Simon Pure" of the Dorking family, and we have no need to describe its descent. There are no means of telling when it was first known, but from Moulbray and others we know that in his day it was so recognised.

The writer just named says that "The white is probably not so pure as that of certain of the Dunghill fowls, nor is the color of the flesh, that inclining to yellow, or ivory shade" Here we may venture on a suggestion as to the reason why the white Dorking began to lose ground. In England and Europe generally, white fleshed fowls command the highest prices, and as breeding for table was then, as it is now, an important industry in Surrey and Sussex, it is more than likely that the other kinds which had whiter flesh were preferred. Mr John Bailey, as quoted in Wingfield and Johnson's Poultry Book, observes that, "though it may appear anomalous, it is not less

(1) A good description of the best table-fowl in existence. Ed.