

THE DROUGHT.

Water for Cattle.—Here we have from every part of the country one universal complaint of the scarcity of water. South-west, as far as the St. Clair river, north to Lake Huron, and east and west is this scarcity felt. Driving cattle miles to some stream or spring is part of the daily occupation of the farmer. Are you as badly off as other farmers?—R—

In my neighborhood they are as badly off as in any other place, but I do not feel the scarcity.—Farmers might have made preparations for such a want. They depend too much on surface water, collected in shallow ponds and in little creeks that in any season are uncertain. We know that in every year there falls rain sufficient to supply ourselves and our stock, and if we preserve it when it comes, to the time when it does not come, we will always be supplied. Every farm yard should have a good cistern, large enough to contain the water that falls on the houses and sheds, with cave troughs to conduct it to the cistern. Not only in a dry summer, but also in a hard winter will he find the great advantage of having at his hand a sufficient supply of water. For cattle in the stalls, when debarred from the pastures by the winter, there should always be water to give them what they need. It is as necessary for them to have water to drink as food to eat, and this year has taught us the value of it in summer.

"It costs time and money."
It does; but not near as much as it is worth to any farmer. Dig in the most convenient place a hole of the required dimensions, line it with brick, cemented with good mortar, and put on it a well-fitting cover made of cheap, rough lumber, and you have a good cistern. Why should any farmer be without such a valuable addition to the conveniences of his farm yard, when it can be had at so little cost? In a time of drought, or of winter storms and hard frost, and in the case of an accidental fire, we cannot sufficiently value a good supply of water.

Poultry Yard.

Eggs in Winter.

If the true value of eggs were better understood in this country, we are satisfied more attention would be paid to their production. The French and Germans far excel us in their care of poultry. A Frenchman makes his breakfast of a couple of boiled eggs, a roll, and a cup of coffee, and a better breakfast a king ought not to have. The French farmers, after supplying the tremendous home consumption, export to England from sixty to seventy millions annually, and the English pay France some \$50,000 yearly for this one product. Belgium also has a handsome income from England for eggs. All over Europe and Asia eggs are much more a leading article of food than with us. At our best hotels, of course they are to be found on the table at all seasons of the year; but in private families, and especially in farmer's families, from November to March, most of the eggs consumed are in the form of cake and puddings, and the housewife is grateful if she can get a supply for these purposes. The price in winter is always double and sometimes treble what it is in spring, and this should stimulate the farmers to meet the demand and secure the profits.

It is not merely for market and profit that we desire to see farmers and others giving more attention to their poultry. As an article of common food they are more nutritious and economical than is generally supposed. Even at fifty cents per dozen, they are not a very expensive food, for two eggs, with a slice of toast and a cup of coffee, will furnish a good meal, and the whole expense, cooking included, will not exceed two dimes. A soft-boiled egg is easily digested and if eaten in this form, rather than in cakes and puddings, there would be less complaint of dyspepsia. Another recommendation of boiling eggs, that they are always clean. If we happen to be at a hotel where there is "too much smell of the pot," or when from any cause we have suspicion that the cooking is not the best, we call for boiled eggs in the shell. We are thus sure not only of clean food, but a clean dish from which to eat it, and can always enjoy a meal off a couple of eggs and a few crackers, even in the most uninviting place.

Eggs are a good substitute for meat, and pound for pound are more nutritious than beef. An average-sized egg weighs a thousand grains, and six large eggs weighs a pound. A dozen eggs may,

therefore, be considered a full equivalent to two pounds of beef, as a shell consisting of a about tenth part of the weight is less in proportion than the bone of beef. The per cent. of water in eggs and fresh beef is about the same, seventy-five per cent. in each. The white of an egg, weighing 600 grains, is mostly albumen, and has a close resemblance in its chemical properties to the fibrin of beef or gluten of grain, and so far as nutrition is concerned may be considered identical with these substances. The yolk, weighs 300 grains, is composed in its dry state of one-third albumen and two-thirds oil, and therefore comes nearer to meet as food, having fat mixed in with its albumen or fibrin.

It will be seen from a comparison of these analyses that the egg, as a whole, is much richer in fat than lean beef, and when compared with fat beef it is found to contain not only more fat, but more albumen, or muscle forming food. No animal food equals eggs, as far as fat is concerned, except pork and eels, and the oil of the yolk is so delicate a fat that stomachs which reject pork and fat beef, will digest egg readily.

Notwithstanding these facts, many a provider for the household will persist in buying meat at twenty-five cents per pound when a dozen of eggs could be bought for less money, and many a farmer sells eggs and buys meat under the impression that he cannot afford to eat the former. He thus cheats himself, and this is not the worst of it; he does a permanent injury to the health of his household, especially the feminine and younger portion of it, for whom eggs and milk are much more suitable as animal food, than tough meat. It may possibly never have occurred to some providers that eggs are animal food.

But some farmers may say:—"All this may be true; eggs are good food, but how are they to be obtained in winter? Hens do not incline to lay after the moulting season." True, hens do not produce eggs so abundantly in winter as in summer, but this is not the fault of their inclination. "The winter of their discontent may be made glorious summer," by a little painstaking. But before we give any suggestions as to the winter care of hens, we desire to say that eggs are not such perishable articles that in a time of plenty they cannot be laid up for a time of need. All that is necessary for this is to exclude the air from them, and this can be done much more easily than we can exclude the air from meat. The latter we have to put into cans, and seal these cans hermetically, but eggs are already sealed in their shells. A kind Providence has so ordered it that eggs, though composed largely of albumen, which has a great tendency to decomposition, have a covering which to a great degree excludes the air, but still is so porous that it admits enough to give vitality to the chick in the process of incubation. Now if the pores of the shell be filled with fat, or the shell be filled with the thinnest slate of varnish, the egg will keep for an indefinite period. Of course a greased or varnished egg will not hatch a chick, but when we put down eggs we do it for featherless not feathered bipeds.

One of the safest and most economical ways of preserving eggs that we have ever tried is to put them carefully in a jar of water in which a lump of lime has been scalded and allowed to cool. A quart of lime is sufficient for two gallons of water. The water is thus kept sweet and an incrustation (carbonate of lime) forms on its surface, which, together with the water and shell so effectually excludes the air that the egg keeps in great perfection. When they are taken out the incrustation is broken, but it speedily forms again, and we have never lost any eggs that were properly put down in time. A broken egg will of course in time contaminate the whole lot, for contagion is as contagious in a clutch of eggs as in a herd of cattle or a barrel of apples.

Eggs may also be preserved by packing them in fine salt, but we do not consider this mode quite so sure as the lime-water method. The air is not so well excluded and the salt, in a damp place especially, is liable to absorb moisture, and communicate a brackish taste to the eggs.

There are other modes of preserving eggs in very tolerable condition for a long time; still no preserved eggs is quite equal to a fresh one. The yolk will settle down after laying quiescent too long, and enough air will penetrate the shell to induce incipient stage of decay. It is therefore better to keep the egg machine constantly running throughout the year. To do this all that is required is to supply warmth and appropriate food. The machine may wear out faster if it is kept running summer and winter, but it is with hens as with factories, it costs but little more to run full time than

half time. The machinery is growing older whether it is productive or lying idle. A hen can lay only about 600 eggs any way, and the sooner she does this and "goes to the pot" the more the profit. An old hen is easily replaced with a pullet; so it is not worth while to prolong her energies by four or five months, idleness in winter. She must be sustained up to a living point any way; a little more expense will keep her up to the laying point.

Warmth may be secured by glass and tight boards. A hennery built on the south side of a shed or barn, with a roof sloping to the south, in which is some rough plaster or glass, will give you all the warmth that hens require in the winter, even in the cold climate of New England. Nature has provided them with a warm coat of feathers, and they do not suffer so much in the winter for the want of heat as comfort. It is not exactly a comfortable thing to wander around in the slush and mud with stockingless feet, even though the body may be well protected, and it is particularly cheerless to squat down in a nest which is half filled with snow. Under glass, which gives both light and warmth, hens will cackle over their new-laid eggs just as well in winter as in summer, provided they have an abundance of the right kind of food and drink.

What is the winter food of hens? It should be just as near as possible to what it is when they are allowed to wander around and pick up their own living in summer. At this time their food is a mixed animal and vegetable diet. They consume a vast number of worms, maggots, millers, grasshoppers, &c., also are constantly nibbling the grass and other green vegetation, besides eating seeds. In winter, worms, grasshoppers, and grass are out of the question, but their place may be supplied by cheap meat and vegetables, often by the refuse of the family table. Beef heads and livers from the slaughter-house makes a good meat diet for hens in winter. Beef and hog scraps, from which the tallow and lard has been pressed, we have found excellent for making hens lay. These can generally be bought for two cents per pound, and we like them all the better when the fat has not been pressed out too closely. A daily allowance of warm boiled potatoes, with an occasional bite at a fresh cabbage, is duly appreciated by hens in winter.

As a substitute for the seeds which hens pick up in summer, nothing is better than corn. No grain has more oil in it than corn, and without oil the yolk of egg cannot be manufactured, for we see that two-thirds of the dry yolk is oil. Hens are, however like, some other bipeds in one respect—they like a variety. We should therefore occasionally substitute buckwheat for corn, and, less often, a few oats. Wheat bran they relish very much especially when mixed with corn-meal, made into a mash and fed warm. The bran contains much earthy matter, which helps to form shells, and also enters into the composition of the meat of an egg, and thus make it perfect for the formation of the future bird as well as for human nourishment.

The best food we have ever tried for hens in winter is the preparation made by steaming the refuse of bones, blood, and flesh of the animals slaughtered there, and afterwards grinding the dry compound. Mixing this preparation, which is furnished very cheaply, with corn meal and wheat-bran, and feeding it to hens, we have increased greatly the production of eggs in winter. We have sometimes pounded up old bones and clam shells, but shall do so no longer if we can continue to get the Brighton preparation—which seems to contain all the elements necessary for egg manufacture except the farinaceous—at present prices. Hens like it, and it makes them lay whether or no the boys say.

Pure, fresh water is another point of no small importance for the winter hennery. In the summer, hens can drink from their watering-trough, the brook, and anywhere they please, and their vegetable food is also nine per cent. water; but in winter the water supply is cut off, and must be furnished artificially. A little butter milk occasionally is also gratefully received. We are confident that a little more care of hens in winter will double the profit of the hennery.—By A. Hyde, in New York Times.

The Hon. M. H. Cochran of Compton P. Q., has purchased of Mr. G. Murray of Racine Wis. 12 head of Short Horns 6 of which are of the Duchess cross; he has also purchased the second Duke of Hellburst from Col. King of Minnesota. Mr. Cochran is determined to take the lead,