



Agricultural Department.

ENGLISH FARMING.

The series of bad seasons, which have to a large extent brought about the present distressed condition of English agricultural industries, are not the only obstacles in the way of the present generation of English farmers competing, even on equal footing, with their American cousins. The annual rent paid by the English farmer would purchase much more fertile wheat soil in the wheat belt of the west. Moreover, most of the labor with us being done by improved machinery, the cost of production is much less, enabling the grower to land sound wheat on the docks of Liverpool at \$1.12 a bushel, at a handsome profit both to the farmer and the merchant. Again on account of the heavy rents for the land, and the many other incidental expenses, beef raised on English farms cannot be sold at any profit to the farmer for less than sixteen cents a pound. On the contrary, the American cattle-raiser of the south-west pays a trifle for his ranch, and is under no extra expense for wintering his stock, so that beef raised in this way can be put in the English markets for ten or twelve cents a pound, with a liberal profit to the owner and the shipper. Unless the signs are greatly at fault, where there is one person now engaged in raising beef for foreign shipments, there will be ten times as many five years hence. American cheese has already forced hundreds of English farmers from cheese-making to raising milk for the London and other large markets, and the business is now so crowded that the price of fresh milk is a third less than it was before American cheese became so popular among English consumers.

In travelling among well-to-do English farmers the past summer, I was surprised to note the lack of economy and the amount of land that is wasted on hundreds of farms by those wide ditches and straggling and unkept hedges which are used as boundaries of small and irregular-shaped fields, the latter, owing to the shape, calling for much extra labor in cultivating them. Another very noticeable feature is the large, heavy and cumbersome character of the farm implements. American manufacturers of farm tools shape them in such a way as to do the work with the least physical labor. The English manufacturer, on the other hand, has a pride in making everything substantial, heavy and solid, without any regard to the weight or strength needed. Why, there is more wood and iron in an English farm-cart than would make two American carts, and yet with their superb roads they load theirs no heavier than we do ours. An English manure fork is of the same size and pattern it was half a century ago—a square, rough tine shouldered near the point—calling for the greatest amount of force in loading or unloading. The American fork is a round polished tine, tapering gradually from the point to the base, and calling for the least power. The weight of an English plow is at least three times that of ours, and its length about twice, and yet it takes neither wider nor deeper furrow-slices than our best plows. In fact, one pair of horses attached to one of our best pattern plows will do from a third to a half more work in the same number of hours than an English farmer with his long, unwieldy pattern that is out of all proportion, both in length and weight, to the work it is intended for. The same is true of the English harrows, cultivators and all of the implements I found in common use for turning or cultivating the soil. The ordinary wooden hand-rake is a clumsy, heavy thing, having from a third to a half more wood than is actually necessary. In many instances, in going through England, I have counted eight and ten hands gathering hay into windrows with these hand-rakes, an operation very seldom, if ever, seen now in the United States. In many of the agricultural districts which I visited, farmers cultivating from forty to a hundred acres of land still continue to cut their grain crops with the reaping hook and cradle. The English cradle has a scythe blade of ordinary size and length, with two short wooden fingers. The man cutting with this cradle throws the

cut grain around against the uncut standing grain. Another man follows the cradle, equipped with a piece of stick about three feet in length with an iron hook on the end of it, and gathers the cut grain into sheafs and places them on the stubble before the next swath can be cut. The American, or what is commonly called the "Yankee," cradle has a wide scythe-blade similar in size and length to the English, but instead of two short fingers it has four long ones, and the operator cuts the grain, which falls on the fingers and which is thrown into a sheaf on the stubble entirely out of the way of the next cradle who follows, leaving the cut grain ready to be bound, one man with us doing the work of two in England. In talking on the subject with an intelligent farmer in Essex County, England, I had difficulty in convincing him that the long fingers of the "Yankee" cradle would not or could not get tangled up in the straw, nor could I induce him to send and get an American cradle, although he was complaining of the high price of farm labor when compared with the low price of farm produce.

In rambling through the agricultural districts I had many favorable opportunities of making personal inspection of the tools and farm machinery of some of the best equipped farms, and in every instance they all had the same character—that is, the tools were out of proportion for the work to be done, or the weight or strength needed. The English farmers in many respects remind one of the implements and farm machinery they use. They are, as a rule, solid, substantial and easy-going. They have taken the world and its affairs in an easy, matter-of-fact way.

English farmers take little interest in matters outside of their own business. They are extremely conservative and are perfectly satisfied with their home form of government, no matter whether they are rich or poor. Up to five years ago they made money enough to pay their obligations and live comfortably, and they had enough left over to lay some aside for future use. It is natural, therefore, with labor plenty and cheap, that they should plod along in the footsteps of their grandfathers. They do not devote much of their time to agricultural literature (the agricultural journals are poorly supported), or bother their heads over scientific farming. They grow the same crops in precisely the same way their fathers did before them, calculating to get about the same yield and profits. The character and results of the wonderful agricultural experiments of John B. Lawes, LL. D., of Rothamsted, are more widely read and better understood in the United States than they are among the English farmers. They have for the last five years been losing money, and for some time they could not realize that such a condition of things could ever come to pass. But the combined force of bad weather and active American competition has all but driven many into a state of bankruptcy and bewilderment. They are thoroughly frightened, and they have very substantial reasons for being so. Their present condition is bad enough, and their prospects gloomy.

As long ago as 1862, Horace Greeley told me that the time was near at hand when American farmers, with the aid of improved modern labor-saving machinery, could and would place a bushel of American wheat in the English markets at a lower figure than it could be raised by the present methods followed in England, and, moreover, with a fair profit to the grower. The realization of this fact now stares our conservative cousins in the face. The introduction of American cheese, beef, and pork has been accomplished in such quantities and at such prices as to make these branches of industry equally unprofitable. The rot in the potato has been so general for the past five years that there has been less reliance on that crop, and less surface planted this year than usual, and there is no doubt that large quantities of American potatoes will find their way into the English markets during this fall and winter. As yet there has been no outside competition in barley; and it is the only crop that has not been affected, and many farmers intend to sow next year twice the surface heretofore allotted to it.

It is safe and certainly within bounds to say that American farmers, with their labor-saving machinery, can raise produce at a third less expense than English farmers can with their clumsy methods. It is also evident that within the next five years large numbers of English farmers will be forced to emigrate to Australia and the United States.

The fact is that agriculture in England, once a prominent and vital interest, has now fallen to a third or fourth place. Even the *London Times*, once the champion of this industry, now hardly recognizes its existence, and will devote more space in its columns in one week to a boat-race between Oxford and Cambridge students than it will in two years to agricultural interests.—*Scribner's Monthly*.

HABIT IN EATING.

Domestic fowls, in their oftentimes narrow limits of confinement, do not enjoy the opportunity to indulge the natural habit of the poultry race in the matter of eating the food given them. Many considerate poultry-keepers we know endeavor to approach, as nearly as may be convenient, to the better modes of feeding, and furnish a varied supply of provender to their fowl stock, so as to approximate to the requirements nature demands for the best comfort of their fowls, artificially cared for.

But the wild fowl in his native forest—as well as the domesticated bird, if he have ample range—forages over a wide extent of feeding-ground. He picks up and devours the grains, buds, berries, leaves, insects, grass-blades, &c., leisurely, and never crams himself or overfeeds.

Thus his habit of eating is a healthy process. He eats slowly, and his food has time to digest well as it passes through the digestive organs. Such fowls (so allowed to feed) are rarely or never ill. For to free digestion may be attributed very much of the good condition and regular health enjoyed by the wild birds, or the tame ones at liberty.

For these cogent reasons, as we have often advised our readers heretofore, in the *Poultry World*, we again suggest that fowls kept in confinement should not only be supplied with plenty of food at proper intervals, but it should be varied—green and dry, raw and cooked, of vegetables and grains. It should be so dealt out to them that the birds will not gobble it down by the handful, to satisfy their craving, and so help to disorganize their digestive powers.

Chickens and young fowls should especially be fed often, in such a manner as that they will have no inclination to gorge themselves. There is a great deal in providing wholesome, proper food for fowls; but there is also much in the manner of feeding it, and the habit of birds in eating such food.

Give them what they will eat up clean only at a time. Never permit them to get voraciously hungry, and we shall rarely be troubled with indigestion among the flocks, which is one of the prime sources from which spring subsequent disease and great fatality in the fowl-yard, when the real cause of such disasters is not appreciated, but is innocently and ignorantly attributed to any and every other sort of ailment, accident, or supposititious agency.—*Poultry World*.

TOMATOES.

The tomato has greatly improved in size, smoothness, and quality within our recollection. It has also changed from a mere ornament, like some other Solanums, to an article of necessity and general use in this country, while it is working its way steadily but surely to favor all over the civilized world. In a cool, moist climate, like England and Scotland, the tomato ripens in the open ground only under the most favorable circumstances and seems to require about such treatment as the peach. Tomatoes are, therefore, grown in houses, like foreign grapes, trained to the rafters. Those who have had no experience can scarcely realize how large a plant the tomato will make when a little pains is taken in giving it plenty of nutriment and proper training. Once we trained one to the side of a building, and it covered a space sixteen by twenty feet, and had several hundreds of ripe fruit at one time. It seemed a marvel to many, and we had plenty of applications for seeds, on the supposition that it was a new and improved variety.

Some years since we sent the Hathaway Excelsior tomato to England, and it has proved for many years the most popular variety in that country. From it, by some freak of Nature, was produced a kind called Green Gage, yellow, oblong, small, but rich and productive—too small for market purposes here. Later we sent a new variety, which we had named, and which received a first-class certificate from the Royal Horti-

cultural Society. Our friends in England named it Vick's Criterion. This, too, has become a leading and popular sort and, it is claimed, excels all others for forcing. From this Richard Nisbet, a gardener at Aswarby Park, has produced a variety called Nisbet's Victoria, which is said to excel all others for fruitfulness. The fruit is oval, less than two inches by two and a half in diameter, growing in bunches and each bunch containing from eight to twenty specimens, of the size and color of a Victoria plum. It contains but few seeds and for flavor is unsurpassed. The original plant covered a space fifteen feet by six, and had upon it at one time 600 bunches of fruit, as many more having been gathered during the summer.—*Vick's Illustrated Weekly*.

DOMESTIC.

JELLY CAKE.—Three eggs, half cup butter, one cup sugar, one cup milk, three cups flour, two teaspoons baking powder. Bake in thin layers and spread any kind of jelly between; currant is best.

CHOCOLATE CAKE.—Make the cake as for coconut cake. Flavor well with vanilla. For paste, grate one-half a cake of baker's sweet chocolate, one-half cup of milk, yolk of one egg, one teaspoon of vanilla, one cup sugar, boil until stiff like jelly, when nearly cool spread between the cakes; the paste should be made first.

CUSTARD CAKE.—One egg, one cup sugar, three-fourths cup milk, one and one-half cups flour, three teaspoons baking powder, butter size of an egg; bake in layers. Custard.—One and one-fourth cups milk, one teaspoon flour, and two of corn-starch, one egg, pinch of salt, sweeten to taste, make quite sweet, flavor highly with vanilla. Must be made first and cooled before putting between the cakes.

ORANGE TART.—Grate the yellow of one orange, squeeze out the juice, being careful to avoid the seeds, the juice and yellow of half a lemon, fourth of a pound of sugar, two ounces of butter, carefully melted, two eggs, leaving out the whites of one; heat well; stir all together, line a tart-tin, or patty-pans with thin-paste, fill and bake fifteen or twenty minutes.

CHARLOTTE RUSSE.—Whip-sweetened and flavored cream; put it into a plain mould lined with lady-fingers, or thin slices of sponge-cake, and let it stand three or four hours in a very cold place. To turn it from the mould, select a dish, the rim of which will fit outside the edges of the mould; turn the dish over the mould, and holding it firmly over it, quickly turn over both dish and mould, so that the mould rests upside-down on the dish; the mould may then be carefully lifted, and the Charlotte will remain on the dish.

CREAM WAFERS.—Warm quarter of a pound of butter without oiling it; work into it five eggs, one at a time; then add quarter of a pound of powdered sugar, quarter of a pound of sifted flour, and a teaspoonful of ground cinnamon, mixing all these ingredients to a smooth paste. Heat a wafer-iron, put in a spoonful of the paste, close the iron, bake the wafer, and trim off its edges before opening the iron; then open the iron and quickly roll the wafer in the form of a cone. When all the wafers are cooked, fill them with whipped cream, arrange them on a napkin, and serve them.

HOW TO COOK RICE.—A recent traveller in Japan says: "They know how to cook rice here, and for the benefit of grocers and consumers in the United States I investigated the matter. Only just enough cold water is poured on to prevent the rice from burning to the pot, which has a close-fitting cover and is set on a moderate fire. The rice is steamed, rather than boiled, until it is nearly done; then the cover of the pot is taken off, the surplus steam and moisture are allowed to escape, and the rice turns out a mass of snow-white kernels, each separate from the other, and as much superior to the soggy mass we usually get in the United States as a fine mealy potato is to the water-soaked article. I have seen something approaching this in our Southern States, but I do not think even there they do it as skillfully as it is done here, and in the Northern States but very few persons understand how to cook rice properly. I am sure that if cooked as it is here the consumption of this wholesome and delicious cereal would largely increase in America."