

falls have been constructed, upwards of 400 miles in extent, at a cost of little less than one million and a half sterling. At the Pote-hole Drain, near Spalding, in September and October, 1848, two engines of 50 and 60 horse-power consumed 500 tons of coal in pumping from 25,000 acres of land.

It is on these lowlands that the warping process is carried on, by which the alluvial soil held in solution in the Trent and Ouse is, by successive floodings and drainings, made to settle on poor land, until a "warp soil" of great depth has been obtained. On this warp soil, crop after crop, even of the most exhausting kinds, may be grown without manure. Those interested in the history of the reclamation of the Fens will find a very good account in a little work recently published by Mr. Clarke, of Wisbeach. But it is on the heaths and wolds which, within the lives of the fathers of this generation, have been changed from wild gorse to first-class turnip farms, that the agricultural reputation of Lincolnshire chiefly rests.

On Arthur Young's second visit to Lincolnshire the improvements were so great that he thought little remained to do, and he then observed, that, "forty years previously, it was all warren for Spilsby beyond Caistor. At that time there was scarcely a turnip to be seen where thousands of acres now flourish; and the few grown were unhoed, except by gentlemen." At that period Mr. Chaplin, of Temple Bruer, let 3000 to 4000 acres at 2s. an acre, chiefly as rabbit warrens. At present one may ride with foxhounds from Lincoln to Barton on the Hamber, and scarcely see such a thing as a rabbit warren. As for this Temple Bruer estate, Mr. Pusey, in his celebrated tour in 1842, found it converted into a first-rate farm, with a tenant occupying 1000 acres, where, with 125 acres of turnips, he wintered from 1200 to 1500 sheep, and fed in fold-yards 110 beasts, for which he purchased eighty-five tons of oil-cake. And he observes, "In passing over Lincoln heath, condemned by intelligent Arthur Young to barrenness, farm succeeded farm, each appearing to be cultivated by the owner, for example, and not as really the case by a tenant for profit; and so for miles through fields of turnips, without a blank or weed, on which thousands of long-woolled sheep were feeding in netted folds; every stubble-field clean and bright, all the hedges kept low and neatly trimmed, every farm-house well built with spacious courts, and surrounded by such rows of saddle-backed ricks that showed that the land did not forget to return in August what it had received from the fold in December."

Now, the question raised in 1854, is friendly chat among the farmers of many counties, was not as to the correctness of this often-quoted passage at the time it was written, but whether the Lincolnshire farmers have continued to go ahead, and keep up the distinguished position they held

twelve years ago. We think they have. We believe, that with few fancy farmers—such as those who are to be found amusing themselves by experiments made regardless of expense—the general average of tenant-farming is higher in Lincolnshire than in any other county; that more good stock is well housed and fed during the winter; that better implements are used; and that improvements of any kind are more readily introduced into the tenant-farms of Lincolnshire than any other county, although there is no one man who stands in so preeminent a position as Mr. Hudson, of Castle-acre, in Norfolk.

After Lincoln-heath come the Wolds, which were left to rabbits when Lincoln-heath, with a near market, grew barley and oats, although not wheat. Lincoln-heath now grows six quarters of barley where, 1799, it only grew three; and four or five quarters of wheat where it was thought the land was too poor to grow any. While, as to the intermediate belt between the sea and the Wolds, Mr. Sidney, in his "Ride through North Lincolnshire, in 1848" says—"The neatness of the general cultivation was as remarkable as the great size of the farm-buildings. The gates, always a sign of good farming, were universally in good order, the fields square, and the corners evenly worked up, the drill system for wheat-sowing all but universal, and the crops consequently well harrowed and clean. On most of the farms the best modern implements were in use; that most useful implement the 'scarifier' was as common as the harrow; Crosskill's clod-crusher passed everywhere; and the wheelwrights' shops had quite a scientific appearance from the number of patent tools there for repair. Every farmer feeds some good beasts, which are to be found with plenty of straw under their feet, not wandering over liquid mud of ill-paved yards."

On a recent visit to the same district, we found no signs of contented agricultural conservatism. Draining had been vigorously pushed in the clay lands in the autumn, and fixed and portable steam-engines were spreading everywhere. On a farm of 1300 acres, of which half was in tillage, the tenant—farming with an agreement for compensation for unexhausted improvements—had laid out nearly £3 an acre for the first two years, on guano, bones, and other tillages, and was then spending upwards of 30s. an acre in the same way. This farm carried 1000 sheep, 100 fat beasts, wheat to pay the rent, beside some breeding stock. This was not a fancy, but a tenant's farm.

The Wold farms on the Brocklesby estate are, on an average, above 300 acres, having been laid out in the rough by the grandfather and father of the present Earl. Many fields are from 40 to 70 acres; and on one of these we saw magnificent crops of turnips, sown with the liquid manure drill, as a medium for distributing super-phosphate,

Now, this new implement was introduced on the Wolds, not by a fancy advertising farmer, but by one who has farmed the same farm more than thirty years, under the Yarborough family, and made turnips succeed gorse, and driven out rabbits with improved Lincoln sheep. It has been remarked by a leading journal that the Lincoln sheep are inferior to the Cotswold. There is no doubt of the fact. The breeders have not, until lately, been under the influence of comparison and competition. The Lincoln Royal Agricultural Show will no doubt have its effect. But fifteen years of repeated trials have shown that the fine qualities of the Cotswold cannot be transplanted. They appear to depend on something peculiar to the Cotswold-hills, and to the style of feeding adopted by a few successful breeders.

There are, unquestionably, three points in which Lincolnshire takes a high agricultural position. The customs and traditions of the county make the landlords what is commonly called liberal, but what is in reality wise. They provide the machinery in fit farm-buildings, and secure the expenditure of the tenant by compensation for unexhausted improvements. The tenants are enterprising, and are not afraid of new implements or new tillages. The labourers are well paid and well fed. The single men and boys live with the foreman. Here is a bill of fare of a Lincolnshire farmer, for the benefit of the "Sheep's-head and Pluck" counties:—"Breakfast—Bread, milk, and bacon. Dinner—Beef or mutton, or bacon, alternately, with vegetables, bread, and cheese. Supper—Bread and cheese. A pint of beer daily." On the Brocklesby estates, it has been Lord Yarborough's endeavour that every labourer should have enough land to keep a cow.

It is safe to assert that, with room for improvement—where is there not?—the three classes of landlords, tenants, and labourers, are better placed, and live in better mutual relation, on the heaths and wolds colonised within the last sixty years; and that the practice of agriculture is, on an average, more steadily progressing than in any other county. The great want is, an intelligent, practically-useful education for the peasantry.—*The Illustrated London News.*

FLAX IN THE WEST.—The American Agriculturist states that large fields in Southern Ohio are devoted to the raising of flax for seed. For want of proper machinery, the stalks are thrown away. One to two bushels of seed are sown per acre, which gives 12 to 14 bushels of seed, more than if a larger quantity were sown, but less lint where the latter is an object. The cultivation consists simply of one ploughing, a harrowing, then sowing and brushing in the seed. The crop is mowed or cradled. The oil mills pay \$1.25 to \$1.50 per bushel for the seed.