

36 are pasture. The pasture land is liberally managed and well farmed. Of 210 acres of plow land, 136 are this year in corn; the wheats—Spalding red, creeping wheat, and Rivett's—look remarkably well; the barley, too, is a most promising crop; there is as much as 25 acres of bare fallow; there are 27 acres of seeds; there are 25 acres of Swedes and mangold wurzel, straight drilled, full of plant and clean; and we nowhere saw fallow crops looking so well. The rotation is pretty much, we think, what Mr. Dunn may choose it to be—seeds, wheat, oats or barley, bare fallow, wheat, beans or peas, wheat, turnips, barley; this was the list we took down. There is a large expenditure in artificial manures and feeding stuffs. The stock includes a few dairy cows with their produce, and purchased cattle and sheep to graze the pastures and the seeds, and to feed the roots. Rent has risen from 20s. to 30s. in the neighborhood during Mr. Dunn's 40 years' experience. One of the chief features in this farm is its neatness, extending from the farm to both premises and home. A more charming garden, tidier premises, better roads, and more perfect fences, we have never seen. The fences are a wonder; the thorn everywhere a perfect equilateral triangle in section, with true sides and most perfect ridge lines, joining the one rectangularly with the other, with roof-like exactness, and coming close to the ground. The roads are first rate, and Mr. Dunn has charge of the parish roads also, many of which pass through his farm, they are in admirable condition, the wide grass margins bearing a heavy produce, thanks very much to his management, making by the hay crop which it yields a handsome contribution to the cost of maintenance.

Mr. W. G. Walgate, who has won the prize, holds about 450 acres, of which about 120 are grass land. Most of the land is tenacious soil, about 50 acres only being lighter turnip land. He follows a five years' rotation—turnips, spring corn, seeds grazed, wheat and oats, or peas or beans. He keeps a flock of 160 Leicester-Lincolns, winters them and their produce, buying as many more as his turnip crop permits or requires. He breeds and feeds a large number of pigs. He has a small herd, and rears their produce; buying graziers in addition for both winter and summer feeding. We saw a magnificent lot of 40 steers, already worth probably £30 apiece, in the grass fields; also a large flock of ewes and lambs on the seeds; capital crops of wheat and beans, some first rate fields of barley and oats, and a large area in turnips, the hoers busy among them—the field not looking, however, by any means so forward or so well as those at Pasture House. Mr. Walgate's farm is worked by twelve horses; the labor costs from 30s. to 32s. an acre, men receiving 18s a week in winter and on till harvest time, when much higher earnings, of course, were made. A number of the younger men board and lodge in the farmhouse, receiving from £10 to £30 per annum in addition. There are no cottages on the farm. All the manure made goes on the turnip crop, which receives some three sacks of bono dust, and 4 cwt of superphosphate per acre in addition. There is an immense consumption of cake and meal by cattle and sheep, so that the manure is of first rate quality. The steers at grass are receiving 6 lbs. of cake a day apiece just now, and if feeding off on turnips they receive a cake a day, and some 6 lbs. or 7 lbs. of meal in addition before they leave—worth then £35 to £40 apiece.

The wheats sown are white chaff and creeping red; 8 to 10 pecks per acre are sown, and drilled nine inches wide, enabling horse-hoeing but also receiving hand-hoeing. The seeds—a stone of white, 7 lbs. of red, 2 lbs. of trefoil, and a little rib-grass sown per acre—are not looking first rate, and some of them were being rather roughly and wastefully grazed. The buildings are altogether insufficient for the farm, but the tenant has the credit of having been himself at by far the greater portion of the cost of their erection. The farm is evidently under profitable management, and we nowhere saw such a capital stock of cattle in the fields. Mr. Walgate has been more than a quarter of a century the tenant of West Hill Farm, and it does great credit to his management.

Mr. George England occupies about 410 acres at Carleton adjoining West Hill, about 300 are arable. There is a capital farmhouse and very excellent homestead, with admirable accommodation for stock of all kinds. The farm is intersected by many roads, both cross country, parish roads, and farm roads, for the condition of which the tenant is responsible; and the excellence of these roads is quite one of the features of the farm. The five course rotation is adopted, seeds being sometimes kept down two years and broken up early for a sufficient fallow before wheat sowing, or wheat being sometimes followed by oats or peas, then the

are 134 acres of white corn, 25 acres of beans and peas, 57 acres of seeds, 60 acres of turnips, and 14 acres of bare fallow on the farm this year. The wheats are magnificent; the rough chaff, white promises a splendid yield; the creeping wheat looks well; some 8 or 10 acres of it had been ploughed up and re-sown with barley, which looked well. A large field of April wheat is promising satisfactorily. The oat crop (Tartarian) looked exceedingly well, barleys, too, are good. The turnip crop, in various stages of growth, is this year in a large field which is in some places of somewhat rough and patchy land, but they promise to be a good crop.

The land is worked by ten horses. The labor bill, including board of men in house, is about £500 a year; in addition to this sum 24 acres of land have been drained 3½ feet deep, at a cost of about £80 in labor, and 126 acres have been steam-cultivated at a cost of £140 in contract price and coals. The bill for cattle food and artificial manure exceeded £1,000 last year. Some 200 fat sheep and 40 to 50 fat beasts are sold annually, and there is a large stock of pigs and a very large stock of poultry.

Specially good wheat crops on the Carlton Farm, good buildings, and very good roads, and good young fences; rare herd of cattle at West Hill, with general good crops, and well-managed grass land, good turnips and general excellence of corn crops, with special excellence of fences at Pasture House, are the leading features of these three farms. They are all held by yearly tenants. Two of them are on Mr. Bethell's magnificent estate, one on that of St. Thomas' Hospital.

It is, we believe, very much to the credit of Mr. Spence, the agent on Mr. Bethell's property at Skirlaugh, that there has been any farm competition at all this year. It was with great reluctance that two of the tenants on this property yielded to his urgency on the subject.

He assures us that the farms are not in any special show order. The judges would have seen them in very much the same condition last year as they have seen them this. They are all certainly in very excellent hands, and the landowners in both cases may be proud of their tenantry.

#### Are Crows Useless?

It would be well for every farmer to endeavor to answer this question to his own satisfaction. We all know how provoking it is, in the spring time, when the corn and other grains are planted, and work drives hard, to see an army of crows encamped upon our fields rapidly destroying the newly planted crop, and we cannot wonder much if the farmer's temper does rise and impel him to shoulder the basket or rifle, and deal death to the marauders. Farmers are apt to regard crows as their natural enemies. What about cutworms and white grubs? Are not they the pests of the cornfields, and are not they the natural food of the crow? To be sure, his appetite prompts him also to taste your corn, and pull up the young wheat, and tear open the husks of the ears of corn. Should he not take a little toll as well as the miller? Destroy every crow, and your corn and wheat will not be taken in the kernel perhaps, but they will stand a chance of being cut down when they are two or three inches high, and force you to plant them over, when it will put your crop back at least two weeks for that season. Crows are undoubtedly useful birds in destroying the myriads of vermin which attack our crops; and so I feel inclined to speak a good word for them, although few of your readers may incline to do so when they are suffering from their depredations, and daily see them pulling up hill after hill of corn. I think that one might find a remedy in planting thickly—putting ten grains of corn or wheat where four are needed, and allowing Mr. and Mrs. Crow to dine on the other six, while they also devour the cut-worms, etc. But if war must be waged against them, commence it by setting a steel trap in a tuft of grass, and bait it with a blown egg-shell, or a bit of fresh meat. If you succeed in catching one crow, its cries will teach all the other crows that danger is there, and it is thought to be a safeguard for the whole field. Crows are, as we all know, exceedingly wary birds, and smell danger from afar; so if one dead crow is hung up in a field, it is the most effectual scarecrow that can be furnished. Poisoned corn will soon rid the farmer of the nuisance of crows. Yet I think it a very mean resort, and feel assured that he who undertakes it will have his crops blasted with cut-worms and other vermin, and will pray for a return of his black enemies.—Country Gentleman

#### Exporting the Land.

The country that neglects manufactures must export its raw products, in payment for the manufactures of other countries. The United States from 1821 to 1861 exported \$1,007,000,000 worth of provisions and breadstuffs; in other words, exported over \$1,000,000,000, worth of the strength of their land, \$1,000,000,000 worth of their capital—of their stock in trade. The result is read in a deterioration of soil so rapid, and over an extent of country so vast, that the history of the world affords not a parallel. In New York, where formerly thirty bushels of wheat per acre were produced, now only fourteen are realized. Ohio now yields less than twelve bushels of wheat per acre. The great grain-growing States of the remoter interior, as statistics assure us, and as their agricultural journals deplorably attest, are rapidly falling off in productiveness per acre. By consequence, the cultivator, finding his harvest failing, pushes on to occupy new land. Much territory, comparatively recently opened, has already become the scene of migration and partial abandonment. The deserted land almost ceases to have value. While farms are sold for less than the former cost of the barns or of the stone wall upon them. Meantime the land near the great manufacturing towns of foreign States, enriched with the fertile elements exported from our own, rises higher and higher in value, thousands of dollars being paid for single acres, raising its owners to affluence at once by abundant harvests and by increase of valuation.—Wool Bulletin.

#### Mushrooms in Pastures.

A correspondent of *Land and Water* writes; "Believing it possible to grow mushrooms in pastures I last year made some experiments which I think were successful. The course of reasoning which led to them is too long to detail now, but the *modus operandi* was as follows: Wishing to plant a pasture field near my house, I proceeded thus: I broke up mushroom spawn into pieces from the size of a filbert to that of a small walnut, and set a small boy to spawn the droppings of the cows and horses by making a hole with a potato dibber or small crowbar (called here a fold-pitcher) through the droppings and about one and a half inches into the mould beneath. A piece of spawn was dropped into this, and a vigorous stamp with the heel of the heavy boot completed the process. I used less than half a bushel of spawn and was, as I believe, largely repaid for my trouble and expense in mushrooms during the natural season. I began the same process again yesterday and hope to have more convincing proofs of the success of my plan this year. I think a crop may even be secured after May, but I should not expect that spawning could be carried on with much expectation of result after the middle of July. If my experiment had been made public I am in hopes that more exact operators than myself will work out the idea, till a crop of fine mushrooms may become as certain as turnips.

#### Clean Seed.

As a rule, those farmers who are the most careful in cleaning their seed grains, and the most thorough in their cultivation, have the fewest weeds to contend with; and such are the most fully compensated in the end for their pains. One of the most prolific sources of the spread of weeds is sowing directly from the threshing machine, for however well these machines clean the grain for market purposes—and the better classes of them do it admirably—still there is no power machine that will clean seed in so thorough a manner as to fit it for sowing. This, however, may be accomplished by careful cleaning by the more modern fans, having sieves adapted to the various sizes and shapes of seeds, and perfectly controlled by the blast given. With the use of these we have often secured a large advance over the ordinary market price, on account of the seed being perfectly clean. One of the most difficult seeds to separate from grain is cockle and chess, and to do so thoroughly, it is necessary to have proper sieves for separating these from the good grain, since the specific gravity of these seeds is very nearly that of barley, rye, and wheat. In the case of chess, the peculiar form of the seed—being long, like wheat and rye—renders it especially difficult of separation. But with the modern fans, but little difficulty will be experienced in their separation, and the value of the seed will be thereby much enhanced.—Exchange.