

on a heavy land clover lee, as last year. The ground was rough and hard, and very dry, and although a kernel was placed in each hole, only about one-half, or half a peck per acre, came up. Of course, we anticipated a partial failure, but spring came, and each stem threw out horizontally a large number of shoots, so that now it is admitted by all who see it that it will exceed in produce the adjoining crop drilled at one bushel per acre. It appears to be about four or five days later than the rest. I invite all who feel an interest in the matter to inspect this and my general crops in July, because, on public grounds, it is lamentable to waste so much food as we do in useless or injurious thick sowing, and it teaches us that deeper cultivation, drainage, and unwashed manure have more influence on the crops and on the seasons (whether wet or dry) than most people imagine. In spite of drought, my crops promise abundantly. This is a good heavy-land season, and particularly favourable to the stiff, crackling clays. Thin, hot soils, especially where shallow ploughed, must suffer considerably. A week ago I was in company with some (good) practical farmers, who astonished me by saying that, although only within 40 miles of London, they continued to sow 7 bushels of oats and 4 bushels of barley per acre! As I only put in 6 pecks of barley and 2 bushels of oats per acre, I presume that the astonishment was mutual. Even at present low prices, a self-taxation to the extent of some 7s. or 8s. per acre is surely worthy of consideration. I do not wonder at my friends finding gaps in their clover, caused by prematurely laid crops. According to Mr. Caird, the average increase of our corn crops is 8 for 1—one million quarters of seed to produce nine millions of corn! This is discreditable to us, for surely one good seed in properly cultivated soil cannot produce so little, if it be allowed sufficient space to develop its growth. Forty for one is nearer the increase on my farm.—*J. J. Mechi, Tipree Hall, June 27th, 1865.*

Hay-Making.

The following extracts, from an excellent paper by Mr. Baldwin, of Glasnevin, are taken from the *Scottish Farmer*, and will doubtless be read with interest:

TIME OF MOWING.

As all grasses do not bloom at once, it is necessary so to time the mowing that the majority of the plants present in the swath shall be at their best. The following rules are a sufficient guide:—

In the case of Italian rye-grass, always mow on the appearance of the flowers, as this grass is such a fast grower, that if cut at this stage a second cutting is obtained equal to the first; and on good land a third and fourth very little inferior. Ordinary rye-grass may be allowed to produce the flowers. Clover is best cut when the heads are in full blossom. Mixed meadows should be mown when the bulk of the herbage is in full flower, or when the seeds of the earliest grasses are fully formed, such as sweet-scented Vernal Grass (*Anthoxanthum odoratum*), Meadow Fox-tail (*Alopecurus pratensis*); and the late grasses, such as crested Dog's-tail (*Cynosurus cristatus*), and Meadow Fescue (*Festuca pratensis*), are just beginning to produce the floral organs. With us, Timothy (*Phleum pratense*), Italian rye-grass (*Lolium italicum*), Perennial rye-grass (*Lolium perenne*), and Cock's-foot (*Dactylis glomerata*), flower during the latter half of June, which, as these grasses constitute the great bulk of good meadow land, is our mowing season.

COST OF MOWING.

This will vary from year to year according to the crop and the abundance of mowers, more than 100 per cent. It is amazingly cheapened by horse-drawn machines, and the following valuations may be accepted as near the truth. For mowing a heavy crop of grass—

1. By manual labour—say	4s. 6d.
2. By mowing machine—	
Manual labour - - -	3d.
Horse labour - - -	6d.
Percentage per acre -	9d.
	1s. 6d.

This gives a gain of 3s. per statute acre. If (says Mr. Baldwin) we assume the saving effected by the machine at 2s. per acre, (and any calculation on the subject is only approximate), we find that the introduction of this machine on all the meadow land of Ireland (supposing the ground sufficiently even for the purpose) would effect a national saving of £150,000 annually! The saving over the greater extent of grass lands in our own dairy counties would, of course, be proportionately large.

HAY-MAKING.

The making, again, is a process cheapened by the use of the hay-tedder and horse-rake, so that from 8s. to 10s. per acre for good hay in good weather, and

10s. and 15s. for inferior hay in bad weather, as the whole cost of it when in the stack the expense may be reduced to 1s. with a mowing and other horse-drawn implements are used. The process essentially consists in so separating and scattering the grass after mowing that no two blades shall cling together in drying. It is perpetually tedded and shaken out as long as it is drying, and gathered together during night, or when left for any length of time exposed to the risk of rain; and as soon as dry enough it should be ricked. The practice of letting it remain too long in cocks in the field is injurious to it.

John Johnston Tries a Little Salt.

THAT veteran agriculturist Johnston writes to the *Genesee Farmer* under date of June 8th:

"I did last year what I never did before: that was ploughing up wheat stubble and sowing again with wheat. It is a respectable looking crop now, but if you saw the half of the field that I sowed salt on, say a full barrel to the acre, I am almost sure you would order forty or fifty barrels of second quality salt to sow in September or October. The salted wheat stands much thicker on the ground, is considerably taller, came in ear fully four days before the other, and altogether looks richer every way; and as I had not salt enough to sow the whole field, I sowed the half that has hitherto brought the worst crop and latest in ripening. Now it is much the best. I can stand in the middle of the field and look forty-five rods each way and see distinctly how far the salt came, or I can walk or ride down the side of the field where not salted, and see the line as plainly as if the one side was corn and the other wheat. If this won't make men experiment with salt, I don't know what will.

"My great crop this season is winter barley. It is my first crop of that kind, and if it don't get laid it is as good as any man could wish to see. It is now beginning to get yellow for the harvest. It was sown I think on the 11th and 12th of September, the field thoroughly summer-fallowed, rolled after the drill, and full one barrel of salt sown to the acre. I never saw such a crop. My neighbour, Mr. Noyes, has also a very good crop, but I have not been to it; still should we have heavy showers, mine might be greatly damaged, as it is both too thick and too tall. I guess it stands about four and half feet high, or nearly. I sowed two bushels to the acre, but I am sure one and a half bushels would have been enough. We need rain here very much for spring crops. There was heavy rain and hail some three miles from here yesterday. If you lack faith in salt, I want you to try one barrel on an acre of wheat, on dry land. If it don't pay, charge the cost of the salt to me."

Peas and Wheat.

SPEAKING of the best preparation for a wheat crop in connection with its great necessity, we are reminded of a fact brought to our notice within a week or two of the remarkable fertilizing value of the common field pea or black-eyed pea. A piece of land of apparently the worst description, a reddish clay, naked almost and gullied, it was found desirable to bring under improvement, and it was determined, as much was being said about the value of the field pea, to give it a trial. The ground was therefore well ploughed, and a bushel and a half to two bushels sown to the acre. When these came up plaster was sown upon them, and the result was a very handsome crop. It is a quality of this pea that it will grow luxuriantly where our common farm crops will hardly live. This crop was left untouched in the fall—neither gathered nor ploughed down. In the spring following everything remaining was turned under, and a crop of oats sown with clover seed. The oats made a fair crop, the clover following a very heavy one, which was grown two seasons in succession, and has left the land in a high state of improvement. This is plainly shown by a crop of corn now growing upon it. It is hardly creditable that from so poor a beginning such improvement should have been made without the help of any fertilizer but the pea and a little plaster. It very well accords, however, with a statement made to us by an intelligent farmer, and with very many facts which have come under our notice in the journals. The gentleman referred to stated that he had last season sown peas among his corn when laid by, and that wheat being sown on this field in the fall gave a better crop than his clover fallow. His experience of several years had convinced him that a good crop of vices, turned down, is a better dressing for wheat than the usual quantity of guano.—*Baltimore Sun.*

SAVE the seeds. Look well to this subject. Select the best of every variety as they ripen—cure properly, label, and store away for future use.

A HEAVY ROLLER. The granite roller that is used for the preparation of the Hillsborough, N. H., Fair ground, weighs six tons and seven hundred and fifty pounds.

LOW PRICE FOR POTATOES.—It is said that the farmers in Oxford, Maine, have contracted to furnish potatoes this fall for the manufacture of starch at twenty cents per bushel.

SURFACE MANURING.—In a recent communication to the *Genesee Farmer* on this subject, John Johnston states: "I have used manure only as a top-dressing for the last 26 years, and I do think one load used in that way is worth far more than two ploughed under on stiff land."

GOOD BARLEY CROP.—The *Genesee Farmer* says: "John Johnston has just thrashed his twelve acres of winter barley, and had six hundred bushels. He sowed two bushels per acre, but thinks he should have had more barley had he sown only a bushel and a half."

SEEDING LAND TO GRASS.—Where grass seed is sown alone, August is the best time to sow it, or, if not convenient before, it will do in September. We have known excellent crops obtained the next season from land sown the previous September. On low land that can only be ploughed at this season, there is a manifest advantage in seeding at this time. In such situations, red-top (*Agrostis vulgaris*) is, of course, the best kind to sow.

WHEAT A PLEASANT CROP.—It is a pleasant crop to put in; pleasant to see it cover the ground in autumn; pleasant to see it grow in summer; pleasant to look at as it whitens for the harvest; pleasant to see a good self-raker lay it down in sheaves ready for the binders at the rate of ten acres a day; pleasant to "pitch" on to the load; pleasant to thrash and get ready for market, and if you have a good crop and obtain a good price, it is not unpleasant to receive the money for it.—*Genesee Farmer.*

ECONOMY OF MOWING MACHINES.—A gentleman of experience has given as his opinion that a good mowing machine will save a farmer, upon an average, one-eighth of his crop of grass, aside from the fact that "laying is done" much sooner, and thereby a great saving must be made. He says the average height of grass is about 16 inches, and that a machine mows, upon an average, two inches closer than the scythe, thus saving two inches of grass over the whole surface. If a man cuts forty tons of hay with a mowing machine, he saves five tons of hay, as he would have got but 35 tons with the scythe. Calling hay worth, upon the average, \$3 per ton, there is a saving of \$10 a year in hay, to say nothing of labour. Thus the price of a mowing machine is saved in three years—no inconsiderable item. But this is a small item when compared with the saving in labour and "the wear and tear of the disposition" in swinging a scythe through a hot forenoon. Commend us to the mower as a labour-saving machine over all others invented for the use of the farmer.—*N. H. Farmer.*

UTILIZATION OF NIGHT SOIL AS A MANURE IN STRASBURG.—At Strasburg a company of middlemen engages to empty the cesspools, of which every house has at least two (built air and water-tight), once a year for nothing, and pays, moreover, 6 francs per charette, containing 96 baquets of the capacity of four gallons each. This quantity the company sells afterwards to the farmers for 10 francs. Now, as there are 14,000 houses in Strasburg, 10,000 of which have cesspools affording the soil in question (which is always semi-liquid), supposing the latter to be emptied only once a year, and to furnish each three charettes only, at 6 francs, we have 10,000 x 6 x 3 = 180,000 francs which the company pays yearly to the inhabitants of a town having a population of 70,000 souls. But as the company re-sells to the farmer the said soil for manuring purposes at 10 francs per charette, it follows that this article of traffic produces yearly at Strasburg 300,000 francs, or just about 4 1/2 francs for each inhabitant. The average sum, therefore, for each inhabitant of a city, where the material contents of cesspools are sold for their benefit, may be adopted with safety as founded on fact.—*Scottish Farmer.*