

AGRICULTURAL IMPROVEMENTS.

The Culhorn Grass Parks were let last week. The result of the set is a great encouragement to proprietors to improve their lands, and to all farmers to follow the example shown by Lord Stair, of *ploughing deep, cleaning thoroughly, manuring liberally, and sowing out with good seeds.* If good management is profitable to a proprietor, it must be doubly so to a tenant, who can perform all the operations with more economy, and with a more minute superintendence. That the improvement of the lands of Culhorn farm has been profitable to the proprietor is certain, for we have observed that he has had throughout superior crops of all kinds; and when the lands now came to be let in pasture, they yield a rental more than double of what they were let at in 1840, when Lord Stair entered on the Culhorn estate. We are enabled to give the former and present rents; and considering that a considerable part of the lands did not require the expense of draining, and were improved only by deep ploughing, cleaning, and manuring, the "contrast" of the former and present rents is very striking:—

	Former rent.	New rent.
Glenhappel field, 4th year's grass	£60	£155
Craignochs, 2nd year's grass, about	40	90
Gemekeeper's Park, 3rd year's grass	35	78
Clover field, 1st year's grass ..	28 10s.	66

We attended the set, and were much pleased to see the fine grasses upon the fields, after being two or three years in pasture, proving themselves the true perennial, by coming away as thick, and looking as green, as if they had been sown out last year. There is a great general improvement in Wigtonshire, of late years, in the selection of grass seeds, for we recollect when tenants were content to sow out their fields with any cheap rubbish they could get, from gentlemen's stables or from inns, and many did not sow grass seeds at all. But still there is an unwise economy in purchasing grass seeds; and sometimes, for the sake of 6d. a bushel, a tenant will sow an inferior article; and to save 5s. or 10s. on seed for a field, will incur £5 or £10 a year of future loss in inferior crops of hay and pastures. Lord Stair has taken great pains to suggest and recommend to his tenants in various ways the best modes of agriculture, but he has also taken the most effectual way of teaching them by example; and we are not sure but a walk through the Culhorn fields just now, will read a lesson as practically convincing as the best lecture of Professor Johnston or Dr. Murray, or even as the shrewd practical disquisitions which his lordship delighted so much to encourage in the Stranraer Farmers' Club.—*Free Press.*

DALE'S HYBRID may be sown a little later than the Aberdeens, and the same culture, distance, &c., apply to them.

SUBSOILING, MANURES, &c.

TO THE EDITOR OF THE MARK LANE EXPRESS.

SIR,—It appears from the remarks of Mr. Cherry made to the Royal Agricultural Society of England, and reported in your last week's paper, that he and probably many other farmers are not aware that subsoiling can be, and is, carried on without the horses treading either the loosened subsoil or the newly ploughed soil.

The manner in which it is practised here (Suffolk) for roots on light land is—the land is ploughed in three-rod lands, and, as usual, the subsoil plough follows the common plough. The subsoil plough (Reid's) is drawn by three horses, yoked to a steelyard whippetree. This whippetree is four and a half feet long, and has a fixed hook at one yard from the end, to attach it to the plough, with a moveable hook at each end for the plough horses. Holes, two inches apart, are drilled in both ends of the whippetree, ten holes in the longest end and five in the shortest. These are to allow the moveable hooks to be shifted to suit the draught of the horses; a bolt passes through the holes, and fixes the hook. The horse walking in the furrow is attached to the shortest end of the whippetree, and a pair, as in the common plough, to the longest end.

In order to prevent the trampling of the horses on the subsoiled land, the horses in the common plough walk on the *unploughed* land, instead of one walking in the furrow where the subsoil plough has just been. The line of draught is adjusted by altering the head or bridle of the plough. In shutting up the furrows, the horses are made to go at length in both ploughs instead of abreast as usual. All poaching the land is thus prevented.

Manures, &c.—The subject of manures and deodorizing substances having much attention drawn to them at present, I am surprised that the plan followed in many farm houses, which supplies a manure nearly, if not quite, equal to the superphosphate of lime, has not yet been mentioned.

Thus, erect a brick-walled bin about six feet deep, and let the house sweepings and ashes from the fires be mixed with the house slops, as urine, soap-suds, &c. This forms a mass not much unlike superphosphate, and containing the same useful constituents, viz., the phosphates in the urine, and the sulphuric acid in the ash. Besides the ash absorbing everything, it (from the sulphuric acid it contains) acts as a deodorizer in destroying nearly all the disagreeable effluvia. Where there is but little ash from the house, powdered gypsum (being a sulphate of lime), peat and clay ashes, and peat and wood charcoal, might also be used with advantage.

In some cottages the ashes are thrown down the water-closets. This, when sufficient ash is used, makes a stiff and comparatively inodorous mass