exercises no direct control on the plough: hence the experiment was instructive. Another trial was made, extending the distance to 210 yards between the engines, when, with both a Kent turn and an Essex rest plough, very good work was accomplished. The subsequent trials were made with a two-wheel single engine, the wire rope being returned through a pully anchored opposite the engine, and were equally successful as regards the work done. When a common swing plough was tried, the downward draught buried it beyond the necessary depth at once. From these rude trials, with an engine of ten-horse power, which is locomotive, or can be drawn by two horses, we think there is little doubt of the practicability of the plan, as now tested; but on the question of its economy, nothing but actual experiments on a large scale, with suitable implements, can determine.

These engines possess great advantages, in being applicable to threshing and other agricultural purposes, and can be moved from farm to farm or from one field to another with the greatest facility. The mode employed for taking up the wire rope constitutes the patent. The compactness of the engine is admirable; for, while it is equal to ten-horse power, and performs three distinct operations, its compass is only 10 feet by 6½ feet, the height of boiler being 5 feet. There is now every prospect of an extensive and profitable application of steam power being made to many of the purposes of agriculture.

BENEFITS OF AGRICULTURAL EXHIBITIONS.

Horace Greeley of the New York *Tribune*, in writing from the State Fair at Syracuse, thus speaks of the utility of such exhibitions:—

"There cannot be less than two or three hundred different kinds of agricultural implements on exhibition here—horse-rakes, cultivators, straw-cutters, subsoil and all other plows, new bee-hives, water-wheels, horse power saws, &c. &c. I consider this altogether the most important feature of the Fair. A great ox may be reared by a greater fool; but no man who ever worked a year at farming can spend a day among these implements and inventions without being stimulated to *think*. The great end of all such exhibitions is an improvement of the breed of farmers—of men. Now the man who has been skimming over a hundred acres of land for the last twenty or thirty years, plowing six inches deep, manuring with his good wishes, and growing fifteen or twenty bushels of corn to the acre, cannot spend a day in one of these Fair enclosures, without being startled and shamed. These subsoil plows, one of which, properly used, would double his usual product of corn and vegetables, and in dry seasons treble it—these straw-cutters, with one of which his scanty crop of hay might have been made, with the aid of straw, stalks, &c., to winter his stock bountifully—these cultivators, seed-planters, horse-rakes, and other labor-saving implements, must set him thinking. What sort of crops do those farmers obtain who use such implements? Who make the most by farming—the fifteen or the fifty bushel corn-growers? What sort of farmers is it who are able to buy land, when any is for sale low for cash? What sort of farming leaves land in condition to sell advantageously? These questions arise spontaneously in the simplest minds, and they will be answered. I don't believe a farmer can attend three successive Fairs, and not resolve to farm better through all his life afterward.

"No other business could bear to be managed so wretchedly as farming still is. Only think of civilized men killing their bees to get the honey, in this nineteenth century after Christ. Killing a cow to obtain her milk would be on the same principle. Yet to this day half the bee-men smother their bees to get the honey, although the land is full of simple and cheap hives, on a more humane and economical principle. How long shall the stupid barbarism of smothering bees continue?"

MODE OF FATTENING CATTLE IN GREAT BRITAIN.

John Bull loves fat beef, and some of the beef in that country is made enormously fat. The following is the mode of feeding adopted by the Messrs. Davey, and some others, in Scotland. The cattle are kept in what are called boxes or pens, and the following feed given them daily, to each:—

2 lbs. linseed, (flaxseed), cost	2½ pence.
6 lbs. barley meal, or rye,	4½ "
84 lbs. turnips, . .	4½ "
14 lbs. hay, . . .	4½ "
Attendance and fuel,	1½ "
	17½ "

or about 30 per cents. of Yankee money per day.

The chopped straw or hay was first mixed with the meal, in a shallow wooden cistern, and was incorporated with the linseed or flaxseed, in a boiling state. The cattle were fed six times per day, and on this system they were enabled to fatten an ox weighing 10 cwt. of the very best quality of meat, in sixteen weeks. It is stated that the farmer is enabled thus to feed three animals, instead of one on the old system, and thereby make a quicker return of capital, which is the life of trade. It will be seen, according to this, that if it takes sixteen weeks to fatten an ox, at 30 cents cost per day, the cost of fattening would amount to nearly 37 dollars. Their markets must be very excellent, to allow them a profit.

We guess the thing could be done here much quicker, and more profitably, on Indian meal and potatoes.—*Maine Farmer.*

ON PLOUGHING.

In wet soils it is necessary to have the fields ploughed in small ridges, so that the open furrows may carry off the superabundant water. Those who are possessors of such land I shall pass by in the meanwhile: it is only those who occupy thoroughly drained lands, or who have had the good fortune to have naturally dry, that I wish at present to address myself. Although I do not mean to say that I will disclose a mystery, yet I shall endeavour to point out a prevailing error which every day meets my eye, for even on land thoroughly drained, or naturally dry, the old eighteen-feet ridges are still persisted in. Being for sometime back annoyed at the insignificant appearance of the crop in the 'hinting fur,' (as we locally term them), I was desirous of having the matter decided, as to what difference there was from the even field. On a field of oats after lea, I had an average furrow cut, three feet in breadth, and the same breadth on the even field alongside. Both these were carefully threshed, and the result was, that the even field produced exactly three times the quantity of grain grown on the same breadth of land, I may say partly laid waste by the open furrow; the average produce of the field was seven quarters per acre; and had that field been ploughed as it ought to have been, without an open furrow, the produce would have been increased three bushels per acre,—hence the advantage of the turn-wrest plough.