

THE STEAM CULTIVATOR.

To the Editor of the Canadian Agriculturist:

DEAR SIR,—In that very interesting and unique little book called "Falpa," or the "Chronicles of a Clay Farm," a picture is drawn before the reader of an instrument (not rolling on the ground, but) performing independent revolutions behind its locomotive, cutting its way down by surface abrasion into a semicircular trench about a foot and a half wide, throwing back the pulverised soil as it flies from the feet of a dog scratching at a rabbit-hole.

The only approach to this description in a practicable form, the idea of steam being omitted,—is Samuelson's digging or forking machine, which is said to bid fair for superseding the plough in many cases.

To persevere the plough is with many considered an impossibility. Though hitherto almost the first object of the farmer's acquaintance, and the first of his implements of tillage, the numerous attempts made to invent a substitute are plain demonstrations of the inefficient and unsatisfactory working of the instrument.

A machine somewhat similar to that described by the author of "Falpa" is at present being constructed in England. Invented by a Canadian and patronised by the Bureau of Agriculture, it goes before the world with many indications of success. It has already received the approval of Mr. Mechi, on whose farm at Tiptree Hall the first trial is to be witnessed.

The inspection of a model is necessary to a correct idea of the machine. Differing from that portrayed by Mr. Hoskins, its steam power is stationary, or more properly speaking not locomotive, but placed in a cart drawn by horses, and giving motion to a cylinder behind, armed with teeth; or to quote "Falpa," reminding one at a distant view, of a half-bred between a hay-tedding machine and a Crosskill's clod-crusher—but unlike them, fundamentally distinct from any and every instrument that was ever seen in a field, as doing its work not by traction, not by its rolling weight, but driven by its axis, as the steam-paddle, the circular saw, the driving wheel of the locomotive, are driven; supported by its own apparatus, and abrading the soil with its armed teeth, first cutting its own trench, burying itself to the required depth, and then commencing its onward task, *tearing down the bank* (so to speak) on the advancing side, casting back the abraded soil, *earth's saw dust*, "commuted, aerated, inverted" into the trench it leaves behind.

This much for Romaine's Steam Cultivator armed with the Falpian claw, that "works up the earth so fast."

I am, dear Sir,

Your obed't servant,

A. KIRKWOOD.

Quebec, Sept. 5th, 1853.

Abundant crops cannot be grown for a succession of years, unless care be taken to provide an equivalent for the substances carried off the land in the products grown thereon.

THE PLOUGH SUPERSEDED.

The machine described in the following letter, which recently appeared in the London Times, is, we are informed, an invention of Mr. Romaine, formerly foreman in the Queen's Printer's Office, Quebec. Mr. Romaine, it appears, is now in England, for the purpose of completing and introducing his machine in the British Islands. We heartily wish him every success:—[Ed. Ag.]

To the Editor of the Times.

SIR,—A calm and rigid investigation and computation have convinced me that the doom of the plough, as an instrument of culture, is sealed, and that the rotatory forking, or, as it is wrongly called, digging machine, is the only profitable cultivator. Even with six or eight horses, it is cheaper and infinitely more effective than the plough.

Since the trial of implements at my "gathering," I have received from one of our North American colonies the model of a newly-invented machine, which, by a happy and most simple combination of horse and steam power, will—and I pledge my agricultural reputation for it—not only deeply, cheaply, and efficiently cultivate and pulverise the soil, but at the same time sow the seed and leave all in a finished condition. It will also, by a simple inversion, cut and gather the corn without any rake or other complication; while, both in cultivation and harvesting, its operation will be continuous and without stoppage.

The inventor and his machine have, by the government of the district (!) been placed under my charge and guidance. I have, therefore, on public grounds, and considering the vast importance of the invention in a national point of view, advised the inventor to grant licenses for its manufacture, at a very moderate royalty to the most eminent agricultural implement-makers in various parts of the kingdom, so that our agriculturists may be secured by competition against monopoly or inferiority, while the inventor will benefit in proportion to the appreciation of his merits. I shall call together a meeting of the various implement-makers, and in due time my practical friends of the old school (who must now consider me quite insane) will have an opportunity on my farm of forming their own conclusions.

I may venture to state generally that the implement when complete will weigh about 20 to 25 cwt., will require a pair of horses, and will represent the power of about 8 to 12, or more, real horses.

I trust I need hardly say that I shall have no pecuniary interest in this matter. The invention has been duly secured. I am, Sir,

Your obedient servant, J. J. MECHE.

Tiptree-hall, Kelvedon, Essex.

The implement for digging will require one man and one boy only, including the management of the steam-engine; in reaping, the same, with the addition of three men to bind as the corn falls into their arms. The men will be carried on the machine.