

the sunken portions of the inequalities of the soil. These, therefore, in many instances go uncultivated; and as we examined a great deal of the work done by Fowler, we can fully verify this fact. The fields, indeed, must be laid out specially at right angles and even in surface before ploughing by steam, according to the plan of Mr. Fowler, can be effectually done. We must say, however, that the furrow slice was cut much better than we saw it upon previous occasions, and the soil was fairly inverted; but when compared to good horse ploughing it is much inferior at present, and unless it can be done more economically than the latter, all things being considered, the invention is not yet in operation that it is at all likely to supersede the plough, assuming that the practice of inverting the soil is to be adhered to. The following may be considered as a fair summary of the details involved in Mr. Smith's plan, and in that also of Mr. Fowler:—

SMITH'S APPARATUS.

An eight-horse ordinary farm engine, sufficient to work all the implements. Windlass and tackle easily shifted from place to place. Anchor sufficiently firm for all useful purposes. This is a kind of safety-valve when the implement chances to strike against a root, or a large stone, as the anchor gives way, and thus prevents the breaking of tackle. The ropes being coiled on a windlass, triangular and crooked fields are as easily cultivated as square ones. The turning bow is arranged so as to turn ploughs, cultivators, harrows, rollers, drills, or other implements. The trenching plough exposes a greater surface to the action of the atmosphere than the common plough, and cultivators can break any strong land, even in the driest weather; a common plough can also be added to the same apparatus. Smith's anchor, and windlass, and plough, exclusive of the engine, is £187, and is therefore within reach of the ordinary farmer. Any repairs necessary can be done by a blacksmith.

FOWLER'S APPARATUS

Requires an engine nearly double the power of that of Smith's. Windlass must be separated from the engine for removal. Anchor stands great resistance, but should the implement strike against a root or heavy stone, a break down may likely take place. The rope being endless, necessitates anchor being parallel with engine; therefore crooked and irregularly shaped fields cannot readily be ploughed. Must work all double or two-way implements; even a drill must be so; the weight is thus greatly increased. Plough may be worked upon light land, but cannot work to advantage on clay land, nor can it break up hard dry land of any kind. The price of Fowler's apparatus varies according to the power of the engine employed. If for a seven-horse engine the price is £240; for an eighthorse engine £290; for a ten-horse £468.

(To be Continued.)

THE DINNER AT THE CHESTER MEETING OF THE ROYAL AGRICULTURAL SOCIETY, ENGLAND.

The dinner was numerously attended, and several distinguished foreigners were present, among them Mr. Sandford Howard, of the *Boston Cultivator*. We subjoin the greater portion of the eloquent and suggestive speech of the Right Hon. W. E. Gladstone, M. P., a distinguished statesman, merchant, and scholar, which will be read with nearly as much interest on this side the Atlantic as in the mother country:—

The Right Hon. W. E. GLADSTONE, M. P., was received with loud cheers. He said. My Lords and Gentlemen, I am quite sure that I could not fail of addressing what would be acceptable to you this evening if only it were true that the subject with which a man has to deal inspires with it ideas that appropriately belong to it; for you have chosen me, my lord—and it is only in obedience to your commands that I acquiesce in your choice—you have chosen for me an undeserved honor in entrusting me with the charge of proposing to this company that they should drink what every man will drink with the utmost satisfaction and joy—"Prosperity to the Royal Agricultural Society of England" (applause). For this is a toast, my lord, that carries written upon its very brow, the whole of its claims to an enthusiastic reception (applause). A society founded under the highest auspices, a society which invites in its support every class of the community; and which, therefore, is itself among the efficacious means of exhibiting to the world the union of classes, without which there is no strength in any community—