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The Water Drill.

It will be seen by the Prize List of the Provincial Association for the present year, that the Board of Agriculture, (at the suggestion of J. Marks, Esq., an old, tried friend of Canadian Agriculture, whom we most cordially welcome again among us,) have offered a liberal premium for a water or liquid manure drill; an article as yet, we believe, unknown in Canada, and probably also in the United States. A few years, therefore, in reference to this novel machine, which has been in use in the old country for some half-dozen years, will not be unacceptable to our readers.

The advantages of the Drill in cultivating grain and roots, are generally known and acknowledged; and the practice has been surely, and rapidly, extending in this Province for several years. Mechanical art most opportunely came to the help of British farmers when artificial manures, such as guano, super-phosphate of lime, bone dust, &c., were introduced as fertilizers, by so constructing the drill as to enable the machine to deposit the seed and these combined manures by one process, thereby effecting both economy and efficiency. The liquid manure cart, for distributing over grass or other crops during their incipient stages of growth, the drainage of the farm-yard, mixens &c., properly diluted with water, has now been a considerable time in use where agriculture has attained to an advanced condition, and the intro-

duction of the water or liquid manure drill may justly be regarded as among the most recent refinements of this indispensable and ever progressing art. Solid manuring substances, which can be dissolved in water, are by this novel process deposited below the seed in the most favorable condition for promoting germination, and accelerating the early growth of the plant; an object of great and general importance, and in the case of some species,—the turnip, for example,—altogether essential to the realization of a large crop. The advantages produced by the water drill, like most other agricultural operations, are modified by soil, climate, &c., and, therefore, it is unreasonable to expect the same results, in extent, at least, in all seasons and in all places. In many parts of England this machine has been employed, almost invariably with a satisfactory amount of success; and on dry, gravelly soils, the results have been often quite astonishing.

In a recent number of the *Journal of the Royal Agricultural Society of England*, Mr. Ruston has a very interesting paper on the Water Drill, in the use of which he appears to have had extensive experience. He uses Chandler's Water Drill; and when speaking of his mode of drilling tells us that when sowing mangel, cole-seed, or turnips, he invariably uses only two coulters, which, with a four feet six inches drill, makes the rows just twenty-seven inches apart. Mr. Ruston dissolves guano, superphosphate of lime,