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POSTAGE FREE.

The Field.

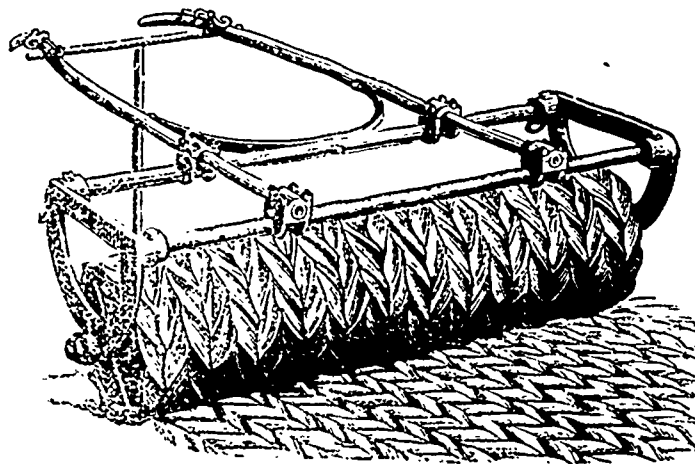
New Agricultural Implements.

We observe advertised in our recent British files, some novelties in the way of farming implements, a few of which we purpose to illustrate and briefly notice. It is impossible to over estimate the importance of the farmer being possessed of suitable implements. By their employment, the cultivation of the soil is more efficiently performed; and other things being equal—a much larger return is secured. We have repeatedly and the pleasing duty of recording in our columns, the gradual improvement and development of agricultural machinery in this Province. We trust the good work will jog merrily along, and that manufacturers as well as purchasers, will have reason to be satisfied. There are several useful ideas embodied in the implements noticed in this article, of which we venture to hope some of our manufacturers will hasten to avail themselves.

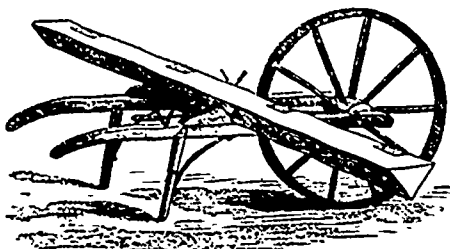
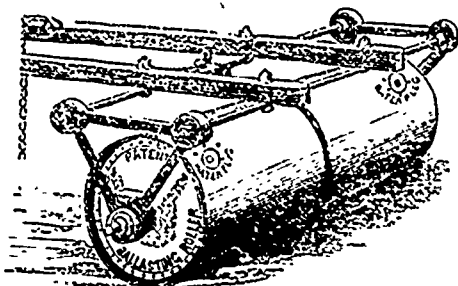
The first illustration represents what is termed "Spencer's Excelsior Roll and Clod Crusher." The advantages possessed by this implement appear to be—equalization of pressure, as shown by the imprint on the wood cut. The discs work independently and will thus consolidate the soil to the root of the plant more equally than any Roll we remember to have seen. The maker claims that "the wire-worm and grub are effectually destroyed; the clods thoroughly pulverized; the indentation of the discs approach nearer to the trampling of sheep than any other, and the objection to the row of clover coming immediately on the row of wheat is obviated." The maker does not state the selling price of the implement. Our next cut shows the roller to which was awarded the First Prize at the Newcastle Exhibition of the Royal English Society. As will be observed it is a cast-iron implement and embodies the novel idea of being constructed on the water ballasting principle. It is, as will be noticed, composed of two hollow cylinders which can be emptied or filled with water at pleasure by means of the two water plugs, indicated in the cut. The weight of the roller can, therefore, be conveniently regulated to suit the condition

of the soil, crop, &c. Amies, Barford & Co., of Peterborough, are the manufacturers of this implement.

Our last woodcut exhibits a "Grass and Clover Drill," with nothing particularly novel in its construction. It is light, strong, and cheap, and performs its work admirably. The drill is twelve feet long, and has twenty-one brushes and regulating coppers. It has double gear for varying the quantities of seed sown, and an arrangement for carrying the box diagonally on the harrow when not in use. This



useful implement has already been awarded six first prizes at first class British Exhibitions. Its inventor is Mr. T. Fry, of Bristol, and its price is about fifteen dollars.



Familiar Talks on Agricultural Principles.

EXHAUSTION OF THE SOIL.

EVERY one at all versed in practical farming knows quite well that there are soils once rich and productive that have undergone a change for the worse, and have become exhausted. They will not yield as they once did. People are accustomed to speak of such land as "worn out," "skinned," "hungry," and so

forth. These and other current allusions to exhausted soils, imply what is after all but little understood, namely, that they have been impoverished by bad farming. There is no subject connected with agricultural practice, on which people more need enlightenment than this. Not only is light needed in reference to it, but sharp reproof and censure deserve to be dealt out in many quarters, and in short every practicable means employed to put a stop to a system which has only to be pursued long enough to turn the most fertile soil, ever tilled by man into a barren wilderness. It is passing strange that men with heads on their shoulders can go on, year after year, tilling land that is all the time growing poorer under their usage of it, while they are asleep as to the cause of the change that is going on before their eyes, or, perhaps, using their brains about it only to wonder what can be the matter with soil that once yielded so rich a return for the toil spent upon it. If they would only reflect that every crop grown in a field takes a certain quantity of plant material out of that field, and that unless what is thus taken out be put back in some way, the field must necessarily be injured; they would adopt a wiser course than that of extracting from the soil, by successive croppings, its original store of fertility. In previous "Talks" we have explained what plant food consists of, and where it comes from. Now nearly all the substances in the soil, which renders it productive, pass from the soil into the plants which are grown in it. Ten out of twelve of the inorganic elements of the soil thus go out of it into cultivated crops. This has been made so plain and convincing by the researches of chemistry that there cannot be a shadow of doubt about it. Johnston

gives the following estimate of the quantity of matter taken from an acre by an ordinary English four-course rotation. He supposes that the crop of turnips may amount to 25 tons, that of barley to 38 bushels, that of clover and grass to 2 tons per acre, and that of wheat to 25 bushels.

For English crops, these are moderate figures, and a moment's reflection will show that large crops would cause a much heavier drain upon the productive resources of the soil. The reader will do well to bestow more than a passing glance on the subjoined table