

horse-power, whereby the one can be used in any position relative to the other, not necessarily, as heretofore, confined to a right angle or parallel position. This improvement was due to Messrs. Medcalf of Toronto, and we have no doubt will prove of immense utility and convenience.

OTHER IMPLEMENTS.

In potato diggers there were several shown, one in particular that claimed to possess the power of digging and cleaning the potatoes, and having them all picked up and in a box, and, moreover, thus effectually operating on three acres each day.

There were three stump extractors on the ground, two screws and one lever. All had their admirers, and if the size of the chains used is any guide, their strength at a pull must be immense.

In straw cutters the show was certainly most excellent; many kinds were heavy and strong—strong enough to cut not only the straw, but apparently also the fork used to handle it with. Some exhibitors claim that any small stick that by accident may get into it affords no impediment whatever, so far as breakage is concerned.

There are several smut machines, of excellent construction, and much was claimed for their performances.

The grain-cracker and corn and cob grinder was much approved of generally as among the most useful implements the farmer could possess.

The elaborate clover-cleaning machines are so far in advance of former exhibitions as scarcely to be recognized as an effect of the original conception.

There were several cider mills and presses, and visions of cider and excellent and palatable drinks were manifestly in the minds of the many spectators.

WAGGONS AND SLEIGHS.

The two-horse team waggons, with spring market waggons, were in great force, and numbers of excellent articles were on exhibition. One cart also, such as is used for light purposes, was shown.

In farm sleighs there was little shown, with one exception, which consisted of a combined sleigh, with wheels so arranged that if at any portion of a journey snow should fall, nothing more was required than to bear down on a handle, and the wheels did the work, to be again raised in their turn if the sleighing was again good.

BRICK-MAKING MACHINES.

There were two brick-making machines on the ground, one in actual work, and it certainly turned out an excellent article with rapidity; the other was not tried at that time, and was only a hand machine, whereas the first named was driven by power and pressed every brick in its turn.

DITCHING MACHINE.

The draining or ditching machine was much thought of—hitherto the digging of the trench for the tiles has been a great expense, but with the machine there seems to be no doubt that draining can be done wholesale and at small cost.

ARCHITECTURAL.

John Dennis shows a barn of new construction, the object being to dispense with the ordinary heavy timber used, and to substitute that of a very much lighter description. The principal feature of its construction seems to be that of first building a small barn with exceedingly light timber, and using all the well known strength derived from additional long braces. When this centre erection is completed similar additions are made all round the first, and attached to it there is also a horse power of the old cheap "finger and thumb" motion, said to be strong enough for eight horse power, which drives a threshing and unloading machine for hay and loose grain when unbound. The grain is delivered on a transverse railway arranged in the roof, which conveys its load to any part as required, and on its arrival at any one given point automatically delivers its load and returns for another. The new principle here developed and used consists of round 2 in. holes being bored, and square 2 inch hardwood pins driven into the piece that would ordinarily be morticed; the other end of the square pins is again inserted into the piece that ordinarily would be tenoned, and through each end of this square pin, where the two surfaces of the part of the timber to be joined are brought together, smaller pins of about $\frac{3}{4}$ of an inch in diameter are driven across, with a little "draw-bore," as it is called, which effectually brings all parts into close contact. It will be seen that by this means small hardwood tenons are virtually substituted for the ordinary pin, and can be therefore made much lighter.

GRAIN.

In spite of adverse harvest weather and the various troubles and difficulties that croakers are apt to bemoan so woe-folly, the appearance of the grain at the present exhibition affords abundant evidence that, in sections of the country widely spread, the quality of the crop has been better than usual. The samples of all the cereals, but especially of wheat and oats, are finer than we have seen them for several years; and in some instances there was an evenness of excellence that rendered it a matter of no small difficulty for the Judges to award the premiums. For the Canada Company's prize of \$100 there were more than the usual number of competitors, but the honour was awarded to Jas. McNair, of Vaughan, for a remarkably good sample of Deihl wheat, heavy, plump, and

even. The second prize of \$50, given by the Association, was gained by John Cullis, of Hamilton Township, for 25 bushels of Soules wheat, and the third to Joseph Freeman, of Flamboro, for the same quantity of the Deihl variety.—The first prize for the best two bushels of white winter wheat was to Joseph Redmond, of Otonabee, and the second to W. Taylor, of Pickering. The last-named exhibitor also secured the first prize for red winter wheat, and W. Grant, of Puslinch, obtained the second.

For the four bushels of spring wheat (any variety), John Hanna, of Manvers, obtained the prize of \$50 given by Messrs. Cook & Robertson.

The samples of Fife wheat were particularly good, not only in the section devoted specially to that variety, but in the mixed class, the Fife wheat took all the premiums. The prizes did not go to any particular district, but were divided over the Province in every direction, showing that no section has been specially favoured in the season.

There were some excellent samples of barley, many of which, in spite of the pervading wet weather, were not only plump and well filled, but bright in colour. Of the two-rowed there were six entries, Thomas Gibson, of Markham, taking the first prize. The competition in the six rowed variety was much greater, and Walter Riddell, of Cobourg, won the laurels.

There was but a small show of rye.

In oats there were a large number of entries, and the samples were unusually fine. Indeed, there was scarcely a bag of inferior ones among them. The judges had much difficulty in making the award—in white oats especially, which were remarkably fine. There were also several bags of heavy and well-filled black oats, the best sample of which was undoubtedly shown by W. Riddell, and gained for him the first prize.

There was less competition in peas, though the samples were good.

Indian corn was fairly represented, the palm going to Niagara in the person of H. J. Brown.

Five bales of hops were exhibited, mostly well cured, and in prime condition.

A DOUBLE CROP OF POTATOES.

We are glad to see that a spirit of discontent has arisen among some of the agriculturists about Windsor,—because it betokens progress. They are not satisfied with having one good crop of potatoes in a season, but think that, with our fertile soil and climate, we ought to raise two. The following is from a correspondent of the *Windsor Mail*:

"I send herewith a sample of a second growth of our common potato,—raised during this year, after the Chinese mode of cultiva-