

proper motion, and too commonly leaving more or less grain in the straw unthrashed. As a general thing, however, the machine thrashed cleaner than the flail, and the amount of work done by each bore no kind of comparison. Within the last few years the substitution of steam for horse power in this operation was considered, and very properly so, a great stride in advancement; but now the farmer is not content with thrashing out his grain merely, he must have it dressed, sacked, weighed and thoroughly prepared for market, by one and the same operation. Hence mechanical skill has recently been prolific in so modifying the threshing mill as to render it capable of effecting these various purposes at the same time, impelled by the agency of steam.

The accompanying engraving represents one of CLAYTON, SHUTTLEWORTH & Co.'s Portable Thrashing and Single Blast Machines for finishing the grain for market. It has consequently combined, a single blast, bolting, straw shaking, riddling, barley horning, and winnowing machine, all which operations it performs with accuracy and dispatch.

This well known firm have been distinguished for their superior manufacture of the combined Thrashing Machine, of which they may be said to have been the inventors, inasmuch as they were the first who produced a combined machine that proved of any real or practical use to the farmer. Their straw shaker has undergone great improvement, as it not only shakes the straw much cleaner than any other kind yet brought out, but the improvement has also diminished the wear and consequent expense in repairs, so justly complained of in straw shakers generally. Their new and improved Drum Beater thrashes all kinds of grain, and, from its peculiar construction, renders it much less liable to split the grain than those of ordinary kinds. It also accomplishes what has from the first been the great desideratum in thrashing grain by steam power: thoroughly extracting

the grain from the ear, whatever may be its condition, without splitting the kernel, thereby effecting a great saving.

The machine here engraved has one blower only, and is fitted with Barley Horner, (which can be used or otherwise at pleasure) and well constructed elevators for delivering the grain into sacks as thrashed, and makes four complete separations, viz: the corn, straw, chaff, and pulse or cavings, delivering each in the respective places assigned, and, in most cases, the grain requires only once passing through the ordinary dressing machine to render it fit for market. The price of this machine mounted on wood wheels, and the drum fitted with patent drum beaters, is £30 sterling. The illustration we gave in our last number of a portable steam engine manufactured by this firm is adapted to the working of the thrashing mill, and general agricultural purposes.

#### THE PROVINCIAL EXHIBITION.

The By-law for raising the money to build a Crystal Palace for the Exhibition has been confirmed by the citizens of Hamilton, the contract let, and the erection of the building, with the pens, fences, &c. energetically commenced, so as to be completed at an early day. The ground plan of the building has been extended from the original design, so that it will afford somewhat more floor space than the Toronto Exhibition Building, and will doubtless be sufficiently commodious for the purpose. There is now considerable probability of its being practicable to arrange for the exhibition to take place during the approaching visit of the Prince of Wales and suite, and in that case we had some reason to anticipate that the Government would be willing to afford additional aid, in the shape of money grant, towards it, by which means the Board of Agriculture would be enabled so to extend the Prize List, or offer such other advantages to exhibitors as to make the occasion a more than usually imposing