of metal that the team is obliged to force through the soil, it may pretty fairly be argued that no real utility could be gained to the country by the more general use of the iron plough. In competing for premiums it is not only proper that a distinct class should be awarded for iron, but also that they should not be put in competition with wooden ploughs, in the ploughing matches.

SUBSOIL PLOUGH.

There was only one subsoil plough entered for competition, and that too, was a hybrid, if the term is admissable. It had some advantages over all other implements of this kind, that have yet been manufactured. It was perfectly simple in its construction, and its operation in the soil very much resembled that of a wide crow bar working in the substratum horizontally, to the depth of from fourteen to eighteen inches. Most subsoil ploughs have a wing on the furrow side, about four inches wide, to partially perform the office of an ordinary mould-board; this wing materially increases the amount of friction, without performing any real service to the well-working of the implement. To obviate this objection, the implement under notice was void of a wing, and the subsoil, by its operations, would simply be broken and pulverised without removing or mixing it with the active or surface soil. On some soils the use of the subsoil plough would only tend to make the land like a quagmire, unless accompanied with thorough underdraining, an expensive operation, that could not be practised largely in this country with profit, but in other soils it would be productive of an exceedingly large amount of direct benefit. A close retentive or adhesive subsoil, in which water would be held like a basin, and not allowed to pass freely to considerably below the usual depth of ploughing, would, in nine cases out of ten, receive damage from subsoiling; but a permeable subsoil, that would crumble to the touch of the finger and thumb, may be subsoiled with the greatest degree of profit. Nearly one half of the arable land in Canada is adapted for subsoiling, without the expensive accompaniment of under-draining, beyond that of low grounds. The great increase of most of the usual crops grown in the country, that might be produced from this simple and unsightly looking implement, cannot be credited, without the matter being put to a practical test by the farmers themselves.

Although there was only one subsoil plough entered for competition, still the fact should not be forgotten that the Messrs. Emery, of Albany, and Messrs. Rapelje & Briggs, of Rochester, N. Y., had a very large assortment of subsoil ploughs, cultivators, and American ploughs of a great variety of patterns and sizes, drilling machines for grain and seeds, thrashing machines, and garden and field implements, of an almost endless variety of patterns, amounting in all to many thousand dollars' worth in value, all of which were arranged in a most beautiful style, and exposed for sale in a manner that, to Canadians at least, appeared novel and interesting. Too much credit cannot be given to those young men for having contributed so largely to the value and interest of this useful department of the exhibition. It is likewise to be regretted that the financial resources of the Association have been such that no substantial mark of commendation could be given them for the great expense they had taken in visiting our national show. This much, however, they have done for their several agricultural establishments: they have circulated some thousands of catalogues gratuitously through the country, which will doubtless, in the course of time, amply repay them for the money and time so liberally and zealously spent in the service of agricultural improvement.

THRASHING MACHINES.

There were only three machines for