

improvement of stock is another matter which deserves even more general attention than is now bestowed upon it by many of our enterprising agriculturists. Our annual Exhibitions are important auxiliaries in the securing of increased excellence in all these departments. They shew the farmer at once his deficiencies and his merits, by letting him see wherein he outstrips or falls short of his neighbours, and they excite an honourable emulation in all parts of the Province. They present an arena where men of all creeds and all political opinions can meet without angry passions or clashing interests, to contend in friendly rivalry for the awards which all are willing should be adjudged to the worthiest. They have done much good in past years, and we hope the coming London Exhibition will have a success not inferior to that which has attended the most successful of its predecessors.

### Trial of Reaping and Mowing Machines.

EDITOR AGRICULTURIST. SIR:—As the Trial of Mowing and Reaping Machines is always of interest to practical farmers, I beg to hand you the Secretary's report of a recent trial held under the management of the North Riding of Lanark Agricultural Society, which I trust you will find room for in your valuable paper

Yours, &c., L. H.

Ramsay, July 15th, 1861.

According to notice the Trial of Mowing Machines under the patronage of the North Riding of Lanark County Agricultural Society came off to-day, on the farm of Mr. Robert Lang, lot No. 14, 10th Con. of Ramsay. The decision is as follows: That No. 2, the Buckeye Machine, manufactured at Smith's Falls, by Messrs. G. M. Copitt & Bro., is entitled to the first prize. No. 4, Messrs. Froit & Wood's machine, although third in point of quality of work, yet in consideration of weight, portability, and general adaptability, being superior to No. 3, is entitled to the second prize. No. 3, Messrs. Patterson's Combined Machine, is entitled to the third prize.

JUDGES:—And. Dickson, Robt. McFarlane, Robt. Bell, R. W. Sutherland, W. W. Wilkie.  
David Campbell, Sec. & Treas.

August 1st, 1861.

The trial of Reaping Machines came off this day on the farm of Mr. Peter Young, lot No. 25, 7th Con. of Ramsay, awarded as follows. The Judges decided that No. 1, the Buckeye manufactured by Messrs. G. M. Copitt & Bro., is entitled to the first prize. No. 2, Messrs. Patterson's is entitled to the second prize. And No. 3, a Self-Raking Machine, is entitled to the third prize. They beg to state that in some points, particularly in the saving of the labor of a Rake, No. 3 is entitled to consideration.

JUDGES:—Robt. Bell, Robt. McFarlane, W. R. Sutherland, W. W. Wilkie.

David Campbell, Sec. & Treas. N. B. L. A. S.

### Cockle in Wheat.

EDITOR AGRICULTURIST.—Yesterday while working in my fall wheat field, I was curious enough to pull and examine a Root of Cockle which I found to have five stems, dividing into thirty three branches, having as many heads seed pods, containing fifty-one seeds each, all sixteen hundred and eighty-three seeds.

This little experiment will prove to the farmers how necessary it is to prevent the growth noxious weeds, which in most cases produce seed in greater abundance than valuable grain.

To those who are not acquainted with the plant, I may say that it is produced from small black seed, very like an onion seed, some in the fall wheat and is an annual. The plant grows about 3 feet high, and bears a purple flower, the stalks are very stiff and rather straggling. The best time to eradicate it is about the first of July, when it is easily known by its pretty bright flower. The principal objection to it, is the great injury to the flour when the wheat is ground.

R. L. D.

Dovercourt, July 7th, 1861.

### Smut in Wheat.

TO THE EDITOR OF THE AGRICULTURIST. SIR Permit me to enquire of you, whether smut wheat sown will have a tendency to produce smut; and if so, whether there is any means to prevent it. Some say that washing the seed with salt and water, and then drying it with lime, prevent the smut in the future crop. Others again, say that steeping it in a solution of white and blue stone, is a preventative.

Whether any of these operations would be a benefit, or if there are any others, you will do a great favor by informing me to such effect.

It is from the difficulty of procuring seed, year which is free from smut, that I write to you, concerning this matter.

Perhaps some of your readers could suggest something which would be a benefit.

By complying with the above request you much oblige.

Yours, &c.,

AGRICOLA.

Brampton, Aug. 25th, 1861.

REMARKS.—The disease called smut is likely reproduce itself, by sowing affected seed. would say to our correspondent by all means procure seed that is altogether untainted by any or any other malady, if possible; for too much attention cannot be given in selecting plump healthy grain for the purpose of seeding. Smut is produced by minute fungous plants, and occurs principally of two varieties. The first is the *Uredo Segetum*, and resembles a black mold growing within the glumes of wheat. It destroys the seed and its envelopes, converting them into black powder. The other fungus is called *Uredo caries*, the dust having a brownish