

is the parent of agriculture. It determines, on a small scale, the value of the principles on which an extended cultivation of the soil depends."

In garden vegetables, in fruits, in flowers, in shrubs, immense progress has been made within the past few years, mainly the result of propagating new varieties. In all departments of horticulture the exercise of skill and untiring perseverance is apparent, and should be an incentive to agriculturists to follow in the same path.

The pleasure, and in exceptional cases the profit, to be derived is so considerable that the propagator of new varieties will generally be amply rewarded for the time occupied in conducting the various operations of selecting, sowing, and reaping new kinds of grain. These farmers who are anxious to improve the varieties of grain in cultivation—wheat, oats, or barley, should adopt the same means as some so successfully followed out by horticulturists—hybridizing, and more especially by selecting the best ears, and growing the seed so obtained until sufficient quantities are secured to seed considerable portions of land preparatory to disposing of a portion of the seeds raised from the selected ears. The improvement of the domestic animals and birds has been mainly effected by selection, and the same principles are equally applicable for the improvements of the various varieties of the cereals in cultivation. This field of experiment is open to all, and the persevering may calculate upon success. Where so much can be effected with even an ordinary amount of attention, the experimenter who possesses a knowledge of the cereals, and also of vegetable physiology, is certain to reap a good harvest.—*North British Agriculturist.*

Agricultural Intelligence.

The Michigan State Fair.

The *Prairie Farmer* of October 4th observes:

The 14th annual fair of the Michigan State Agricultural Society was held at Detroit last week, and proved a complete success financially, and presented an array of articles and animals in the different departments that entitle it to a fair comparison with the most successful ever held by the society.

The opening day closed with a heavy thunderstorm, quite flooding the grounds and dampening the ardor of the members and exhibitors somewhat, but the second morning broke cool and clear with promise of fine weather which held good. Departments filled rapidly and the people turned out.

The attendance was very large Wednesday and Thursday. Parson Brownlow addressed an audience of about 15,000 on Thursday afternoon with a recital of personal adventures before leaving Dixie land—he was cordially received.

Horse Department.—The entries were numerous, but enough well known stock entered to attract great attention. Among them "Mag Charta," "Fanny," a celebrated trotting mare and many others of local celebrity. Seven excellent spans of matched horses were on ground for carriage and general work. Jags and mules were more in number and better than ever, showing the attention paid to this branch. The government demand for both horses and mules will tend to remove very many ordinary horses and their place will doubtless be filled with a better grade of stock if we may judge by the feeling shown among horse men and farmers.

Cattle Department.—The number of animals entered was large, comprising Devons, Jerseys, and grades. There were a good many fat cattle, some very noticeable ones. One especially, fed by Mr. Smith, Detroit, weighed over 3,200 lbs. The herd of Messrs. Crouse, Hatland, in part of imported stock, was very fine, and contained animals of much promise. The Messrs. Sly of Plymouth, noted breeders, had a fine herd. Several others from Ohio and Canada, showed good herds.

Sheep Department.—Here, as at Cleveland the Vermonters appeared in competition with local breeders and growers. The home exhibition was not what Michigan can or ought to have made. The show was made up of Lehighs, South Downs, French and Spanish Merinos. There is a large demand now for sheep corresponding to the government demand for clothing and want of cotton, and prices have largely advanced the past season. Large prizes are offered for fancy sheep. We would caution those desiring to commence to be very careful of whom they buy high priced sheep, that they do not suffer as many in the west have heretofore done.

Implement Department.—Anything that lessens the labour of the farm, and in part makes demands for the labor of those who have volunteered, gave this department especial prominence, and the usual number of new inventions, practical and impractical were shown, the proprietor of each demonstrating what fortunes he made or saved by their adoption. Reapers and mowers were well represented. R. L. Hard, of Buffalo, N. Y., showed the Ketch Reaper and Mower. The former has a very ingenious simple raking attachment, which the driver can operate with one hand, while the other drives with the other, or it can be so arranged as to be worked by the machine—the cost of the attachment is about \$10 for a hand reaper and can be attached to any reaper. He also showed an attachment to the reaper for cutting