

## Agriculture.

## A GRANDFIELD TEST OF AGRICULTURAL IMPLEMENTS.

A Marvellous Success.

(Concluded from last week)

D. T. Dell, President of the Kalamazoo Husbandmen's Club followed in response to the welcome of Mr. Burlingame in a speech fitly chosen, in many respects.

He said, among other things, that farmers were regarded as the mudsills of society. He, however, regarded farming as a profession, and in every way as honorable as the learned professions.

Speaking of the interests of the different sections of the state, he regarded them as identical. Whatever was for the material benefit of the Southern part of the state, was equally so for the northern. He dwelt at length upon the claim of superiority of other branches of industries over that of agriculture. In this the gentleman was sadly at fault, for to day the intelligent farmer stands as high in the social relations of life as any other of the individual members of society. Speaking of the effect which the meetings of such clubs must have upon the interests of agriculture, he held that such meetings could not be too frequent, and must necessarily be productive of good.

On the whole the speech of Mr. Dell gave good satisfaction and showed a good degree of intelligence.

At the close of Mr. Dell's speech Col. Messmore was called to respond on behalf of the press. He came forward and said briefly:

Mr. President and gentlemen, I simply come forward to return thanks for the flattering manner in which Mr. Burlingame referred to the press of Michigan.

While it is the business of the farmer to give to the world that which sustains life, and without whose products all other interests would be of no value; may life itself would be a burden. While this is the high position of the farmer, the work of the press is to provide food for the mind. Without the daily press, where would we be at the close of the 19th century in comparison with our present position? The inventive genius is at work day and night devising new appliances to lighten labor and facilitate the work of the husbandman.

No sooner is it conceived than the press places the fact of such conception in the hands of every man.

The intelligent farmer can not do without the newspapers of the country.

They look to the press for their mental food with as much interest as other industries look to the ripening harvests for that which sustains life and gives vitality and energies to meet the pressing duties of physical existence. The press is ever on the alert to give the earliest and most important information to the farmer. It is ever ready to expose wrong doing, from whatever quarter it may come. But I desire to take issue with the gentleman, Mr. Dell, with regard to the estimate in which the farmer is held socially and intellectually.

If by mud sills, he means the very foundation of all physical and mental greatness, then I agree with him. For I desire to ask upon what other foundation does our magnificent superstructure rest, if not upon the great agricultural products of earth. Indeed, farming is fast rising to the dignity of a learned profession. And

right here I desire to say to these farmers who so kindly listen to my talk and who are my neighbors, make farming so attractive that your boys will not desire to go to the towns and cities to live. Let them feel that there is a dignity in that noble profession which can be found nowhere else. Let them understand that in every handful of soil there is a world of wealth, whose depths have not yet been reached. Teach them that the science of chemistry will unlock the mines of wealth that lie under every foot fall.

The man who can fully analyze the different soils within his reach and tell the adaptability of each to different grains, grasses, roots and flowers has a knowledge of infinitely more value than that which the professional man can boast of. The farmers can easily master that science, and when he has once mastered it his calling will become so attractive that town or city life will have no overmastering allurements for him. He will have no desire to form one of the ten thousand professional paupers hid away in the top story of some block in the city. If there is anything on earth which we feel like pitying it is a professional pauper in some city, whose father lives on broad acres, surrounded by that freshness which the country farm life alone affords.

Farmers, keep your boys on broad acres if possible. God made the country, but of late years, especially, bad men make cities and villages. No doubt there is vice and immorality enough in the open country, but as compared to cities and villages it is a paradise. Bad women and worse whisky meet the farmers boy at every turn in our cities and villages, and if they escape the one they are almost sure to fall into the lap of the other. The farmer whose head is whitened by the winters of three-score winters can look upon the wonderful advance made in the profession, but who of you will venture to say that equally vast fields for improvement do not lie before your sons who come after you? No man can fix a limit to which chemistry will reach when fully and practically applied to the cultivation of the soil. It is a magician's wand which will unlock mysteries which mother earth has held bound in her bosom since the time when the stars first twinkled in the heavens.

Farming, it is true, has thorns as well as roses, but what vocation in life has not?

At the conclusion of the speaking the assemblage repaired to the tables upon the lawn in front of the house when a bountiful repast, provided by Mr. Sweet, and presided over by Mrs. Sweet, was rapidly despatched and thoroughly enjoyed by all present, particularly the "Boston Baked Beans," Mrs. Sweet's specialty, which received the highest praise from all present.

Anticipating that there would be a larger number present than they could provide for, the club made arrangements with Mr. Bradford, the Monroe street baker, who was on hand with a large supply of edibles, so that none were obliged to go hungry.

After dinner the various committees proceeded to their duties in inspecting the large number of implements offered for exhibition; the trial of harrows and cultivators commenced and the crowd scattered about the farm and fields, enjoying themselves according to their various inclinations.

The committee on Harrows and Cultivators consisted of Hon. E. L. Briggs, of Grand Rapids, Geo. Van Ness, of Byron, and E. Manly, of

Walker, and the that was made upon plowed and unplowed ground, and also upon a field of young corn. There were a large number of entries in this class.

In the department of Miscellaneous Implements the entries were almost numberless, and the committee, consisting of Lyman Murray, of Sparta, S. S. Bailey, of this city, and Robert Slater, of Paris, commenced their duties early in the day, and were kept very busy all day examining the various entries, consisting amongst other things, of mowers, reapers, self-binding harvesters, broad cast seeders, drills, hay forks, manure spreader, rollers, croamers, churns, &c. The report of this committee will be published.

The great centre of interest for the stock men present was Mr. Sweet's herd of Holsteins, probably one of the largest and best in the State, which attracted a great deal of attention from all present.

The special premiums offered by Grand Rapids merchants and manufacturers were awarded as follows.

1st—One Pinny Plow, offered by Grand Rapids Manufacturing Company, and one coil of steel barbed wire offered by Foster, Stevens & Co., for the person doing the best plowing, awarded to Wm. Arnett, of Grand Rapids township.

2nd—One Pinny Plow offered as second premium by the Grand Rapids Manufacturing Company, for the same object, awarded to Thos. Manley, of Alpine.

3rd—\$10 in gold offered by W. S. Gunn & Sons, to the boy under 18 years of age who shows the best skill in plowing, and a \$5 pair of pants from the Star Clothing House, awarded to Webby Ewing.

There were only two entries for the special premium—\$6 clothes wringer—offered by Carpenter, Judd & Co., for the worst plowing. The plows used were primitive, in fact almost prehistoric. One had the old wooden mould board of fifty years ago, covered with a thin sheet of iron; while the other looked as if it had the pattern of iron mould-board first invented, and in its woodwork was still more primitive than the first, having only a single handle. The plowmen were C. Millsom and E. G. Warner. Millsom got away with the wringer, and those who saw the furrows he turned didn't wonder at it.

The committee on all these special premiums was Messrs. W. Bair, O. A. Williams, and D. T. Dell, of the Kalamazoo Husbandman's Club.

At the close of the day it was universally claimed that the only mistake the club had made was in not having a three days trial instead of one day, and it was voted to have a similar field day every year. At dark the young folks repaired to the lawn, and, utilizing the planks composing the tables into a dancing floor, they danced until the small hours, and went home thoroughly satisfied, and wishing the club great success. It is estimated that at least twenty-five hundred people visited the grounds during the day, composed of the best classes in the city, the surrounding country, and from abroad. The affair was a complete success, and the club has every reason to be satisfied with itself.

## Horticulture.

## INSECT ENEMIES OF THE STRAWBERRY.

The "strawberry worm" is very destructive to strawberries over a large extent of our country, in the Eastern States, in Ontario, and extending westward into Missouri. Prof. Riley says

that "early in May the worms attract attention by the innumerable small holes they make in the leaves." In the month of July a second brood of the larva occurs, which enter the earth for pupation during the forepart of August.

Other insects known to be injurious to the strawberry are the following: The "white grub" of the May beetle, the grub of the June goldsmith beetle, and the grub of the beetle, which three species prey upon the roots; the "grapevine colaspis," of which the larva eats the roots and the perfect beetle the leaves; the "strawberry crown-borer," the larva of which bore the crowns of the plants to the extent, often, of killing them.

Another depredator is a small caterpillar named the "strawberry leaf-roller," from its habit of gathering around itself the leaf in which it lives. It transforms into a pretty little moth, known to entomologists as *Anchylopera fragaria* Riley. At times it has been quite destructive in Ontario and the Western States. Two other species of moths are also recorded as injurious to the strawberry, viz.: the "stalk-borer," *Gortyna nitela* Guen., and *Acronycta obliquata* Sm. Abb.

In the order of Hemiptera, which includes the leaf hopper, the plant-lice, the bark-lice, the bugs, &c., a species of plant-louse known as the "strawberry aphid," feeds on the undersides of the leaves and on the stalks. The "little lined plant-bug" is also destructive to the foliage of the plant. A small, round, almost black plant-bug, *Corymela atra*, is recorded by Glover as abundant, at times, upon the stems of the plants, which it punctures so that they wither and die.

It is possible that the insect perforating the leaves is the one which has lately been brought before the public as a strawberry leaf-beetle, by Prof. Cook, of the Agricultural College at Lansing, Mich. It belongs to the extensive family of Chrysomelidæ, and is known as *Paria uterrima* Oliv. Its transformations and habits were observed by Prof. Cook, and were found not to differ greatly from those of the grapevine colaspis *Colaspis flavida* Say. In larval stage it is destructive to the roots of the strawberry; in its perfect stage of a beetle it feeds upon the leaves. The beetles "are voracious feeders, and though small [an eighth of an inch in length], they are so numerous that in early spring, and after harvest, they completely defoliate the strawberry plant."—Prof. J. A. LINTER, in *Country Gentleman*, (condensed.)

## A NEW CLASS OF GRAPE VINES—TUBEROUS ROOTED.

Cochin China, which has within the past few years added many valuable flowers to our gardens, now promises a decided novelty in the way of grape vines. The gardener in charge of the government garden at Saigon, the capital of the French possessions in that country, has made known some remarkable grape-vines found there. As they are mentioned as "vines," we infer that there is more than one species or variety; they have tuberous roots and annual stems, their manner of growth being described as similar to that of the Hop. The vines are said to run from thirty to fifty feet, and to bear clusters their whole length. The gardener, referred to, speaks of the fruit mainly with reference to its wine making qualities, and merely incidentally states that, where he has added lime to the soil, the grapes are "very good." It appears that similar vines also grow in Soudan, in Africa, as one of the large French seed-houses advertises seeds from both countries.