

Roadmaking by Prisoners.

The experimenting in roadmaking by county prisoners undertaken two years ago by the Board of Supervisors of Oneida County, N. Y., has gone far enough to enable some judgment to be formed of its practical value. The second section of road built under the system has been completed, and statistics of cost are available for comparison with the cost of good macadam roads built under contract. The Oneida County Supervisors in the fall of 1899, after nearly a year of planning, purchased a road outfit, including a twelve-ton steam roller, a stone crusher and self-dumping waggons, at a cost of \$9,000, and offered to contract with the towns and villages for the construction of roads by the labor of the prisoners in the Utica jail. The county charges 25 cents a head for each day's work of eight hours actually performed, and \$2.50 a day for the services of the engineer employed for the steam roller. In addition, it requires the road district or village to furnish coal and road material and supervise the construction according to specifications agreed upon.

The first roadbuilding was undertaken in the fall of 1899, of a section seven-eighths of a mile long and sixteen feet wide, in the village of Vernon. This was not entirely satisfactory, owing to the experimental nature of the work. A large amount of preliminary labor had to be performed in developing a quarry, and the cost of the road and the time occupied in construction were unexpectedly great. After a year's wear, however, it is in perfect condition without any repairs. In May a contract was made with Road District No. 1 of the town of Whitestown for the construction of a road one and three-tenths miles in length through the village of New York Mills. The New York State specifications were adopted and strictly enforced, careful accounts were kept, and valuable data are preserved for the use of other towns and counties.

For 250 feet the road was 10 feet wide; for 4,760 feet, 16 feet wide, and for 1,900 feet, 20 feet wide. The macadam was six inches thick, with a crown of half an inch to the foot. Thirty-four prisoners on an average were employed, 2,109 cubic yards of 2½-inch crushed limestone and 703 cubic yards half-inch crushed limestone were used. The time occupied in construction of the road and on accessory drainage was fourteen weeks. The total cost of 6,910 feet of road, including wages of prisoners and all materials, was \$5,873.35, or \$4,517.96 a mile. A piece of State road adjoining, of equal length, built by contract, cost \$9,500. The *Utica Press* gives the following interesting figures of other roads built under the Higbie-Armstrong law:

Troy and Schenectady road, Schenectady County, two miles, \$16,517.51.
Deerfield, near Utica, Oneida County, two and a quarter miles, \$16,338.39.
Hamburg, south of Buffalo, Erie County, six and a half miles, about \$30,000.
Lebanon road to Massachusetts line, Columbia County, one and a quarter miles, \$9,992.87.

The Oneida County League for good roads is enthusiastic over the success of the work and hopes for the wider adoption of the plan. Mr. E. C. Walcott, superintendent of some of the factories of the New York Mills Company, the largest taxpayer in the road district, assisted in supervising the roadbuilding, and in report to the State Engineer points out some objectionable features of the present system. The law making an allowance to the Sheriff for prisoners' food and permitting him to save what he can from it he thinks should be changed. Prisoners at hard labor outdoors need more food than when in jail, and the Sheriff is under strong temptation either to feed the men inadequately or to oppose the outdoor work which cuts down his profits. The county furnishes one guard for each eight prisoners. They are entirely under the control of the Sheriff. Mr. Walcott finds that for lack of authority over them, the Highway Commissioner is sometimes unable to secure perfect discipline or exact a fair amount of work from them. These defects could easily be remedied. In spite of them, roadbuilding by county prisoners is a great success. It is good for the prisoners, and it makes possible good roads in places where the expense of other labor renders improvement hopeless. By the expenditure of the present wasted road taxes for the prison labor on the construction of permanent macadam roads, the towns of New York in a few years could obtain a fine system of highways to supplement the main thoroughfares to be built by the State. The Board of Supervisors in every county would do well to follow the example of Oneida, and turn the occupants of their jails to good use.—*N. Y. Tribune.*

Ducks Without a Pond—Spreading Manure in Winter—Golden Tankard Mangels.

To the Editor FARMER'S ADVOCATE:

SIR,—I noticed in a back number of the *ADVOCATE* parties inquiring about raising ducks without a pond. I might say I have had good success by sinking a trough in the ground so it would not dry out, and putting in a few pails of water daily.

I have read a great deal about drawing out manure in winter, which I approved of. I have had good returns from oats by top-dressing my fall plowing thinly in winter.

As for mangels, in this section the Golden Tankard is a great favorite for hogs and poultry.

Welland Co., Ont.

ROBERT CHAMBERS.

Domestic Science Session at Guelph.

In conjunction with the Experimental Union meeting, at Guelph Agricultural College, a ladies' session was held on the afternoon of Dec. 11th. Dr. James Mills presided, and welcomed quite a large audience. The speakers were Miss Laura Rose, O. A. C.; Miss B. Maddock, Guelph, and Prof. Ellen H. Richards, Boston, Mass. Mrs. Hoodless, of Hamilton, and Dr. Robertson, of Milton, were also present, and took part in the discussion.

Dress—Its Health, Influence, and Beauty—was the subject dealt with by Miss Rose. The chief consideration in dress is health, shape and fit, rather than ornaments and buttons. The sense of being well and fittingly dressed sets one mentally at ease, giving confidence in oneself. The dress should be suspended from the shoulders, rather than from the hips. Short skirts in walking or in the kitchen are altogether appropriate, whereas long skirts, except, perhaps, in the drawingroom, are a menace to society. House clothes should be chosen for their washing qualities, and be entirely innocent of frills and furbelows.

Domestic Science.—Miss Maddock, in opening, referred to the fact that this was the first session ever held at Guelph College to consider domestic science. The tendency of the rural population to gravitate towards the centers of population was touched upon, and the speaker pleaded for the making of the home life pleasant to the brother as well as the sister, and said a good word for the younger brother, which will cause the latter to rise up in his place and call her blessed. There should be no special advantage given the boy over the girl, nor vice versa. The mothers and sisters were urged to get out of the old ruts and to do everything possible to strengthen the family tie, so that boys and girls alike might look upon the home life as the pleasantest period of life.

Housekeeping in the Twentieth Century.—Prof. Richards, under this heading, dwelt on the necessity of study being given to the housekeeping problem. She reverted to the early days of this century and brought out clearly the active productive life of the Anglo-Saxon household and the major share which the women folk had in directing and managing it. The piles of linen, the barrels of beef, the boxes of candles, the strings of dried apples, the closets of preserves, the roots and herbs for dye pot and medicine chest, all required skill of hand, steadiness of eye, foresight, judgment, planning, and tended to develop a strong personality. The boys, as well as the girls, helped their mother in her manufacturing, but, with the evolution of the factory and the shop, the boys and men took over the main part of the old household work, the women were given their ease, stagnation of mind followed lack of occupation, women became "ladies," little girls were made to be seen, service became "common" and ignorant as the mistress lost her hold in knowledge of her materials. The energetic girls, feeling the loss that had come on them, went into their brothers' occupations, which proved a safety valve, to some extent, on the social machine.

Mrs. Richards admitted that housekeeping was somewhat of a treadmill: it was drudgery, because it was not creative, thoughtful work. It was in a transition stage, and was undeniably unsatisfactory and unsatisfying. But that need not be in the next century, if the young women would take another step and fit themselves, not only for teachers of Latin and mathematics, but for practical employers of labor and purchasers of material. To abolish friction and unnecessary work in the household machinery, to train the labor to skillful, systematic results, were worthy aims. The greatest need in the education of the 20th century housekeeper, continued Mrs. Richards, was in values—of textiles, of wood, of food. No one would study these, however, until the place of the home in the social life was re-settled, until the new product of the home was seen in the men and women, developed in them, in the character and ability, which was for the world's service, of greater value than could be obtained in any other way.

"Can the child be taught those elements of manly and womanly duty, self-control, self-sacrifice, self-restraint from a present good for the sake of a future greater good, anywhere else as well as in the family circle? Is there any other bond which will hold wayward fancies and still wild longings as firmly as the home bond? If not, then at all hazards there must be a house and home and a housekeeper whose spirit prevades the walls, the furniture, the food, the servants, the air. We are only beginning to understand the subtle influence which affects us. The food prepared by an angry cook—does it agree with us?"

"To have the new ideal house and home, we must have the real new woman with scientific knowledge and training in the use of power."

"Scientific housekeeping is what is good for us—a systematic division of the income between the different departments of expenditure; a careful balancing of the claims of each side of our nature. It is only possible in perfection in the house which the new architect shall build for us."

FARMER'S ADVOCATE BRINGS SUCCESS.

JOHN BURKE, Gatineau, Que.:—"Your Christmas number is invaluable. Please accept my sincere thanks for it, also for your valuable paper. I can safely say that I must attribute my success largely to its teaching."

Honey as a Daily Food.

Some farmers are in the habit of selling off all the best of anything raised, letting the family worry along with the leavings. It is pleasant to believe that in many cases honey forms an exception; that the farmer with two or three colonies of bees does not think of selling any of his honey, but leaves it all in the hands of the good wife, to do with when and how she will. Very wise indeed is such a farmer. Indeed, if he is wise enough, he will have honey on the table daily, even though he should be obliged to buy it.

It is good for the health to use honey. It is the product of pure air, sunshine and flowers. What could be more healthful. Many a poor mortal is today living a life of lingering torture or cruel self-denial, to whom the doctors have forbidden the use of all sugar and all foods abounding in starch. And the trouble came about from over-indulgence in sugar. This nation has a wonderfully sweet tooth. It is said that the average man, woman and child of the American Continent consumes more than a pound of sugar every week of life? Some more than that, some less; more than a pound a week is the average. Before that sugar can be worked into flesh and blood, it must be changed from cane sugar to grape sugar. When too much of this work is thrown upon the stomach, there comes trouble, sour stomach, headache, and all the varied ills that come from bad digestion. The stomach turns over the job to the kidneys, and when the kidneys have more than they can do, having no one else to turn to for help, they break down with disease.

The use of honey satisfies this craving for sweet without the dangers that attend the use of sugar. The sugar in honey is already grape sugar, all ready for assimilation. Give a child the choice between sugar and honey, and see which it will take. For too many children, bread and honey is a treat, a luxury, instead of being an article of daily food. The old man or woman of eighty, as well as the child, finds the daily use of honey both pleasant and healthful.

The average family of five persons would be considered as using a good deal of honey to use fifty pounds in a year. Many do not use ten. But the average of sugar for such a family is about 300 pounds a year. If half of that, or even 100 pounds, were replaced by honey, it would be for the betterment of the health of the family, and it is by no means an expensive luxury, the price seldom exceeding ten cents a pound, and so small a quantity satisfies, a little goes a long way. It should make part of one meal at least each day, and to our mind that should be the breakfast meal.

The Testing of the Vitality of Seed at the Central Experimental Farm.

The past season has in certain localities been unfavorable for the perfect maturing of grain. In some districts it has been injured by rain during harvest or from being stacked before fully dry, thus causing it to sprout or heat, while in other localities it has suffered more or less from early autumn frost. When exposed to either of these conditions, cereals are apt to lose a portion of their vitality or to have it so weakened as to produce when sown an unsatisfactory growth. The character of the crop is greatly influenced by the quality of the seed used, and to obtain the best results it should have its germinating power unimpaired, so that when placed in the soil the young plants may make a prompt and vigorous start. Hence it is very important that farmers should ascertain whether the grain they are holding for seed possesses the vitality necessary to produce a good crop.

By instruction of the Honorable Minister of Agriculture, provision has been made whereby the vitality of seed can be ascertained without cost to the individual, and any farmer in the Dominion, who may have any varieties of which he desires to have tested, can get the information he seeks by forwarding to Dr. Wm. Saunders, Director of the Experimental Farms, Ottawa, samples of such grain or seeds. Samples may be sent free through the mail, and an ounce or two is sufficient for the purpose. About two weeks are required to complete a test. It is hoped that all who desire to avail themselves of the provision offered will send in their samples early so that the work may be completed in good season.

More About Extracting Stumps.

To the Editor FARMER'S ADVOCATE:

I notice a question asked in regard to the best and cheapest mode of removing very large pine stumps after being pulled. Our farm was covered with this class of stumps. It was timbered with beach, maple, rock elm, and basswood, with very large pine trees mixed all through the other timber. Some of the stumps could not be removed after being pulled without being split apart. Many of the stumps after being pulled and split made two rods of fence. We would find the weakest place in the stump, and then with a long saw cut through the curl in the bottom of the stump, and with a steel wedge and sledge split the stump in two or four pieces as necessary. In this way we could handle the largest stumps without any trouble. We have two hundred and eighty rods of stump fence made with stumps which grew on one hundred acres. J. B. STONE, Northumberland Co., Ont.