

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
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THE FARMER'S ADVOCATE AND HOME MAGAZINE
is published every Thursday.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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astonished. Probably they had read about the length of alfalfa roots, but, again, it was not a reality. When, however, one digs up a root, every inch being harder to dig than the one above it, the impression of depth becomes very graphic and lasting. "I'm going to subsoil my whole farm with alfalfa roots," said one. It is safe to say both men will make larger and more intelligent use of legumes than they have ever done before.

Best of all, the boys shared their father's interest. The young "codgers" were all eyes and ears. Picking around in the earth, they discovered the nodules almost more quickly and eagerly than their elders. "Well," said one of the fathers to his elder son, "you know more about alfalfa roots now than I ever did." And there was no doubt he spoke truly. Those boys have received an impression they will never forget. Legumes, as nitrogen-gatherers, will no longer be an abstract idea to them. They have seen for themselves. It will not take them half a lifetime to appreciate the value of alfalfa and clover.

Now, that is the kind of thing that should be taught and illustrated in our public schools, not as a separate subject, but woven into the warp and woof of the curriculum. The value of the soil mulch in conserving moisture, how seeds germinate, the composition of milk, and any number of other important practical points can be most interestingly explained and illustrated before the child's mind. Our school-teaching has been too abstract for maximum efficiency from a pedagogical standpoint. There is nothing like actualities, and especially living things, to interest a child. Let the juvenile mind study, for instance, the germinating seed, and, as the embryo plant unfolds, the child's mind will unfold with it in the most natural way. Thus shall we educate our youth along lines that will be continued into old age, conducing not only to educational efficiency, but to the training of an alert, informed, masterful people, who will raise the plane of agriculture, the plane of industry, and the plane of character and citizenship.

A Study of Corn.

Mrs. Anna E. McGovern, of Cedar Falls, Iowa, in a late issue of the Journal of Education, has given an illustrative lesson on corn, intended for use in schools where there is more or less teaching of the elements of agriculture. Some of the questions may possibly set the older folks to thinking, also. At all events, they indicate how fruitful of suggestion the study of some common plants may be made:

1. What kind of roots has the corn?
2. How far do the roots extend into the ground?
3. Study the brace-roots found an inch or more above the ground. Of what use are these to the plant?
4. What is the work of the roots?
5. What is the height of the corn plant?
6. How many joints on a stalk?
7. Are the joints the same distance apart throughout the entire length of the stalk?
8. Does the stalk break more easily at or between the joints?
9. What is the work of the stalk?
10. Have you any reason for thinking that the corn belongs to the grass family?
11. Where do the bases of the leaves clasp the stalk?
12. How does this arrangement benefit the corn stalk?
13. Find the growth (rain guard) at the base of the leaf that prevents the rain from flowing down between the stalk and the clasping leaf. If water should get in between the leaf and the stem, how might it injure the plant?
14. What is the work of the leaf?
15. What kind of flowers has the corn plant?
16. What would be the result if the tassels were cut off as soon as they were formed?
17. Is there a thread of silk for each kernel?
18. How are the ears arranged on the stalk?
19. What is the difference between the outer and the inner husk?
20. What birds frequent cornfields?
21. How long does it take corn to mature?
22. What are the enemies of the corn plant?
23. Why are pumpkins not planted in corn fields as commonly as they were in former times?

School Corn Fairs in Kent.

THE CHATHAM TOWNSHIP CORN FAIR.

Editor "The Farmer's Advocate":

One of the ways the Ontario Corn-growers' Association are taking to arouse farmers in Ontario to the importance of the corn crop and the chance for the improvement of the same, is the School Township Corn Fair. The idea is by offering prizes to the school children for different varieties of corn, to get the parents interested. When the children come home from school and tell about the prizes they can win by exhibiting corn at the fair, the father and older brothers get interested, and in most cases it is their selection of corn that goes to the fair to be judged. Farmers who would hesitate a long while to show corn at the Ontario Corn-growers' Exhibition, would not hesitate to let their corn be shown by their children.

I believe that the idea of giving prizes for a type of corn which the Corn-growers' Association approve of to be the very best way in which to improve the crop on the whole. It will not only improve the crop of those who have shown corn in competition and won a prize, or those who have shown corn and failed, but have, by so doing, gained better knowledge of what a good ear of corn should be like, but it will also improve the crop of these contestants' neighbors; for what farmer would be satisfied to grow year after year a strain of corn inferior to that of his neighbor?

The work that the Corn-growers' Association are doing in Ontario, especially in Kent and Essex, is filling a want that has been for years neglected. The corn crop in Ontario for years had been planted and cultivated in a more or less indifferent manner, farmers in most cases going to the crib in the spring of the year to select seed, in some cases doing it with a scoop-shovel. To-day, in certain localities, certain individuals are producing a strain of corn which would compare favorably with anything produced in the corn belt in the United States. This is a direct result of the work which the Corn-growers' Association are doing.

Last year there were two School Corn Fairs held in Kent, one at S. S. No. 5, Raleigh, and the other at S. S. No. 2, Chatham. They were held as sort of experiments, and passed the expectations of the Association, with the result that this year they are being held in each township in Kent and Essex. The fair in Chatham Township was held in the township hall. It was organized some three weeks before it was held. A president, a secretary-treasurer and a board of directors were elected. Money was freely subscribed to meet expenses. The fair was held October 29th, and, considering the kind of weather, there was a remarkably large crowd of

people present. A programme of sports was run off while the corn was being judged. The judges for the corn were J. O. Duke, President Corn-growers' Association, and A. McKenny, B. S. A., Secretary Corn-growers' Association. The first prize for best five ears Yellow Dent was won by Gordon Cummings, S. S. No. 6, North. First prize for best five ears White Dent was won by Gertrude Lamb, S. S. No. 6. Best five ears 12-rowed Flint—1, Jean Stark, S. S. No. 6, South. Best five ears 8-rowed Flint—1, S. S. Shaw, S. S. No. 8. Best five ears, any variety—1, T. J. Shaw, S. S. No. 8.

In the evening, an open corn discussion was held. Mr. McKenny and Mr. Duke gave some very valuable suggestions in connection with seed-corn selection.

R. H. ABRAHAM
Kent Co., Ont.

HORSES.

Progeny is supposed to represent the prototype of ancestors. An ill-proportioned horse reflects the attributes of progenitors.

Temperament has a commercial value in the horse-breeding industry. Farmers should breed for reliable dispositions, as well as soundness and symmetrical conformation, if they expect to realize top market prices for their horses.

Sires should be perfect in qualities in which dams are deficient. If the mare is undersized, she should be stunted to a sire that possesses representative or average size of his class. Two undersized animals mated are almost certain to produce undersized progeny.

There is just one way of being even tolerably sure of raising sound colts, and that is by using sound sires and sound dams. Saving five or ten dollars on the service fee by patronizing an inferior or unsound stallion, makes most other forms of horse-breeding follies look like the proverbs of Solomon.

Soundness should always be insisted on in purchasing a horse. One can usually buy an unsound horse much more cheaply than a sound one, but such practice is often poor economy. The horse that is sound is ready for a full day's work every day; the unsound horse seldom, if ever, can do his full quota, and is a source of discomfort and annoyance to his driver.

The breeder should not anticipate miracles in the laws of breeding, but rather anticipate their ordinary operation along the lines that "like produces like." When fillies attain the age to be relegated to the stud, the farmer should carefully weed out such as possess any marked imperfections, and breed only such fillies as show superior attributes of soundness and conformation.

Horses sleep but little—usually three to four hours in the twenty-four. Consequently, whatever can be, should be done to make them comfortable. Narrow stalls, insufficient bedding, stiffened joints on arising, all discourage the horse from lying down as much as he should, and some from lying down at all. These conditions should be remedied. Stalls should be wide and well bedded.

The care of the legs is really of more importance than the care of the body. They are subjected to severe concussion and strain, often covered with mud, and in the winter, ice, or soaked with water all day. These conditions are bound to injure the legs in time. While, in regard to the body, the use of a blanket largely displaces grooming, with the legs nothing can dispense with that care.

Danger of injury to the limbs, as well as discomfort, result from allowing a horse to remain all night with damp legs, covered with mud, in drafty stables. Wherever straw is used for bedding, one of the very best possible materials is at hand for cleaning and invigorating the legs. A willing groom, with a wisp of clean straw in each hand, is all that is necessary for putting the legs in excellent condition after a day's work in the mud and wet. A wisp of coarse pea straw, twisted, is even more effective in cleaning the legs than the straw of wheat or rye.

The mare in foal should never be overworked or fatigued, particularly under saddle or on uneven ground, or put to unsuitable work. Exercise throughout the whole period of gestation is beneficial in fact, necessary to both mother and offspring, and unless moderate work of a suitable character can be provided, concerning which there is rarely any difficulty with the heavy breeds on