The Weeder for Cultivating Crops.

An implement which is not generally known among farmers, but which, we believe, is bound to gain favor with those who have used it or seen it working, is the spring-tooth weeder, which can be used to great advantage in the early growth of grain, root and corn crops, for breaking the crust of the land, thus forming a moisture-retaining mulch, admitting the air to the roots and relieving the pressure of the baked surface soil upon tender plants, which retards their growth, delays tender plants, which retards their growth, delays their development, and in many cases makes all the difference between a failure and a good paying crop. Another advantage of the weeder is that it destroys the weeds in the crop while they are young and tender. These, if allowed to develop, prove a serious detriment to the crop by robbing the soil of moisture and appropriating nourishment which should properly go to feed the crop and bring it to perfection. Many advanced farmers have learned the importance of this point and are careful to take advantage of it, but there are many who do not seem to have grasped the significance of it, and it is to such that we desire to address this reminder. The importance of frequent stirring of the soil can scarcely be overestimated in the cultivation of all hoed crops, and applies largely to grain crops as well, and this narrow-toothed weeder is the only horse imple-ment that can be successfully used to break up and loosen the soil between and all around the plants so as to give them freedom to expand and do their best. Manure is good, but tillage is nearly, if not quite, as effectual in producing good crops, for no matter how rich the soil may be, if it is baked and bound it cannot feed the crop, and if weeds get headway they play the part of robbers of the soil and crop, and thus defeat the efforts of the honest and crop, and Consider land crops and Consider land crops and Consider land crops and crops and Consider land crops all win the consider land crops and crops and crops and crops and crops are considered crops and crops and crops are considered crops and crops are crops and crops are crops and crops are crops and crops are crops are crops and crops are crops are crops and crops are crops are crops are crops are crops are crops and crops are crops ar husbandman. On clay land, especially in the spring after the grain has been sown, a heavy rain causes the particles of soil to run together and pack close, and when the sun and wind dries it rapidly it be-comes baked and a hard crust forms around the plants, preventing them from coming up and retarding their growth if they do get above ground. The use of the weeder at this time, before the land has become dry and hard, will break the crust and losen the surface sail giving relief to the plants and all the surface sail giving relief to the plants and all the surface sail giving relief to the plants. the surface soil, giving relief to the plants and placing them in a fair way to grow freely and fast, and this operation may, in one season and in one field, repay in the improvement of the crop the whole cost of a weeder which will, with proper care, last a lifetime. In the cultivation of the corn crop this implement is invaluable, as its frequent use will effectually kill all weed growth and at the same time promote the growth of the crop immensely, and it can be used until the plants have grown a foot high or more with great advantage. The weeder can also be used to good advantage for covering clover and grass seed, instead of using the harrow for that purpose, and one horse will do more work with the former than two with the latter.

Preserving Fence Posts.

To the Editor FARMER'S ADVOCATE: SIR,—In reply to J. L., of Grey Co., regarding the preservation of fence posts, would say that there might be some objection to setting the posts in masonry or concrete on account of the expense, and in the next place, of removing lower portion should they ever rot off or be broken near the surface. In my estimation it would be better to char the lower ends of dry posts, or encrust them with hot lime, which could be done without much expense by placing a barrel deep enough in the earth to slack the lime and dip the posts in. If the posts are green timber there would be no advantage in any of the above preparations, as they would be more inclined to take an inside dry rot. In light, sandy soil it would be well to dig the post holes large and puddle the post in with clay. Yours truly, A.W.M. York Co., Ont.

Re Commercial Fertilizers and Preservation of Fence Posts.

To the Editor FARMER'S ADVOCATE:

SIR.—Seeing a communication in your January issue from J. L., Grey County, with regard to commercial fertilizers, I would say that I have used these fertilizers, and they have been used a great deal in the vicinity of Toronto, where farmers, having sold their farms at the time of the boom, and the purchasers having sold each year any hay that there might be, then allowed the land to remain in a state of waste. After the collapse of the boom the land came back to the original owners; the question arose with them what was the quickest and best way to obtain a crop and a catch of clover. Bone meal, then at \$22 per ton, was freely used, and in heavy soil it was found most beneficial and well paid the investment, but it was not found to be so desirable in light sandy land, as it appeared too hot. From experience, the commercial fertilizers can be sown and harrowed just before the grain is drilled in, and on any but very dry, sandy land it is a great benefit, and it will generally enable the farmer to obtain a catch for his clover seed. This year I am experimenting with Albert's Thomas-Phosphate at \$25 per ton having put it in land sown with fall wheat, but of course cannot yet speak of the results. With regard to the preservation of posts, if the bark is taken off them and they are then given a good coat of Finch's Wood Preservative, I think the user will be satisfied with the results. SUBSCRIBER. York Co., Ont.

EVERYBODY LIKES THE FARMER'S ADVOCATE.

LIKE FATHER, LIKE SON.

Geo. Crocker, Lambton Co.:—"We could not get along without the FARMER'S ADVOCATE. My father has taken it nearly ever since it was first published. As a farm paper it is unequalled."

BEGINS THE YEAR WELL,

Walter Simpson, Bay View, P. E. I.:—"Your Christmas number was a gem, and was greatly admired by all who saw it. Your first issue for January to hand to-night—is a splendid issue. Send us a few samples."

IN GOOD TASTE.

Thomas McFarlane, Secretary American Aberdeen-Angus ssociation, Harvey, Ill.:—"Your Christmas number was excedingly creditable to your good taste and enterprise, and will, trust, bring good returns for the large outlay thereon."

BEATS EVERYTHING.

J. R. Dillon, Wellington Co., Ont.:—"The Christmas number beats anything I ever saw, and the January 1st issue is worth a whole year's subscription itself."

TAKES THE CAKE.

John Craig. Professor of Horticulture, Iowa Agricultural College:—"Allow me to offer you my congratulations on the felicitous manner in which you wished your many patrons the good cheer of Christmas and New Year time. Your Christmas number exceeds in comprehensiveness of text, wealth of illustration and beauty of finish, anything I have seen in the agricultural field this year."

BETTER THAN EVER.

Alex. Hume, Menie, Ont.:—"We were much pleased with the Christmas number, particularly as it was all Canadian. Your January 16th issue is also good. If you carry out the year as you have begun it, the FARMER'S ADVOCATE will be better than ever."

John D. McLeay, Oxford Co., Ont.:—"In a few words allow me to say that the Christmas issue of the Farmer's Advocate is a 'Klondike' of itself and is emblematic of artistic, literary any practicable ability. When my friends in Scotland receive your Christmas number they will be agreeably surprised at sight of the many magnificent farms, and the views will be much appreciated. Congratulations!"

A REAL HELP!

J. S. McGurn, Hastings Co., Ont.:—"No farmer can conduct his business intelligently without the ADVOCATE."

"LONG LIVE THE ADVOCATE!"

E. C. Bligh, King's County, N. S.:—"I have been so busy of late that I have given the Christmas number of the ADVOCATE but a cursory glance. Now that I have a little leisure I have been scanning its contents more closely and am surprised and delighted with its whole make-up. Its pictures are an art gallery in miniature. I cannot but contrast in my mind the fine photogravures of its pages with the crude wood-cuts of my boyhood days. Long live the ADVOCATE, and may the shadow of its editors never grow less! I have loaned my last year's numbers of the paper to a neighbor, feeling that, on perusal, he will forthwith become a subscriber."

SUITS THE P. E. ISLANDER.

Fred G. Bovyer, P. E. Island: "The FARMER'S ADVOCATE comes more nearly to being a perfect farm journal than any other publication I am acquainted with. It suits the requirements of our Island farmers to a marvellous degree, considering the distance you are from us. It would add great sums to the annual income of our Province if every one of our farmers are a corn." got a copy.'

DAIRY

Convention of Cheese and Butter Makers.

A new dairy association has sprung into existence in Western Ontario, and from the work it has undertaken and the support it is receiving, its success is assured. The objects of the Association are: To advance and protect the interests of dairying and of dairymen, especially those of makers; to raise the standard of makers; to assist the patrons in the production and care of milk; to protect the patrons from unskilled makers, and makers from losses over which they have no control; to establish a better system of selling dairy produce, and to secure better sanitary conditions in connection with cheese factories and creameries. This, it will be seen, is an important and wide-reaching programme, but the officers and directors are live, energetic and conscientious men, who have already made the new association appear indispensable, at least to the membership of well over two hundred, which it is hoped will this year be doubled.

Their first annual convention was called to order by the President, T. B. Millar, London, in the town of Listowel, on Feb. 1st. There were about 400 per-sons present at the first session, largely cheese and butter makers, which, by the way, are the only ones accepted as members. The officers chosen for the ensuing year were as follows: President, T.B. Millar, London: Vice-President, G. H. Barr, Sebringville: Secretary, W. W. Brown, Attercliffe Station; Directors: George Goodhand, Milverton: E. Agur, Brownsville; James Morrison, Stratford; W. Brown, Attercliffe Station; John Brodie, Mapleton; T. E. Nimmo, Ripley; T. D. Barry, Ingersoll.

The President's address referred to the history of the Association, which had its birth about one year ago. On January 20th, 1898, a meeting of makers was held in London, when a Provincial Board was elected, which arranged to hold a public meeting at Woodstock on February 23rd and 24th following. At that meeting the organization was completed and officers elected. Mr. Millar referred to the co-operation and support the Association had received from the vast majority of makers, including many of the oldest and most prominent dairymen in Western Ontario. One thing referred to as having been done was the getting out of forms of agreement to be used between factorymen and

makers. These have been heartily received, which shows the advisability of such action. He advised the makers to work together for their mutual benefit, always with an eye to improve the quality of the goods produced. Mr. Millar endeavored to encourage the makers by pointing out that although they could not raise the price of cheese and butter they could increase consumption and therefore the demand by producing a uniformly high quality. There is no reason why we cannot make the finest cheese and butter in the world, but to do this anything of less merit must not be satisfied with. Milk must be delivered in first-class condition, and better fac-

tories, especially cheese-curing rooms, are needed.

Care of Milk. — Mr. W. A. Bothwell, Hickson, read a paper, which, if followed by all patrons, very many of the bad flavors in cheese and butter would be overcome. A fine quality of cheese or butter can be made only from fine flavored milk. If only natural grasses were fed to cows, and nothing impure was allowed to get into the milk, and it was made up right, there would be no difficulty from the raw material standpoint. It is unfortunate that classes of foods are often given to cows that produce bad flavors in milk, and too often milk, after it is drawn from the cow, is allowed to become contaminated by filthy surroundings. Milk should be aerated in pure atmosphere till all the animal heat has been expelled. If the weather is very warm, or the milk has to be held over Sunday, the cans or pails should be set in cold water. It should be kept in small quantities in an airy place away from bad odors. The milk should never be away from bad odors. put in a cellar, or it is liable to incorporate musty taints. Not only do many kinds of food give undesirable flavors, but impure water is a common source of evil. A cow will not drink foul water if she can get clean. Mr. Bothwell urged makers to refuse milk that was not in good condition. Mr. Bothwell pointed out that it costs as much to draw and make up inferior milk as that which is all right. This paper, as most of those read, was followed by helpful discussion.

Mr. A. T. Bell, of Tavistock, recommended patrons to keep the milk over night in pails hung on a scantling between posts. The scantling should have hooks on which to hang the pails, and should be roofed over with two boards to keep out rain, etc. A good way to air milk in such cases is to pour it from pail to pail a few times at intervals of a quarter of an hour. The importance of keeping everything in which milk is kept scrupulously clean was emphasized by Mr. Bell. He advised using a fine wire strainer, which should be used as soon as the milk is drawn. He had known bad flavors in a patron's milk to arise from bailing milk with a tinhandled dipper with a hole in the handle in which milk entered and became sour. A solid-handled dipper was recommended. The President advised the use of a good modern aerator in dairies of large herds where it was not practicable to have a pail for each cow. Keeping of milk in large bulk was strongly opposed. The use of a cloth strainer was vigorously condemned. A member recommended cooling milk by setting a corked jug of ice water in the milk or setting in a shotgun can with ice. It is not well to cool too low or bitter flavors are apt to arise. Mr. Robt. Cleland, of Alma, a veteran cheesemaker, and ex-president of the Western Dairymen's Association and first president of the Listowel Cheese Board, remarked that cheese-makers were, as a rule, well posted in their work, and that much of the trouble lay with the patrons. The industry is not suffering so much from lack of knowledge on the part of patrons as on their not doing as well as they know. He believed the character of cheese is largely fixed at the farm.

Mr. Agur, of Brownsville, contended that patrons were generally anxious to take proper care of the milk, but too often they did not understand how best to do it. He has found that by visiting patrons whose milk had to be returned, and giving them an object lesson in airing and cooling down a batch of milk, that the trouble with that patron ended there. In one such case, by pouring and cooling he reduced the temperature of a night's milking from 90 to 70 degrees in fifteen minutes. Prof. Dean recommended that a neat, kindly, goodlooking man be engaged by a certain number of factories to visit patrons at milking time, giving instruction in caring for their milk. President Millar expressed his intention to fill that office in connection with the three factories of which he is to have oversight the coming season.

Summer Buttermaking.—Mr. Fred Dean, buttermaker at the St. Mary's creamery, reviewed their system of making butter in the summer months. He referred to the need of common sense in conducting the work from day to day, as one is continually being met with new conditions. Cleanliness should be the keynote in all branches of the work. The system reviewed was similar to what was published in the Farmer's Advocate of July 1st, 1898, page 309, as the result of a day spent at the creamery by one of our editors. In the course of the paper it was indicated that the St. Mary's creamery, which is turning out about a carload of butter per week, s putting in a pasteurizing apparatus, so that a uniform quality will be insured from day to day and from week to week. This the British market

In the course of the discussion which followed, it was pointed out that a little salt paste put on the top of the butter in the 56-pound boxes prevents mold. Referring to the ripening of cream, Professor Dean pointed out that thinner cream ripened more quickly than that which has, less milk in it