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The Farmer's Mayocate "Persevere and Succeed." and Nome Magazine Established 1866.

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VOL. XLI.

EDITORIAL.

Mistakes in Corn Cultivation.

Few men thoroughly understand the objects of summer tillage of growing crops, consequently they often do poor work, and sometimes actual harm. The first object should be the formation and maintenance of a blanket of loose, dry soil to protect the capillary moisture in the firm soil beneath from the evaporating influences of sun and wind above. The second object is to permit circulation of air into, out of, and through the soil body. Moisture and air are necessary for the elaboration of plant food. A third object, though a minor one, is to open up the soil to a fair depth while the plants are young, so as to facilitate subsequent permeation of the roots. It is fortunate for many farmers that weeds threaten their crops. The cultivation they compel helps to fill silos and root cellars; but no man who understands the effects of cultivation will have much occasion for special work to keep down weeds. He will accomplish that incidentally

We are amused sometimes at mistakes made in cornfields. Some men wait till their corn is well up, and then go at it a few times with shovels like plows, blindly believing they are "liberating plant food." They certainly do liberate it, but with quite a different result than they suppose.

As plants can draw little nourishment from the loose, dry layer which forms the mulch, the effect of overly-deep cultivation is to shut off the roots from two or three inches of the fertile subsurface soil. In this well-aerated and somewhat moist lower portion of the mulch layer, humus is being gradually broken up and nitrates formed, which, the plants being unable to utilize them readily, are in part "liberated" to washing or leaching rain water. Four inches may be a permissible depth to cultivate when the plants are small, but as the lateral roots strike out, the depth should be reduced. A three-inch soil mulch is ample for practical purposes of conserving moisture, and, after the first cultivation it is worse than wasteful to go deeper. The third and fourth strokes should not be much over two incha hot spell in July and rip up the ground four inches deep, cutting off many feeding roots at a time when the crop could ill spare them, wasting precious moisture in the third and fourth inches of disturbed soil, and giving the corn a setback that counted many bushels per acre off the crop. Other fields alongside, cultivated shallowly and often, remained green and growing. Another common mistake is disturbing sticky soil. Just lately, in Essex County, we noticed a hired man at work in a field which was drying up after a prolonged rain. The surface was in nice condition, but the points of the shovels were plowing up sodden clay that peeled off in lumps which would dry into bricky clods. When asked why he did not set the teeth a little shallower, he replied, "I ain't the boss." Most hired men need watching in a cornfield.

Cultivator teeth require more attention than they generally receive. Avoid those which leave deep furrows where the sun can get down close to the roots and close to the moist, firm soil. In making a soil mulch, some earth must be stirred, the principles and methods by which they are loosened and dried, so as to be of little direct use to the growing crop. Let the layer be as shallow as will serve the purpose. It will serve the purpose best if distributed in an even layer. Ridging is wasteful of soil moisture. The best cultivator is the one which leaves the top loose and the mulch uniformly deep. Then, take pains

rows, and you have observed reasonable, practical precautions to provide an economical soil mulch.

Maintain that mulch throughout the season. Many cease cultivation when the corn gets about to the horse's back, for fear of breaking off leaves. The fact is there is more danger of injury of foliage at that stage than later. When the corn gets away up, so that neither horse nor man can be seen in the field, one can go through without fear of breaking off anything of consequence. wire muzzle will prevent the horse from snatching at the corn, and the leaves switch off the flies. There is danger of injuring the roots at this stage unless one is careful, but by using the scuffler only once through each space, throwing the ground towards the rows with broad-winged shares, which shave along about an inch deep, one will kill many germinating as well as larger weeds, prevent a crust from forming, conserve valuable moisture, and secure a paying increase

Searchlight on Insurance.

The investigation, by the Royal Commission appointed by the Canadian Government, into the life-insurance business, as prosecuted in Canada, has been proceeding leisurely, and, while the revelations thus far have not been so startling as in the United States a few months ago, still, transactions in the handling and investment of funds have been made public that fully justify the Government in ordering the enquiry, and, in our opinion, it has been made at an opportune time. This country appears to be entering the full tide of national progress and prosperity, when the concomitant struggle for display, material advantage and rapid wealth-getting naturally becomes very keen on the part of the people. Under such conditions, the temptations to make reckless or improper use of funds which are really held in trust for others, becomes very great. Hence the special desirability at this stage of letting in the daylight and anchoring upon principles and methods financially and morally sound. During the dog days the Commission may be expected to take a vacation, giving the insurance companies a respite till the early autumn. Thus far we notice that the enquiry has dealt altogether with the regular surance companies, or those conducted upon what has latterly been described as the "levelpremium " plan, whereby the amount of each premium is gauged according to the age of the insured, the number of premiums, and when payable, overpaying the cost of carrying the risk in the earlier years, but underpaying it in later years, when the death rate and risk inevitably increases. The other plan in vogue in the fraternal organizations is called the assessment system, by which death claims are annually assessed on the survivors, the proportion of deaths naturally increasing as the membership grows older. We presume the scope of the Commission is sufficiently wide to cover all these latter organizations, which are very numerous in Canada. Their membership is very large among people of moderate meanssurance which at the outset, at all events, is less costly. The hopes of provision for the future of a host of families-wives and children dependent upon the head of the household for support-is largely wrapped up in these institutions, and if conducted are sound and safe, then they are entitled to the assurances of the Royal Commission to that effect, and if, in these societies, as in the regular insurance companies, radical defects or objectionable methods have crept in, these should be rectified as far as practicable, and people put upon their guard for the future. Turn on the

No. 719

Utilize the Enterprise of Youth.

The next best thing to reading an agricultural journal is to encourage your boys to do so. It was a wise farmer we met recently, who said, in speaking of one of his boys, "He knows many things that I do not. He is a great reader. He does not bother very much with the newspapers, but he reads 'The Farmer's Advocate' from cover to cover. He often tells me this, that or the other thing that he has read. He persuaded me to sow that piece of alfalfa last spring. 'I see they recommend it highly,' he said, 'let's try it.' So we did. In the winter he spends pretty near all his time, when he is not reading, among the cattle." Afterwards we had a chance to shake hands with the young man. He was a trifle bashful, and not much of a talker, but he had a good headpiece, and the calves and other live stock under his care showed that he took an interest in his work. He will make a thrifty farmer and the best kind of a citizen. We felt like shaking hands again with the father for the frank admission that he was willing and able to learn from his son. The man who will do that deserves credit. Boys may need guidance, and sometimes restraint, but many of them have excellent ideas, and if given a freer rein and a little more encouragement to think and plan, they would lift some of the fathers out of the ruts into which they have fallen. Boys are enterprising, and enterprise is the quality most needed in agriculture to-day. The judgment of a fairly level-headed youth is often superior in certain respects to that of his elders, because the young man is untrammelled by habit or custom. He can size things up impartially in the clearest light of his own generation. A good thinking boy is an invaluable asset on a farm, and the father who is wise enough and open-minded enough to recognize the fact and give the lad a chance to assist in the management of the place, is doing the very best thing for himself, for his son, and for the homestead.

The Macdonald College.

As was announced in last week's issue of "The Farmer's Advocate," the trustees of McGill University, Montreal, have agreed to accept the property and endowment fund of the Macdonald Agricultural College at St. Anne de Bellevue, P. Q., to he used exclusively for the maintenance of the College and its work. This, we understand, does not involve any departure from the original purpose of the institution projected by $\operatorname{Sir}\ W_{\operatorname{m.}}$ Macdonald, under the direction of Dr. Jas. W. Robertson. The Principal and Faculty will control the educational policy and curriculum, but, naturally, courses leading to degrees conferred by the University, with which the college will be affiliated, must be approved by the University corporation. The structural and other work on the new college is going steadily forward.

W. R. Corwin, Secretary of the New York Comthose who have been attracted by a form of in- mittee of the American Reciprocal League, which advocates reciprocal tariff trade relations with all countries, but especially with Canada, in an address before the Detroit Board of Commerce, showed by statistics that the markets of the world are gradually being closed against the United States. He strongly advocated closer trade relations with Canada, and showed that, as a result of the commercial warfare of the United States with Canada, their manufacturers have been forced to establish in Canada mills and factories financed by American capital, and that there have been over 130 of such industries established in Canada within the last few years, employing something like 40,000 skilled laborers.