The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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It is impartial and independent of all cliques and 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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12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Hoots or Vegetables not generally known. Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.

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The Need of Coming Out. Why is it that farmers do not turn out in the old-time, enthusiastic manner to meetings and conventions? This question is causing no inconsiderable amount of worry and thought amongst those who have to do with agricultural propaganda and meetings by which those engaged in farming may be brought together. We do not care to mention any particular convention or character of meetings, lest readers might consider those particular organizations as no longer active, and look upon them as having served their usefulness, and now ready for that honorable roll that includes the names of many good movements long since relegated to history and seclusion. This is not the case. Several organizations there just as active and influential as they ever were, yet they are obliged to exert their influence through the Press and through their printed reports. A provincial institution or an organization covering a large territory probably will expect to reach the major part of its clientele in this way, but there are usually a number of farmers living in the neighborhood of the annual meeting place who could, under favorable tircumstances, attend the different sessions. It appears that men active in the pursuit of farming, including the many lines which are considered by different associations organized to foster these interests, have lost zest either in their work or in discussions relative to their enterprise. Why is it? The church is gradually adapting itself to the needs and whims of a more modern people Perhaps the modern program for the agriculturist must be brightened by the infusion of more color.

In one sense the present-day farmer is in a different position than was the man of one or two decades ago. Formerly there were more men and more boys: much of the labor was manual, and a pair of hands would not be missed so much at chore time as nowadays. Farmers of the present era do more work with mechanical assistance. The work formerly done by the boy is now accomplished with the aid of a milking machine, a wider drill, a two-furrow plow, an extra horse. The farmer is acquitting himself well in a time when the inducements held out by industrial life are having considerable effect upon the youth of the country. However, to keep things in order on the farm the owner must be there.

In spite of this apology for the small attendance so often seen at agricultural meetings, it appears that a few hours could be spent to meet others and enter into an carnest discussion of the matters that relate so closely to every-day work

and thought. There is a benefit to be derived from simply meeting and mingling with others, which farmers should not neglect or overlook. The keenness and alertness of the successful business man comes from his associations with other members of the same occupation and with men in all professions. The agriculturist should not fail to get the other man's viewpoint, and identify himself with all movements which tend toward better and more profitable life on the farm.

War Problems.

By Peter McArthur.

The new problems raised by the war seem to be endless. All the delicate machinery of civilization has been put to new uses, and, in some cases, the results are not only surprising but impossible to understand. In dealing with men and munitions we are dealing with concrete things of which we can know something, although the numbers and quantities involved in the war are beyond our comprehension. In describing the march of the German army through Brussels, Richard Harding Davis compared it to a cosmical force, and the best he could do was to record the stupefaction with which it overwhelmed him. And that army was only the vanguard of the thronging armies of Europe. I do not think that Napoleon, in his greatest efforts, ever tried to handle more than six hundred thousand men, and yet generals without a glimmer of his military genius are compelled to-day to try to handle armies of millions. Not only in handling men, hut in handling provisions, supplies and muni-tions, tasks have to be undertaken that demand executive ability such as the world has never known. John D. Rockefeller probably held the world's record for business and executive ability, but his Standard Oil Company was child's play compared to the organizations that have been made necessary by this war. What wonder that there has been bungling and failure in some quarters. The marvel is that they have not been worse. Almost every phase of the war is beyond the grasp of any mind. All we are really capable of understanding is the suffering and misery caused in individual cases that come under our personal observation. The total sum of misery and suffering is as unthinkable as it is unpardonable. And when we reflect that this calamity that has fallen on mankind is due to the ambitions of men we may be excused for quoting Browning's words

"There may be a Heaven. There must be a Hell." Of all the results of the war the development of finance is the most bewildering. Though we had become somewhat familiar with millions without understanding them very well, we now talk glibly of billions. But those billions do not represent money of the kind that we carry in our pockets. They represent credit. All the coined and printed money of the world would only make the small change of war finance. While trying to get some idea of wealth in its modern developments, it occurred to me that we might get a helpful analogy from chemistry. You I now that practically all elemen's and substances may be dealt with in three forms, according to the heat or pressure to which they are subjected. Iron, for instance, may be dealt with as a solid at ordinary temperatures. When heated in a furnace it a liquid, and under interse heat it may be resolved into a gas. But whether a solid, liquid or gas, it is still iron, though in each form it has different qualities and attributes. A more familiar instance is water, with which we are daily familiar as ice, water and steam. you study wealth you will find that it undergoes similar changes. First, we have the solid or commodity form of wealth, gold, wheat, cattle, etc. By trading we change this wealth into money or currency. This is its fluid form in which it is made to flow into all sorts of places irrigate the prospects of financiers and make them blossom as the rose. These two forms of wealth are fairly well understood, but the third or gaseous form, known as credit, has been discovered so recently that its properties and peculiarities are still mysterious. About all we know is that, like all gases, it needs to be handled with care to keep it from disappearing. Before the outbreak of the war credit was largely used to send up all kinds of business balloons that were inflated with it, and from whose collapse many people got bad falls. But in the case of credit, the chemical analogy is not entirely true. cannot develop a gas in chemistry without a solid or liquid to work with. But credit can be created from nothing, and if the man who gets it is clever enough, he can materialize it into liquid currency or solid commodities-which usually should belong to someone else. Credit more than fulfils the dreams of the alchemists of the dark ages. The alchemists tried to translate lead into silver and gold in their alembics, but they at least had lead to start with. financial alchemist may have absolutely nothing The modern material to start with, but if he can secure credit he can translate it into silver and gold aplenty. But this credit is not of the kind you get at the bank after you have given the manager a state-

ment of your assets and liabilities. While trying to explain credit to an investigating commission J. Pierpont Morgan asserted that he by no means confined himself to credit based on tangible assets. He told of an instance where a man who owned nothing came into his office with a scheme which he explained, and because the financier had faith in his ability to carry out his scheme he loaned him a million dollars on his personal note. The borrower had nothing but a convincing manner and an engaging smile, but these were sufficient to get him credit enough to make him a power in finance. And according to Mr. Morgan the man made good, paid back the money he borrowed, and won for himself a mass of solidwealth. Cagliostro was a stupid bungler compared with that alchemist of finance.

. . . . Financiers assert that the development of credit caused by this war is entirely beyond their comprehension. A New York banker, reported in the Evening Post, asserts that it belongs to "The Fourth Dimension" of finance. If that is truewe had better not try to understand it, for it is said by mathematicians that when a man Legins to dabble with problems of the fourth dimension, he is preparing himself for the Asylum or for that more fashionable substitute for the Asylum, the farm for the foolish, known as a Sanitarium. But we may be permitted to observe that the nations are expanding their credit to an extent that was undreamed of even a year ago. the war is over the holders of this credit will try to transmute it into real wealth, pr, at least, into a claim on the production of others that will parctically enslave the people of the nations affected. Just how this will work out remains to be seen. Future generations may refuse tobe enslaved because of the war madness of the present generation, and credit may be resolved again into the nothing from which it was conjured. The problems that will follow the war will doubtless be even more complex than those encountered during its progress. * * * *

Canada, with her almost unlimited resourcesof land, forests and minerals, is in a better position to meet the burdens of the war than most of the nations involved-if she can only get men to develop them. A great population is just as much a part of the wealth of a nation as territory, mines and forests. Without the population the undeveloped wealth will remain idle. For this reason it is becoming imperative that steps betaken to make Canada attractive to new settlers. of the right kind. But to do this is a problem of the first magnitude. Even before the outbreak of the war, it was becoming apparent that the flood of immigration was being checked. The increased cost of living, largely due to trade combinations and special privileges, was making it impossible for settlers to come to the country as they did in pioneer days. Once it was possible for men with nothing to come to Canada and make homes for themselves, but now that is next to impossible. They must have money to get a start on the land, and they must have a considerable amount if they are to be successful. Much of the best agricultural land in Canada is now heing held idle by speculators and by owners who are unable to work more than a small portion of The taxes that will follow from the war will probably make it difficult for much of this land to be held and there will be a breaking up of large holdings, but it is doubtful if this will clear the situation. It will be necessary to eliminate the conditions that artifically increase the cost of living, so that we may get back to a normal basis. Assuredly we shall have enough to think about during the next few years, and we shall need a new class of public menwho will be able to do more than shake hands warmly with the sovereign voter.

Na ture's Diary.

A. B. Klugh, M.A.

In our study of the plant environment we have considered the factors of the air and the soil. We now have to deal briefly with the effect of a non-living covering on plants, a subject of considerable importance in a climate such as ours. The chief non-living coverings are snow and fallen leaves and dead grass.

The chief significance of a covering of snow is that it prevents plants from becoming dried out by the intensely dry winds of winter. keeps their temperature more even, and guards against their too sudden thawing out. Snow also acts as a protection against changes of volume in frozen soil, which would result in "heaving" and destruction of the roots.

A covering of snow shortens the vegetative season by preventing the soil-temperature from rising above freezing-point early in the spring, thus hindering plants from awakening into activity as early as on snowless spots.

The coverings of dead leaves and grass have much the same action as snow in diminishing the extremes of temperature, and keeping the soil The covering of leaves over the soil moister.

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