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,

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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What Will They Do?

The criticism has been directed at the latest Royal Commission, created by the Dominion Government, that it represents strong financial, manufacturing and political interests rather than agriculture which is nominally recognized as the foundation industry of Canada. To its nine members has been assigned the task of taking stock of the country's resources and evolving plans for their development. Collectively they will naturally see things from their own viewpoint, which will hardly be claimed as that of the farm. But class contentions are idle. The Commission is a ranged and at work. They may sincerely be desirous of seeing greatly increased population on the unoccupied and under-worked lands of Canada and a great after-the-war development, but are conditions to be made such that the man next the soil will receive an adequate, economic return or will greater production be simply a larger pawn in the hand of more powerfully organized interests? This is the gist of the problem they have to solve. Despite the hard-won progress made there is a deep-set conviction that for the labor, capital and intelligence which successful farming demands, and the risks involved the pursuit demands generally a more adequate return. The personnel of the Commission might well have included half a dozen representative farmers, but it could be just as seriously faulted for the lack of specific representation for the educational interests of the country. The lessons drawn from other modern nations certainly teach clearly and with growing emphasis that upon whatever extraneous helps manufacturing industries may rely, if there is to be substantial and permanent advancement, education, including training of a technical and industrial character, must be at the base. This then demands a foremost place in the plans of the country for the future, and in its outworking it will be more equitable than fiscal aids. Fortunately in this particular the Commission need not go far afield. There is at hand a fund of accumulated data awaiting further appreciation, viz., the results of the industrious research of a previous commission. There is now an opportunity to turn it to good account.

The world knows Canada well now, and a resort of artificial stimulants to immigration had better be discarded in any treatment prescribed for improving the future economic health of Canada. A natural inflow of healthy population will be best, and such a policy as will tend to

equalize the income-making opportunities of town and country. Speaking before the Canadian Club of Ottawa recently a well-known American author, Winston Churchill, admitted that the United States' policy towards Canada had been purile, but he added by way of explanation or suggestion that it had been dictated by and organized for the benefit of manufacturers, who, until recently, arranged tariff schedules to suit themselves, but there were signs now that this economic dictatorship was weakening.

Individually isolated as the farmer has so generally been from the nature of his holdings, his interests admittedly require safeguarding, so that for example, in the access to capital for furthering his operations he should relatively stand on a parity with enterprises of the town. What concerns him most of all is the profitable disposal of the products of the farm, and their reasonable and efficient transport to market so that an adequate income will be assured for his year's toil. Unless this is accomplished the drift townward will continue and the farm ranks will be further decimated by the terrific drains of the war upon our effective population. The hundreds already returning incapacitated for active occupations suggests some of the problems that will soon confront us as a people. It is not the often well-meant advice of townmen that farmers stand In need of-they have that in 11 nty from daily papers and platforms, nor yet to be flooded with government reports, however useful in their place. The farmer has ever been as ready as any class in the nation to avail himself of new and proved facilities. The development of Canadian agriculture during the past half century stands in proof of this. With the march and spread of general knowledge he may be trusted to "spruce up" and 'broaden out" if the returns of his business afford the required facility and encouragement. Suddenly confronted with war administration the government has relegated what ought to be its own peculiar duty to the Development Commission, and if the latter succeeds in laying down with fidelity to the chief original producer and allied interests of the country, a really courageous and efficient program, the country has a right to expect prompt and effective action.

A Sane View.

The countless schemes that are being advanced to change or relieve "conditions" indicate that a large body of men in our cities apparently still believe that conditions are abnormal because they cannot live and increase their wealth by speculative methods and without actual work, and the persistence of this class in handing out its advice to farmers becomes distasteful not only because the advice is wholly unsound but because the men of the land know that they must support this class of people, know in fact that the whole commercial and financial system in Canada is supported by the industry of the men on the farm. In the midst of this clamor it is a relief to meet a really sane and constructive view on some matemanating from our cities.

In an address before the Convention of Alberta Municipalities, G. R. Marnock, president of the Lethbridge Board of Trade, made some statements regarding the work of the organizations within his city that could well be copled. The trend of his address is well shown in his introduction, which reads as follows:

"No community can be entirely successful that does not proceed in the direction of seeking out what it may do on constructive lines to the advantage of itself and its neighbors. Our endeavors in Lethbridge have been largely in this direction, and the city and the board of trade have worked together, not only for what appeared to be for the immediate advantage of the city, but also for what appeared to be for our ultimate advantage. Having this before us we broadened our vision to take in our surrounding districts and our farming communities; for we recognized that if our agricultural foundations were not secure our efforts to improve our city would be in vain. Some of you good gentlemen may have heard it whispered lately from time to time that the development of our cities and towns was away ahead of our present requirements, and that the rural development, on the other hand, was lagging; that in fact, the cart was before the horse. We recognized that in Lethbridge about two years ago, and we have steadily endeavored since then to reverse that.

'The process has in no way taken the shape of teaching the farmer his business; if he doesn't know his business, certainly we city men are not likely to be able to tell him anything to his advantage-that would be too much like the blind leading the blind. I do not think we would be far wrong in saying that all we have done has originated in requests from the farmers themselves; and so long as a board of trade or a city proceeds on these lines they are likely not only to find plenty to do, but to be sure at the same time that they are doing what is wanted of them.

There is undoubtedly a big place in Canada for our urban centres. There is a tremendous

commercial and financial work to be carried on in connection with agriculture, and the commercial and financial interests can render to agriculture a very great service but it is not in the way of teaching better farming or attempting what some call "rural uplift work," but it is in rendering to agriculture an efficient, honest, and economic business service. When the Associations and Trade Organizations in our towns and cities place as their motto "service" to the people whom they call customers, then will more have been done to bring about prosperous conditions and dispel hardship in our cities and towns than any or all of the schemes that are from time to time being presented. The Board of trade in Lethbridge seems to be leading in a sensible business

That this getting down to bed rock by the people of our cities in acknowledging that the sources of their revenue lie on the farm is not confined to any one city is indicated in a financial review of conditions at Moose Jaw. gloomily stated that a tax sale will be held in this city in which some 21,000 parcels of land, "mostly outlying lots, sold by subdivision artists in the palmy days," will be offered to the public. The review states that, having presented this rather depressing condition, that there is a more rosy side. From figures submitted by the Board of Trade it goes to show that in 1912 there were imported three carloads of poultry, six cars of butter, ten cars of eggs, thirty cars of bacon and fifty cars of potatoes, but there has this year been exported from the city eight cars of butter, fifteen cars of eggs, sixty cars of potatoes and very large quantities of bacon and lard and other products, together with millions of bushels of They are looking to the farms. Three years ago the Boards of Trade in this city and in all our citles were attempting to establish automobile and other factories that could not possibly hope to live and were talking in terms of millions of dollars. To-day they are working to build up a trade through the citles of agricultural products and are evidently talking common sense. The tax sale is not going to hurt Moose Jaw nor will it hurt any other city if it cleans up a lot of outside subdivisions, helps to establish sane conditions within municipality affairs, directs the people's thoughts towards their real source of revenue and shows them their dependence upon agriculture.—"The Farmer's Advocate and Home Journal," Winnipeg, Man.

Natures Diary.

A. B. Klugh, M.A.

One of the groups of animals which are common in our lakes, ponds and rivers and yet about which very little is generally known is the Leeches, commonly termed "blood-suckers."

The Leeches are allied to the Earthworms, but are distinguished from them and from all other worms by the possession of a sucker at each end of the body.

Most of the Leeches live in fresh water, stones, leaves and wood, on water-plants, in the mud and ooze on the bottom of ponds, lakes and streams, or attached to other animals. They can crawl about after the manner of the "measuring worms," using their suckers when thus moving They swim rapidly by flattening the about. body and progressing in a series of undulations. Many of the Leeches feed on the blood of aquatic vertebrates, such as fish and turtles. the blood-sucking species remain attached to their hosts only long enough to become gorged with blood, while others spend most of their life attached to their hosts. Many other species of Leeches are either scavengers or are carnivorous in their food habits, the former feeding on dead animals, the latter on snails, worms, insect larvae, smaller Leeches, etc.

The mouth of a Leech is situated in the middle of the sucker on the head end, and in those species which suck blood there are salivary glands which produce a secretion that prevents the clotting of the blood which is sucked from the host. The alimentary tract (a name applied to the crop, stomach, intestine, etc., of animals when spoken of collectively) is quite different in those species which live on blood and in those which do not. In the former it has numerous sidebranches, or elongated sacs, which act as reservoirs for the blood, while in the latter it is a straight tube. Because of the sacs mentioned above the blood-sucking Leeches are able to take in enough blood at a meal to last them for some time, often for several months.

Our Leeches have no organs of respiration. that function being performed entirely by the

The Leeches are hermaphrodite, that is each individual possesses the organs of both sexes, but they are not self-fertilizing, as sperms are exchanged between different individuals, and the eggs are fertilized by the sperm received from the other individual. Some species lay their eggs in cocoons, or capsules, which they attach either to the underside of stones or to water-plants, while others carry the eggs and young attached to the

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