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## The Farmer's Advocate

AND HOME MAGAZINE. THE LEADING AGRICULTURAL JOURNAL IN

THE DOMINION. PUBLISHED WEEKLY BY THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advecate and Home Journal,"
Winnipeg, Man.

THE FARMER'S ADVOCATE AND HOME MAGAZINE

is published every Thursday.

It is impartial and independent of all cliques and parties, handsomely flustrated with original engravings, and furnishes the most practical, reliable and profitable informa-

tion for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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THE WILLIAM WELD COMPANY (LIMITED),

## LONDON, CANADA.

The Farmer and the Cost of Living. Editor "The Farmer's Advocate":

With your permission I desire to add a few observations on the subject of Federal financial aid to agriculture and Provincial action as presented in your issue of December 18th. While agreeing in the main, that the appropriation of approximately a million a year for ten years has been applied in directions already found useful, I wish to point out that the amount is not so great as it sounds when the varied farming interests and paid agencies of nine important Provinces are considered. I credit the authorities with good intentions rather than crudely attributing to them the expedient of throwing golden dust in the eyes of the people, but at the same time the public will do well not to indulge in any rosy hopes of early or very marked results in agricultural production nor consequent expectations of a reduction in the cost of living which is due to a variety of causes and not wholly to the cost of food, as some would have us think, nor could ten times the appropriation have the designed effect, while it might serve as a cover to extravagance in other and dangerous directions. If by any chance the Federal aid program tended to lower the returns we obtain for our farm products it would prove unfortunate and I say this from no sordid consideration. Many of the great staple foods, like potatoes, wheat, oats, and other cereals, flour and fruits are yet low, affording the producer a narrow enough margin on which to live. Dairy products, which require a great deal of labor and a costly plant, are only reaching prices fairly remunerative to the man behind the cow. To pull down the farmer's returns from dairying and other lines would simply serve to accelerate the drain of the country's blood to the insatiable maw of the cities and towns, with probably little effect in reducing the cost of living in the latter.

Some 36 or 37 years ago Canada set out successfully upon a policy of industrial development which was to repay us as farmers by the creation These have been realized but of home markets. at the cost of "bleeding us white" of our homebred and imported rural population. Multitudes are now unemployed and even charitably fed in some of the big cities and we have the extraordinary spectacle the Government by order-in-council actually forbidding immigration into a Western Province for several months to come. Added to national fiscal policies we have all over the land thinly-disguised bonusing resorted to, municipal bidding corporations boldly against each

other for industries and more people while the farms are undermanned as never betimes have boomed and wages The have mounted. The tall chimneys have risen fore. but the people groan when the smoke swoops down into their eyes. Crowding population into small areas, as has been done, en-hances property values, increasing taxes and This pinches the small householder first. Foreseeing impending trouble the heads of industrial enterprises and the banks have lately been applying financial brakes on the money supplies. The automobile-riding class and others have been going beyond their means and during several years past people have recklessly tied up or lost their money dabbling in stocks, speculating in real estate, or exploiting Mexican oil and railways. The people do not relish the grind of the brakes and join in the unthinking howl about the cost of living. Newspaper writers that berate us for not producing enough are heaping insult upon injury. One of the chief factors has been and is now extravagant living in the cities and towns for which the people themselves are responsible. Attempts to relieve them at the expense of the farmer would be rank injustice and would be putting a premium upon folly. Instead of relieving it would intensify existing conditions, a share of the blame for which also lies at the doors of our educational systems and this is the next point to be touched upon.

What we once thought so good has proved our undoing. If the Public and Secondary or High Schools in the country have failed in the past to drain away the youth rapidly enough to professional and town life, a system of Commercial Schools and Colleges, the product of capable private enterprise, have been admirably designed and conducted to complete the process. Industrialism is also making its demands for training the youth felt in the urban public schools, but agriculture, the basis and greatest in importance of all, has not yet come to its own. A few years ago in Ontario, at the instance, I believe, of Dr. C. C. James, who has worked out the present Federal-aid program, the system of having district or county representatives of the Provincial Department of Agriculture was installed. The original design was that these men should, with other work, touch and develop agricultural classes in six specially selected High Schools, with the hope of leavening them and others and later on the Public Schools with agricultural education. This laudable desire could not be realized. The men in these positions were alert to avail themselves of lines of least resistance and wide-open opportunities to promote directly the interests of farming in their respective localities. The district representative idea as developed is by all odds one of the best and most alive departmental features in Ontario agriculture to-day and is a credit to its originator.

There is a virtual acknowledgement of radical weakness in the many efforts made by supplementary courses for teachers, bonus coaxing, etc., to rectify our school education while the regular program and text books grind along in about the same old way. It is time surely to have done with these expedients which are no longer, if they ever were, creditable to either courage or capacity in a Province like Ontario, which has always prided itself upon being a leader. The time is ripe for a new leaf-turning and making educational history. If the Government wishes to add something to its capital stock, that may one of these days be needed, it will be well advised in making at an early date a decisive de-

In the great work of restoring the balance of population between city and country the Press and the Pulpit have a large share in exalting saner ideals for the youth. The time is overdue for the Federal Government to call a halt in State-aided or facilitated processes of millionaire-making of the few at the expense of the many and putting under a military regime this peaceful new land whose toilers and resources are already severely handicapped. May I conclude with the hope that the foregoing suggestions will commend themselves to the good judgment of your readers and of those installed in the seats of the mighty who may do something to make 1914 a "Happy New Year" in more than a name?

## A Dandy.

Editor "The Farmer's Advocate":

Please find enclosed \$1.50, being renewal of I would not like to miss a copy. subscription. The Christmas Number is a dandy. Rainy River District, Ont. H. PATEMAN.

A good many people are confusing the cost of living with the price the farmer receives for his products, which, in most cases, is not yet more than enough to afford him a decent return for his labor and heavy investment.

## Nature's Diary.

By A. B. Klugh, M.A.

One of the chief components of our weather is What causes winds? Wind is primarily wind. due to the fact that warm air rises, and as it does so, cold air rushes in to take its place. Thus there is a continuous circulation of the air of the globe. The warm air near the equator rises, the sold air from near the poles takes its place. This would give us continual north winds in the northern hemisphere and south winds in the southern hemisphere if it were not for the revolution of the globe on its axis. As it is, the air in going from low to high latitudes passes successively over parallels having less and less eastward motion, so that it runs ahead of the diurnal rotation of the earth in high latitudes, thus giving us our prevailing westerly winds. Thus our westerly winds are part of a world wide movement of the air. But areas over which the air is rising (termed areas of low pressure from the low readings of the barometer) may occur at any point and give us local winds setting in from any direction.

It is necessary to define a term which is commonly used incorrectly. This is the term cyclone. A cyclone is the huge whirl setting in about an area of low pressure, and the winds caused may be light or they may be strong. Such cyclones are continually passing over us, travelling in Canada from southwest to northeast. They give us our winds from all directions and bring our rain. The calm periods between the cyclones are termed anti-cyclones. What is commonly termed a cyclone is a tornado, an extremely violent whirl only a few hundred miles in diameter, and which leaves destruction and often death in its path, as was the case with the tornado which struck the Great Lakes last Novem-

When we consider the whirling action of the air as a cyclone passes over us we can see that the wind will blow from different directions as it passes. If the centre of the cyclone passes to the south of us, as it usually does in Canada, we get first easterly winds, then northerly, then-

It is because of the regular northeast path of the cyclones that the weather probabilities can bemade out, and when the "probs" are wrong it is because of some local disturbance which can in no way be foreseen.

There is very little generally known about thevelocity of the wind, and it is usually very much over estimated. A light air travels at the rateof two miles per hour, when the direction of thewind can be seen from the drift of smoke, but not from the wind vanes, as the force is not sufficient to move them. When the wind can just be felt on the face and the leaves rustle it isgoing at the rate of five miles per hour, and is termed a slight breeze. A gentle breeze, whichkeeps small twigs and the leaves in constant motion, travels at ten miles per hour. A moderatebreeze is going at fifteen miles an hour and raises dust and loose paper. A fresh breeze is one which sways small trees and makes wavelets on inland waters. It travels twenty-one milesan hour and exerts a pressure of one and onethird pounds to the square foot. When the large branches are in motion and the telegraph wires whistle a strong breeze is blowing at twenty-seven miles per hour. A high wind goes at: 35 miles an hour, exerting a pressure of threeand a half pounds to the square foot. It setswhole trees in motion and inconvenience is felt in walking against it. A gale travels at fortytwo miles an hour, and a strong gale at fifty miles per hour. A storm travels at sixty-eight miles an hour and exerts a pressure of fourteen» pounds per square foot, uprooting trees and doing considerable structural damage. A hurricane is a wind travelling at from seventy-five toninety-five miles an hour, with a pressure of overseventeen pounds to the square foot. wind causes widespead damage.

During the recent tornado on the Great Lakesthe wind was going at the rate of forty miles per hour when blowing steadily and running up to seventy-five miles in the gusts, at Kingston. The figures for the Upper Lakes must have beenmuch in excess of this, as the eastern end of Lake-Ontario did not feel the full force of the blow.

The state of the air with respect to the water vapour that it contains is called its humidity; the humidity is said to be high when the air isdamp and low when the air is dry. The capacity of the air for vapor increases rapidly with the rise of temperature. At ordinary temperatures, the capacity doubles for a rise of about 182 degrees in temperature.

The humidity of the atmosphere exercises a strong control over our bodily sensation of the temperature of the air. The body does not act like a thermometer, readily accepting the temperature of the surrounding medium, but attemptsto maintain an internal temperature of about 98 degrees at all seasons. We prevent an uncomfortable reduction of temperature in cold air by