

The great irrigation development in Western North America has been the result of the efforts of people who migrated from the East and the middle West with no knowledge of irrigation.

The Aspect of Irrigation in Western Canada.

The following article taken from "The Farm and Ranch Review," the leading agricultural paper of Western Canada, will be of interest to prospective settlers, as the editor of that publication has farmed most successfully in Southern Alberta, both with and without irrigation:—

"A close study of the agricultural condition under which artificial watering is being practiced throughout the world to-day, reveals the fact that irrigation is by no means confined to countries where the rainfall is so scant that nothing will grow without it. On the contrary, in many countries where irrigation has been brought to the highest state of perfection, the natural rainfall is very heavy. Indeed, there must always be contiguous territory of considerable precipitation in order to produce springs and streams from which water may be diverted for irrigation purposes. The States of Iowa, Wisconsin, Illinois and Ohio, and the Provinces of Ontario and Quebec are generally supposed to be amply supplied with rain and snow, and able to produce excellent crops under ordinary culture without the artificial application of water. Yet, in all of India, except the northwestern part, throughout China, Japan, Siam, Italy, France and Mexico, where millions of acres are brought under irrigation, the rainfall is quite as heavy as in the states and provinces mentioned, namely, 23 to 51 inches per annum, which would generally be considered distinctly humid conditions.

"The average rainfall during the past ten years in the provinces of Alberta and Saskatchewan, where irrigation by gravity is practiced, is as follows: Calgary, 17.69 inches; Macleod, 13.18 inches; Medicine Hat, 15.83 inches; and Swift Current, 16.40 inches. The average rainfall of the state of Dakota is somewhat less. With the increase of population and prosperity, however, more scientific methods of farming were naturally adopted, and the introduction of irrigation marks an epoch in the history of Western Canada. Even in the most humid countries it is seldom that a season passes where the application of water at the critical time in the growth of a crop, would not add considerably to the value of the result. This refers with equal force to the years of greatest rainfall. As a matter of fact, farmers now are not satisfied with returns

more or less in accordance with the accident of rainfall, but are aiming at perfection in the development and maturity of their grain and hay crops. It is, therefore, obviously good business to utilize the means which have been placed at the disposal of settlers in districts favored with an adequate water supply, to supplement the efforts of nature. Having water available in his ditch or reservoir, the irrigation farmer is able to distribute it on his land at such seasons of the year and in such quantities as experience has taught him are the most propitious to favorable results. He is not at the mercy of the capriciousness of the weather, and contends that crop growing without irrigation is a crude system, while irrigation farming is the most ancient, highly developed and natural system of culture.

"It is an admitted fact that the man who derives his living from cultivating the soil takes chances on the ultimate result of his efforts, such as prevail in very few legitimate branches of commerce. Weather conditions make or break him. It is, therefore, natural that where the conditions are favorable he should insure against untoward events. The tendency of the age is toward insurance. We insure against fire, against accident, and against death. It is a maxim in modern business management that every contingency must, as far as possible, be insured against. And the forecasting of the average result of every enterprise man embarks on, and consequently the possibilities of insurance, are daily extending. The farmer all over the world is rapidly adopting the principle. We insure against the death of live stock, and the destruction of crops by hail storms. In Western Canada we go a step further and insure against the absence of the necessary rainfall to produce the greatest possible crop. Drouth is the bane of the agriculturist in every portion of the globe where the soil is tilled and where crops are grown. Countries with the highest average rainfall have at times suffered an almost total loss of crop from the absence of moisture at the time of the growing season, when it was especially needed. Consequently, artificial watering of crops or irrigation, as it is commonly called, has been resorted to on a more or less extensive scale in nearly all countries where the natural conditions admitted of it.

"To sum the matter up, therefore, irrigation in Western Canada is not essential to the production of crops, but promises to increase the returns from farming, that it is bound to become a leading factor in its agricultural development, particularly as the cost of irrigation, owing to favorable topographical and other conditions admitting of cheap construction, will be much smaller than anywhere else on the American continent."