The Mission of Irrigation in Northerly Latitudes.

Leaving out of the question the belts producing the tender fruits and vegetation of all kinds, and confining our attention to that portion of the continent of North America where the agricultural lands are devoted to the production of the hardier crops, the standard economic plants raised on the average farm there, may be classified as follows in their relation to irrigation.

(1) Plants that cannot be produced profitably without irrigation, namely, Alfalfa, Clovers, Sugar Beets, superior Malting Barley, tender vegetables and Strawberries as a market crop.

(2) Plants that can be irrigated to advantage every year, namely, Field Peas, Garden Stuff, Trees, Small Fruits, Rape, Timothy, and other forage crops requiring considerable moisture.

(3) Plants that will respond to irrigation during most years, namely, Oats, Six-rowed Barley, Soft Winter and Spring Wheats, and forage crops adapted to dry land conditions, such as Western Rye Grass, Bromus Inermis, and other semi-arid grasses.

(4) Plants that will give increased yields under irrigation during occasional seasons only, namely, Hard Winter and Spring Wheats, Flax and Rye.

The above classification of northern economic plants presents the irrigation question in a nutshell. No practical agriculturist can fail to recognize the fact, that the scope for irrigation in northerly latitudes, as indicated, is enormous, and that this system of farming will soon occupy a vitally important sphere in the agricultural operations of Southern Alberta.

In considering the possibilities of irrigation in northern latitudes, it is, however, well to bear in mind the fact that the state of Montana, where the conditions are almost identical with those of Southern Alberta, raises more agricultural products under irrigation than the states of Oregon, Washington and Wyoming combined; as much as the state of Utah, and half as much as the state of Colorado. Great irrigation development is now taking place in Northern Montana, by the aid of and under the direction of the United States Government, which will place that state in the front rank of the irrigated districts. In fact, unmistakable evidence is visible on all sides to the effect that the largest area of irrigable lands in America will presently be among the rich agricultural lands of northerly latitudes, and under sub-humid climatic conditions.

Animal Husbandry the Foundation.

By consulting the above plant classification, it will be evident to the observing farmer that the highest development of irrigation farming is not in any way associated with cereal production. The latter will probably be a feature of the irrigated farm in the earlier and cruder stages thereof and until the soil is sufficiently worked up to admit of more intensive effort. But the irrigated farm will not reach its highest degree of productiveness until it is devoted almost entirely to the growth of fodder crops of all sorts, chief amongst which will be alfalfa, and until these crops are consumed on the farm and the waste returned to the soil. In other words, the highest development of the irrigated farm in Southern Alberta will be, more or less, coincident with the expansion of the various branches of animal husbandry, which is the basis and foundation of farming under artificial watering. When this destiny has been realized, Southern Alberta will fill the same place in Western Canadian agricultural operations as the corn growing and dairying States of the middle West occupy in respect to the whole Union.

The popular impression of farming under irrigation is, that only the most valuable crops, such as fruits and garden produce, can be profitably grown under artificial watering. An examination of the agricultural statistics of the United States, however, reveals the fact that fruit growing and truck farming form a very small percentage of the areas under irrigation. Fully 80 per cent. of the whole irrigated area of the United States being devoted to producing crops for the feeding and the finishing of live stock, principally with alfalfa, but including also the coarse grains. The live stock industry being the foundation of all irrigation development in America, it is reasonably certain that live stock husbandry in connection with irrigation farming will predominate to even a greater extent in Alberta.

To further illustrate the minor importance of fruit growing under irrigation compared with fodder production, it may be mentioned that in the State of Colorado, out of a total irrigated area of 1,500,000 acres, only 35,000 acres are devoted to fruit growing, while considerably over a million acres are given to alfalfa and other fodder crops.

The Canadian Irrigation Law.

It is of great importance that the laws under which irrigation is practiced should be so framed as to avoid any litigation that might possibly arise over water rights. In many of the States of the Union where irrigation is in vogue more money