The Reclamation of Empires, or Farming Without Irrigation

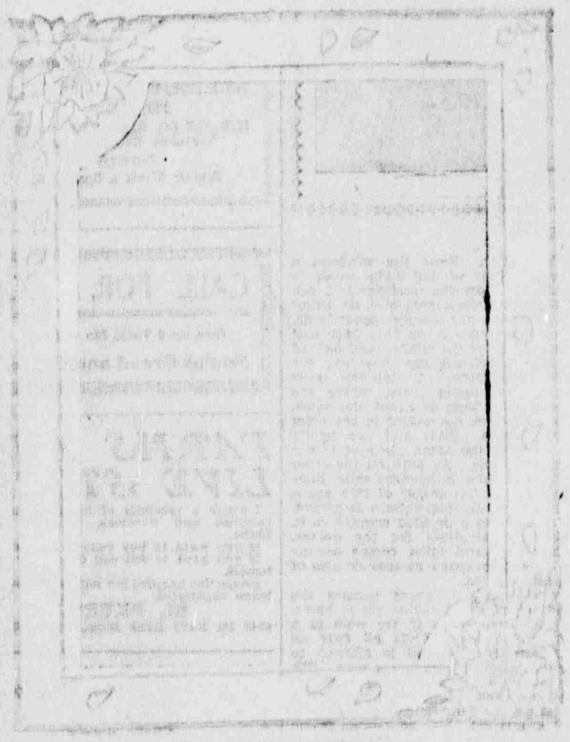
(BY JOHN A. WIDSTOE.)

IN Utah, when all the waste waters shall be stored in mighty reservoirs, to be used at the right time, in the proper season, and when every farmer shall be trained in the most economical methods of applying water, it is very unlikely that more than one or two acres out of every hundred will be reclaimed by irrigation. Of the remaining 49 or 50 acres, perhaps another one abundantly, while the other 47 or 48 are covered with hills or deep and barren as any planed by the Master of the world. Other states have tried to produce crops without irrigation in this state. Among many failures, there were a few successes. In the light of our present knowledge it is evident that the failures were due to improper methods and not to faulty climatic conditions.

In New Mexico city, nearly 40 years ago farming without irrigation was demonstrated to be a financial success. About the same time Father Christopher Layton and his colleagues showed that arid farming was feasible on the east ridge between Ogden and Kaysville. In Cache valley, George L. Farrell relates that he made his first trials on the west side as early as 1875. Success did not come to him until several years later. On the authority of John Q. Adams of Logan, one of the most successful dry farmers in the state, we have it that Hans Anderson was probably the first man to undertake arid land farming on a large scale, on the west side of Cache valley. This was in 1876. Michael Paulsen and Charles Marcham followed Sly. Anderson in 1877. From that time the whole west side has gradually been converted into a splendid wheat field.

In the later seventies, also, arid farming was introduced into Tooele county. Gradually, during the last 25 years, a large portion of the unirrigated land between the Idaho line and Salt Lake City has been made to yield profitable crops of lucern, lucern seed, wheat and other grains without irrigation.

South of Salt Lake county, however, it has generally been assumed that the precipitation was too low for arid farming. In fact an intense prejudice has existed until recently in many of the southern districts against the practice of arid farming.



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very much in the condition of Utah. Their water supply is not sufficient under the most favorable conditions to irrigate more than a small fraction of the available land.

We speak of the reclamation of a western empire by irrigation. If that be true, then 19 empires may be reclaimed, if all the non-irrigable lands can be made to produce profitable crops without irrigation. So vast are the areas involved that the subject of their reclamation is worthy the attention of the wisest lovers of the splendid west.

More than 62 million acres of land are found in Utah. Today about 630,000 acres are irrigated; in the future, very near it is hoped, perhaps 2,000,000 or 3,000,000 acres will be irrigated. Of the remaining 59,000,000, probably 25,000,000 are mountainous. Can the 25,000,000 be farmed profitably without irrigation? It is worth a trial.

Brigham Young and the Desert.

The far-sighted pioneer, Brigham Young, declared repeatedly that a large portion of the sagebrush deserts would in time be made to yield at least wheat without irrigation. Apostle Merrill, who is himself a pioneer of the old type, looking towards a glorious material future for the great west, relates that President Young predicted that wheat would in time cover much of the non-irrigated hillsides and valleys of Utah, and specifically mentioned the west side of Cache valley.

Though Brigham Young and many other thinkers partially understood the possibilities of farming without irrigation, yet the people did not at first take kindly to the proposition. There was yet water to be taken out for irrigation purposes, and then, too, it seemed improbable that the vast unwatered desert could be made to produce useful plants without irrigation. In fact so strong was the prejudice that one case is related of a man who was convicted of perjury because he affirmed that wheat could be grown without irrigation on a parcel of land which now yields from [illegible] to as much as [illegible] of wheat per acre without a drop of irrigation water.

A Gift of History.

The spirit of the pioneers was the spirit of the experimenter, and early attempts to produce crops without irrigation in this state. Among many failures, there were a few successes. In the light of our present knowledge it is evident that the failures were due to improper methods and not to faulty climatic conditions.

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The Awakening of 1900-1901.

In 1900 and 1901, the subject of reclaiming the desert without irrigation was agitated throughout the state by the present writer, and his colleague, Prof. L. A. Merrill. This agitation resulted in the establishment of six experimental farms by the state for demonstrating the feasibility of arid farming in various parts of the state, and for discovering the correct methods for producing dry land crops successfully.

As a result of this work, there has been a wide extension of arid farming throughout the state. So successful has the work been that the general government has taken up the matter, and is investigating it in all the western states. It is generally admitted that the possibilities of arid farming are not inferior to those of irrigation. The two methods of farming in the west should supplement each other.

The Garden of Levan Hill.

One of the first places south of Salt Lake City to be reclaimed was the hill between Nephi and Levan. Some seven years ago Stephen Boswell and Henry Garrett broke up about 80 acres on which several crops of wheat were produced. A few others followed their leadership, but the credit of going at the redemption of Levan Hill in a thoroughly earnest and business-like manner undoubtedly belongs to Isaac H. Grant and brother of Nephi. They began their work five years ago, and this year had 300 acres under cultivation. The example of the Grant Bros. and the establishment of an experimental farm on the hill have finally led to the utilization of nearly all the land on the hill. Much credit should be given to the connection to the intelligent support, given both by precept and example, of President J. W. Taxman of Nephi, who, last year, had 250 acres of dry land under cultivation.

On Levan hill and in the immediate neighborhood, 2,000 acres grew wheat last summer. Some of this was volunteer grain, and another portion had not been properly cared for. However, the average yield was 15.5 bushels per acre. The Grant brothers had 35 acres that averaged 40 bushels per acre; 14 acres averaged 35 bushels, and another 14 acres yielded 30 bushels per acre. The average yield of the Grant brothers' farm was 35 bushels per acre, which is less than eight bushels per acre. The average yield of the farm of President Taxman was 25 bushels per acre. The average yield of the farm of President Wolf was 25 bushels per acre. The average yield of the farm of President Wolf was 25 bushels per acre. The average yield of the farm of President Wolf