IRRIGATION OF ARID LANDS IS NOW A SUBJECT OF GREAT MOMENT TO THE STATE

UNDER GAREY LAW

Experience of Other Semiarid States.

LOCAL STATUTES DIFFERENT

Why Operations Under the Carey Act Have Not Been Uniform in the Several States-No Call for Its Repeal.

The Oregonian asked officials of some states in the arid belt for their experience with irrigation enterprises under the Carey law, with the particular purpose in view of getting matter that would be useful as a guide to Oregon. Of course no operations under the new law have yet been entered on in any of the From Idaho and Wyoming we have valuable information on the subject. The news from Colorado is that no irrigation enterprises under the Carey act have been undertaken in that state. This is significant because very large reclamation works have been constructed there and are in successful operation.

Experience with the Carey law is not the same in the several states because no two states have accepted its provicions in the came way. In Idaho and other states the state provided the machinery for starting operations under the law, and this local machinery was not the same in any two states. In Oregon no provision was made for independent action on the part of the state, all the preliminary work being left to the parties who might seek reclamation-contracts, the State Land Board being authorized to pass upon the matters submitted. In Washington the state has selected a quantity of land, but its statutes are in uch shape that capital will not undertake the works necessary for reclamation. In each of the states the matter presents peculiar features because of the varying local regulations. The same Carey act applies to all, but no two have accepted its provisions in the same way Experience of Idaho.

D. W. Ross, - State Engineer of writes the following comprehensive statement of the workings of the Carey act in that state:

"We accepted the provisions of the Carey law in 1895 by enacting such legislation as we thought would supplement the act of Congress. Since that time the state has applied to the Department of the Interior for the segregation from the public domain of some 220,000 acres. The department has approved the withdrawal of about 210,000 acres. The state has entered into formal contracts with com panies for the reclamation of about 63,000 cres of these lands, 2500 acres of which, lying below a canal partly constructed before segregation of the lands was asked for, were thrown open to public entry in May, 1902. No applications for entry have as yet been made. During the past six years about \$40,000 has been spent upon the construction of a canal sys tem designed to irrigate some 57,000 of land. The estimated cost of works is \$350,000. This is all the actual work which has been done to date the provisions of this act. The other projects are in various stages of reclamation varied from \$3 to \$10 per acre while the maximum selling price of the water rights fixed by the state varies from \$10 to \$30 per acre.
"It was claimed by the friends of this

measure at the time of its passage, that all that was necessary in order to re-claim the irrigable lands of the West was the co-operation of the states them. selves/ and the enactment by/ them of legislation supplementing the provisions of the National law. Like the other of the National law. Like the other states, idaho accepted the provisions of the Carey law, but did not provide for carrying out the purpose of the Congres-sional act through the initiative of the state itself, but sought instead to interest capital in this work of develor Three agencies are thus employed in car-rying out the purpose of Congress—the United States, the owner of the land, the state, who has declared its control over the water supply, and the construc-tion company. The United States agrees to patent these lands to the state free of cost, upon condition that the state will effect their reciamation. The state is authorized to create a lien against the land to secure the return of the actual cost of such reclamation with reasonable interest thereon to the date of entry of the land by the settler. Besides, the state is authorized to sell the lands to the settler at any price it may fix, the only condition imposed by Congress being that any surplus received from euch sales over and above the cost of reclamation shall be placed in a fund for the reclamation of other lands.

The scheme, so far as Congress is concerned, is sound, and had we enacted the proper legislation, I am satisfied that the eater part of our irrigable lands would this time have been reclaimed. The Congressional act paves the way for a plan which might be based upon condi-tions required for a safe investment by the state, but the completeness of the scheme is questioned where the develop-ment is to be done through the agency of private capital.

undertake the work of reclamation Itself, the state should have either cre-ated a construction fund by direct ap-propriation, or guaranteeing the interest on a bond issue, to be secured by the land after its reclamation. If by direct appro-priation the selling price of the lands and works would have returned to the state the original amount appropriated and provided for the perpetuation and gradual increase of the reclamation fund, making the whole scheme self-supporting; if by guaranteeing the bond issue, to be se-cured by a lien against the lands, the bonds could have been readily sold to investors and the state in a short time relieved from the guarantee by the fund which would have been created from the sale of the lands. The work could have been carried on by either of these means,

and both would have been self-supporting "The state did not adopt either of these plans, but, lacking faith in the value of of private capital. Working through the agency of a third party, the plan adopted for securing the investor is not thought to be complete, there being no security at all for the money expended until the works have been constructed, or, in other words, until the lands have been reclaimed. The result of this is that these projects, instead of being considered legitimate investments, are classed by inors as 'speculative contracts.'

"The incompleteness of the security is clared in our constitution that the state the Reclamation Service, and Mr. Charles used for irrigation, no such control has ever been asserted. Our streams are all overappropriated, more water having been claimed during the past five years. would be needed for the reclamation

of all the reclaimable lands of the arid West. These claims are made without the state's exercising any supervisory au-thority whatever. The effect of the absence of a proper administrative system is already proving a serious drawback in promoting some of our Carey act under-takings. The state has agreed with the United States to effect the reclamation of these lands, but, falling to exercise any control over the water supply, there is no guarantee that there will be any water in some cases for that purpose by the time the works shall have been constructed. In the case of one very large project of this kind, more than 10 times the August flow of the stream has been claimed for other purposes at a point on the stream where it cannot be used again for irrigation, part of these claims being made by members of the company which is preparing to enter into a contract with the state for the reclamation of the lands Under these circumstances, it will proba-bly be impossible to raise money for the construction of the works, and, even if they should be constructed, there might be a question as to the right to divert the water. Whether or not the state would be able to fulfill its contract with the Department of the Interior under

these conditions remains to be seen, "We have an almost unlimited area of desert land in Idaho; our water supply, measured by the land, however, is lim-Under these conditions the question as to which tracts of land-are titled to the water will sooner or later arise. If the state neglects to provide a simple and direct means whereby this question can be determined until large investments of money are made in canal construction it should not be surprising if investors refuse to carry on this develop ment at their own risk.

These are some of the reasons why, it my judgment, the results which have fol-lowed the enactment of the Carey law have not come up to our expectations; but careful study of the causes which have been largely responsible for the discouraging results attained under Carey law points clearly to the fact that we are just as unprepared to co-operate with the Federal Government in promoting similar development under the provisions of the National irrigation law, We have not displayed much wise statesman ship in promoting these undertakings.

"The land after its reclamation being worth more than it costs to reclaim it, I believe our Carey act should be amend ed so that the state itself could do the ork which it has been waiting for private enterprise to undertake. This work could then go on in connection with Govern-ment undertakings of a similar nature but before we go any further in this work under any plan we should devise a sys-tem for the public administration and control of our streams, which should be as precise and as definite as our land sys-tem. We can give title to laid by a very simple process, and investors have a per-fect right to demand the same consideration where the right to use the publi waters is involved, and perhaps the Federal Government may also demand the same consideration before investing any large amounts in the development of our

Carey Act in Wyoming. Governor DeForest Richards, of Wyoming-the home of ex-Senator Carey, father of the Carey irrigation law-writes as follows of the operation of the law in that state:

"In cases where those appropriating water and having lands segregated under the Carey act have been supplied with sufficient means, energy and ability, the working of that law has been successful

in this state.
"I do not think that it would be wise in view of the new irrigation law passed recently by Congress, to repeal the Carey act, as both can be used in the same state without conflict. One can be applied to such sections of the country where there is an abundance of water in the streams, whereas the lands intended to be watered under the irrigation act are such as will require the construction of reservoirs or dams, in order that the surplus and waste waters of our streams may be used in their reclamation

"In all the larger and more difficult projects under the Carey act in this state \$10 per acre has been the maximum amount charged for water rights."

No Carey Projects in Colorado. "I do not now recall a single instance poration has taken advantage of the Carey

act," writes Governor Orman, of Colorado HOW IT WORKS IN WYOMING.

Assistant Land Commissioner Richards Tells About It.

OREGONIAN NEWS BUREAU, Washngton, Nov. 17 .- "Reclamation of desert lands under the Carey act has, on the whole, been successful in Wyoming," said Assistant Land Commissioner Richards, of that state, to The Oregonian correspondent today. "There has been more irrigation undertaken in Wyoming under this law than in any other state, and the practice is continually spreading. In the town of Cody, which is being built up by 'Buffalo Bill,' after whom it was named, there are large contracts which have been worked out, but perhaps the most successful work has been in what is known as the Mormon settlement. A colony from Utah settled upon a con-siderable tract of arld land. Each member of the colony, when the contract with the state was approved, turned in and as-sisted in constructing the ditches. As fast as a section of ditch was completed were irrigated. It was but a chort time before the first crops were planted, and as the work of reclamation extended, the agricultural development followed. This contract is nearer the ideal form of development under the Carey act than any other I know of, and the results are correspondingly more satisfactory. "It is true that no contractor in the state has yet secured full return of all

the money he invested in constructing irrigating ditches, but this is because sufficient time has not yet elapsed. Payirrigating ments for the water rights are made in installments, in order that the settlers may have the use of the water on easy terms, and before full payments have been made. I have no doubt, however, but a portion of the contractors with the state will be amply repaid for their in-

vestments."
"In Wyoming the state disposes of lands under the Carey act for 50 cents an acre. The contract price for furnishing water ranges from \$8 to 516 an acre. This covers the cost of construction of ditches, and allows the contractor a mar-gin. The great difficulty has been in getting people on to the lands, and in this respect the Mormon colony has the ad-vantage of all others. Much land now reclaimed is worth \$50 and more per acre

to my certain knowledge.
"Generally speaking it is my opinion its great resources, sought instead to work cut the problem through the agency of private capital. Working the agency that the Carey act reclamation is not only successful in having the lands taken up, so that they can dispose of all their water rights. I see no reason why there should be conflict between reclamation under this law and under the Hans brough-Newlands law of the last session.

WORK OF TODAY.

(Continued from First Page.)

I regret that at this time I cannot visit not the only feature objected to by the you again. I have asked, however, Mr. would-be investor. Although we have de- Arthur P. Davis, principal engineer of exercise control of all the streams H. Fitch, diversion engineer, to meet the association and be prepared to answer questions as far as they can.

F. H. NEWELL, Chief Engineer,

ALL FOR IRRIGATION

Demand Comes From Every County of State.

STRONG DELEGATIONS SENT

Convention Promises to Be Lively Leading Members Favor Working Under Both Carey and National Laws.

oregon is stirred up. It calls for irrigation. The demand comes from every county in the state. This common voice will be heard in the convention today Last night it was heard in every hotel "Store the floods and save the lobby. forests." was the common plea. If anybody wished to keep irrigation out of Ore gon he was nowhere in evidence.

The convention will meet this morning at 9 o'clock in A. O. U. W. Hall, Second and Taylor streets. It will be a no table gathering. Prominent citizens from all parts of the state are in the city. So far from fighting against irrigation are they that they are contending to have the Government establish irrigation works in their own home districts. "We want our share," they cry. "Our section is just as good as the best in Oregon. Don't leave us out.'

Representative-elect to Congress J. N. Williamson, a member of the executive committee of the convention, arrived in Portland last night and was at once be-eleged by a host of admirers. H. B. Maxson, secretary of the National Irrigation Congress, came to represent that body. F. J. Holmes, of Salt Lake, president of the Congress, and Fred Klesel, of Ogden, chairman of the executive committee, did not find it convenient to attend the convention.

A sure forecast of the convention is that its resolutions will not be inimical to the interests of private companies working under the Carey law. "We want just as many irrigation projects as we can get," say the delegates. "We want them under both the National irrigation law and the Carey act. Oregon has millions and millions of acres of arid land enough for both systems for years to some. Both systems are good. Let us use both."

In a choice between the two system the convention would doubtless favor that of the Government, "But we don't have to choose," declare the delegates. "We need all the irrigation we can get. We favor Government irrigation because we can get that at cost. But we shall not discourage private enterprises.

The Carey act and the National irriga-tion law are perceived to be quite dis-tinct in their operation. All the dele-gates interviewed last night said there was no necessity of discord between the two laws. "They don't conflict," asserted H. B. Maxson, secretary of the National Irrigation Congress.

"They supplement each other," suggested the reporter.
"No, not even that. They don't have anything to do with each other. They are as separate as A from Z."

O. L. Miller, chairman of the Baker

County delegation, spoke in the vein.
"We can get more irrigation under the two systems than under one," he re-marked. "And Eastern Oregon, you'll find, is all of this opinion." County Judge G. A. Hartman, chair-

advocated encouragement of private en-terprises, as well as of Government.

"Oregon should go after the money coming to it under the National act," was his opinion. "It should also respect the rights of companies that are working un-

ler the Carey law."

L. N. Liggett, chairman of the Crook County delegation, said that the interests of his county, livestock and all, demanded irrigation. "We have no fight against Drake," said he. "If we have a bone to pick with anybody it is with Major Sears, who has misrepresented us. He has arrayed the whole county against him by saying we don't want irrigation and railroads."

Eastern Oregon has come to the conrention with strong delegations. Those of Baker, Crook, Umatilla and Malheur are particularly aggressive. These four counties alone will have over 100 dele-gates in the convention. The largest delegation is that of Baker, which sends 35 of its most prominent citizena Uma-tilla is represented by about 30 delegates, Malheur by about 12, Wasco by about 15 and Crook by about 30. Baker County comes with maps and surveys of its best areas. These are north and east of Baker

ernment projects, so as to reapportion the \$500,000 which is due Oregon from the reclamation fund.

The convention will be called together by A. H. Devers, president of the Ore-gon Irrigation Association, under whose auspices the sessions will be held. The convention will elect new officers as pro-vided in the by-laws of the association. Severe criticism has been heaped upon the association because of the general un-derstanding that the convention would not elect its own officers. The opponents of the convention on this account have called the organization of the association a "star chamber affair."

The by-laws adopted October 16 are as

Section 1. This association shall be known as the Oregon Irrigation Association. Its duration shall be perpetual and its object shall be to advance the general welfare of the state by promoting irrigation, especially irrigation enterprises conducted under the auspices of the United States Government.

Sec. 2. All persons or associations in accord with the object herein set forth are eligible to membership in the association. Sec. 3. The officers of this association shall

-Photo by Moore.

retary and a treasurer, who shall hold their offices for the period of one year and until their

successors are elected and qualified; provided, that the officers elected at the first meeting of this association shall hold their offices until the second meeting of the association, which shall be called upon the order of the presi-

tion shall be held annually on the first Mon-day in October, at 10 A. M., at such city in the State of Oregon as shall be designated by

Sec. 5. These by-laws may be amended or

repealed at any regular meeting of the asso-

the association at the previous annual mee-

WILL PRESIDE AT OREGON IRRIGATION CONVENTION.

Seat of Proposed Great Irrigation Plans.

OVER IN DESCHUTES

WHAT COMPANIES HAVE DONE

Shall the Government or Private Enterprise Continue Work?-Both Sides of the Controversy.

BEND, Or. (Deschutes Valley), Nov. 14. -(Special correspondence.)-Crook County, the home of Congressman-elect J. N Williamson, is intensely interested in the question of irrigation. This Deschutes Valley is thought by many to be in the best general situation in all Oregon for an ideal irrigation system. Crook County contains about 10,000 square miles, has not one foot of railroad, and a population of less than 5000 people, including the Warm Spring Indians. Outside the Cascade Reserve, Crook County contains over 6,000,000 acres of land, and the larger portion of this is still vacant Government domain The county is eight times larger than Rhode Island, four times as large as Delaware, double the size of Connecticut, larger than Massachusetts, New Jersey or Vermont, and almost as large as Maryland. Each inhabitant has a pro rata of two entire sections. If it were as densely peopled as Rhode Island, it would have a population of 3,500,000 souls. Of the land in Crook County 800,000 acres are arable and so located that the Deschutes River. it is believed, may be utilized to irrigate about 300,000 acres.

These facts, together with the Govern-ment's favorable attitude toward the re-clamation of arid lands, and its probable desire to establish an irrigation system in Oregon, have enlisted the interest of the Crook County taxpayers as one man in the Oregon Irrigation Convention, which is to meet in Portland, November 18 and

The Deschutes. The Deschutes Valley, or that division under consideration in this article, is topographically and geologically divided into two distinct portions, one known as the Walker Basin, the other as the "Des-The Deschutes River has its main source in a series of lakes in a large val-ley to the south of the Three Sisters Mountains. The lakes are fed by subterranean springs, and have no visible outlets, except the two which form the apparent heads of the two branches which unite in Crane Prairie, and from thence flow southeast, then east, then northerly along the base of the Cascades. Coming in from the south and uniting with the main stream near where it bends northerly is Davis Creek, the outlet of

initing in the Walker Basin. is properly termed a basin, having been formed by a volcanic obstruction in the original Deschutes Valley, at a point about eight miles south of Bend, consisting of recent lava flow covering several square miles, which formed a dam of probably 100 feet in height and created a lake on the Upper Deschutes, many niles in extent.

Odell and Davis Lakes, and Little River,

the outlet of Crescent Lake, all of these

The site of this lake was not apparently covered by the lava flow, but was an alluvial valley, with a deep clay subsoil, on which may now be found vegetable loam and alluvial deposits. During the submergence of this tract, pumice and voland washed by streams into the lake, and gradually spread over the bottom of the Dalles.

more feet. Subsequently the lake was drained by the Deschutes River, cutting through the lava obstructions, the Walker Basin substantially leaving present condition, a practically level area. with a clay subsoil covered with pumice and volcanic ash. Anywhere in this basin water is obtained by digging down to the

as the Paulina Mountains flowed northward at least as far as Crooked River, covering the entire valley hundreds of feet deep and extending eastward to the foothills of the Blue Mountains about Principle and eastward. This lava sheet was comparatively smooth on the surface, and the leveling hand of time has still furinterstices, crevices and valleys with the dust and debris of its own erosion, leaving the higher points and ridges still projecting above its general level, while beneath are vast fissures and caverns, due to ex-pansion of steam and gases generated at the time of the eruption and overflow. This lave sheet, with its superficial cov-ering, is what is known as "the desert," and desert it is. Not a drop of water can remain above the foundation upon which it rests, and which it covers to unknown depths. This is the bedrock of the lands oposed to be reclaimed by Butte Development Company. Its founds tions are not built upon sand, they are literally upon the solid rock. In fact, over large areas, Nature, prone as she is to cover her deformities, has yet failed to hide her barrenness, leaving the unprotected lava sheet still exposed to the scorn

of man. Nature, in her younger moods, cut some fantastic capers in this ancient formation. Scores of buttes, with extinct craters from 100 to 1000 feet in diameter, are grouped around "the desert" and the Deschutes Valley to the east and south, and appear as grim, mute, but eloquent, representa-tives of that mysterious age of the world's history which still defies the mind of man in his effort to classify and systematize archaeological data on the basis of true science. It is cinimed by some authorities that this was one of the greatest lava flows of the prehistoric world. It averages about 20 miles wide, and is about 75 miles long. It is mostly in Crook County, and is covered by sagebrush, chemisel and a forest of small, scattering juniper trees. Running through near the center of this desert, from southeast to northwest, there is an old channel, varying in width from 100 yards to a mile, and known as the river bed. For most of the way, the banks are low and not steep, but near its mouth, 10 miles below Prineville, it breaks into a deep gorge, and is lost in the Crooked River bottom. Parallel to this old channel is a series of basaltic rock-reefs rising from one to 20 feet above the common level, with lava ash and sand of various degrees of fineness, intervening between the stony reefs. The old river bed is not straight, and the reefs are very tortuous, but in their general course parallel to the old river bed. The agricultural possibilities of "The Desert" under irrigation, it is claimed, will be great.

The Deschutes River. The Deschutes River, which is to sup-ply this arid region with the major portion of its water supply, is one of the remarkable rivers of the West. As remarkable rivers of the West. As stated, its sources are near the snow-West. As capped peaks of the Three Sisters Mountains, Diamond Peak and Mount Thiel-son, of the Cascade Range. All the branches have but little fall, with level, grassy meadow-like bottoms, bounded by dense black pine forests, with at times yellow and sugar pine for about 50 miles, where, at the big meadows, all the streams join their waters, forming the Deschutes proper. Deep and slowly at this point it flows along, dammed by the most recent lava flow, over which it pours, bubbles, boils and roars for threequarters of a mile; then it reforms into a placid, limpid stream, varying in width from 100 to 300 feet wide, and from two to three feet deep; it flows rapidly to the northward for about 40 miles to its

junction with Crooked River, thence into

the Columbia a few miles above The

the Walker Basin and "The Desert," a volume of water of 350,000 inches at its mean stage, and the variation from low to high water marks is about 12 inches. It has seldom been known to rise above 18 inches above low water mark. On acnear the water's edge, and bridges resting on trestles only a few feet above the water never wash away. This practically uniform flow makes the Deschutes an ideal source of irrigation. This phenome non is essayed to be explained on vario hypotheses. The most plausible is that the rainfall is light-about 10 inches-an-nually, and that the pumice and baseltic stones from numerous extinct craters catch up and absorb the water as it drops and slowly allow it to percolate through later. There are large areas of such sur-

faces hereabouts.

It has been mentioned that private irrigation companies are already interested in the Deschutes Valley. Some of these are of doubtful financial soundness, while others are known to be responsible and are acting in good faith. There are three large companies and one small one actually on the ground which have by surveys, making ditches and filings on water secured what they term vested rights. It is the private corporations which have thus pioneered the Deschutes River Valley, from an irrigation point of view, that may stand in the way of the plan to have this section, so highly favored by nature, irrigated by the Gov-

Pilot Butte Development Company. Of which A. M. Drake is president and principal owner, under the Carey act, has asked for about 85,000 acres lying east of the Deschutes River and south of Crooked River, on what is properly known as "The The entire system of canals and laterals have here been surveyed and com-pleted in every detail, ready for construction when the company's contract with the state shall have been approved. The estimated cost of reclamation per acre is about \$10. The lands selected are not in a compact body, but, owing to the nature and topography of the desert, are in a U shape, with the open end at the north and the largest compact tract at the base, or south. Between the arms of the U is an elevated, rocky, valueless tract. The soil is largely composed of disintegrated basalt and pumice; is naturally fertile and produces abundant growths of bunch grass, black sage, chemise and funiper. Climatic conditions are favorable to the production of all cereals, vege-tables, grasses and hardler fruits. The elevation being less than 3400 feet, snow seldom attains a greater depth than 12 inches, and remains but a few weeks at a time. Stock thrives the year round on this desert without care or feed, except the native bunchgrass. Reclamation of this tract by irrigation would add much to the wealth of Eastern Oregon, but the general conditions are such that the undertaking must be a very expensive

Mr. Drake's upper head gate of the Central Oregon Canal is located at the lava beds, about eight miles above Bend Postoffice, or the town of Deschutes, at Lava Island. It is located on the west side of the river and winds about to get on grade before it recrosses the river. on the lava beds, and stretches away to the northeast, winding its serpentine course along the eastern edge of "The Desert," and terminating in a "draw" or flat basin near Prineville. It is to be 60 feet wide at the top and 35 miles long. will be a very expensive ditch, as there le much fluming to be done and long distances of solid rock to cut through. His Townsite Canal (such is the name) is taken out four miles above Bend, and is to be flumed along the middle edge of a solid rock bluff for one mile and a marter to start. This canal is to be 16 miles iong and

A. H. DEVERS.

City, and aggregate about 46,000 acres of , consist of a president, a vice-president, a sec

The rumor has been floating around

that the irrigation companies will try to

capture the convention. Any such ef-fort would be ill-advised, because of the

generous disposition of the delegates toward the companies. It would be futile

because of the powerful resistance it would encounter. On the other hand

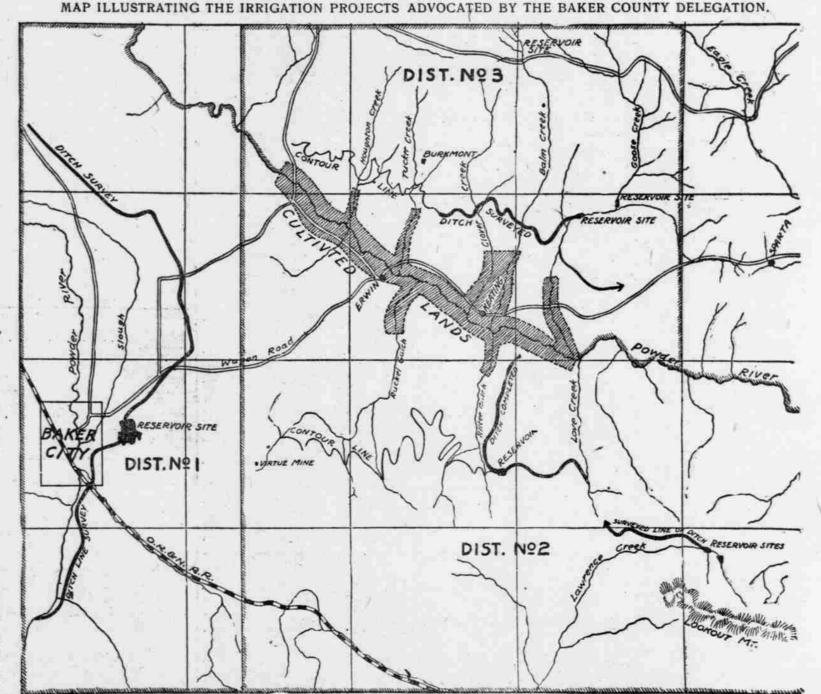
there are rumors that livestock inter-ests will endeavor to sway the conven-tion. These are denied by the persons on

whom suspicion is directed.

The convention will be a spirited one.

It promises to be enlivened by occasional

tilts of competing ideas. But the outcome



The Baker County delegation has three projects in view for irrigating the lands in the vicinity of Baker City, which will benefit nearly 60,000 acres of land. The statement

of the projects as given with the map are as follows:

PROJECT 1. Water taken from Powder River eight miles south of Baker City. Reservoir site located about two miles east of Baker City

Reservoir covers: Private lands, 7000 acres, located from one to seven miles from Baker City. Government lands covered by reservoir, about 10,000 acres, located from 7 to 20

miles from Baker City. Lands produce two crops of alfalfa hay, averaging five tons per acre, worth \$4 and \$5 per ton in the field, stacked. All kinds of hay, grain and vegetables and fruit raised in a temperate climate grow in abundance and good quality.

PROJECT 2. Water taken from Little Lookout Mountain watershed. Numerous streams and

Land located from 8 to 20 miles from Baker City, on the south side of Powder River, on the north slope of Lookout Mountain range.

Nearly all Government land. Several farms irrigated from reservoirs owned by private parties show abundant crops of alfalfa, grain and vegetables. About 30,000 acres of Government land covered by this project. Free from alkali or rock cliffs. Within easy reach of Baker City market. Good market; good roads;

PROJECT 3.

Water taken from Eagle Mountain watershed. Numerous streams. Several res ervoir sites. Land located about 15 miles from Baker City. Good roads.

About 10,000 acres of Government land. Several thousand acres of land now whed and irrigated along the streams show abundant crops of hay, grain, vegetables and fruit. Watershed covered with heavy growth of vellow pine timber