

MORMON PIONEERS THE SPONSORS OF IRRIGATION IN MODERN AMERICA.

To the Mormon Pioneers will ever belong the credit of the introduction of irrigation into the productive systems of modern America. The story of how they came into the forbidding wilderness of the great west and subdued the wilds of the desert by the magic touch of water is an oft told though ever interesting tale. As Historian Whitney says: "It was no Garden of Hesperides upon which the Pioneers gazed upon that memorable morning of July 24, 1847. Aside from its scenic splendor, which was indeed glorious, magnificent, there was little to invite and much to repel in the prospect presented to their view. A broad and barren plain hemmed in by mountains, blistering in the rays of the midsummer sun. No waving fields, no swaying forests, no verdant meadows to rest and refresh the weary eye, but on all sides a seemingly interminable waste of sagebrush bespangled with sunflowers—the paradise of the lizard, the cricket and the rattlesnake. Less than half way across the baked and burning valley, dividing it in twain—as if the vast bowl, in the intense heat of the Master Potter's fires, in process of formation had cracked asunder—a narrow river, turbid and shallow, from south to north in many a serpentine curve, sweeps on its sinuous way. Beyond, a broad lake, the river's goal, dotted with mountain islands; its briny waters shimmering in the sunlight like a silver shield. From the mountains snow-capped, seamy and craggy, lifting their kingly heads to be crowned by the golden sun, flow limpid, laughing streams, cold and crystal clear, leaping, dashing, foaming, dashing, from rock to glen, from peak to plain. But the fresh canyon streams are far and few, and the arid waste they water, glistening with beds of salt and soda and pools of deadly alkali, scarcely allows them to reach the river, but midway well nigh swallows and absorbs them in the thirsty sands. These, the oak-brush, the squaw-berry, and other scant growths, with here and there a tree casting its lone shadow on hill or in valley; a wire-grass swamp, a few acres of withered bunch-grass, and the lazily waving willows and wild-rose bushes, fringing the distant streams, the only green things visible. Silence unbroken, save by the crickets' ceaseless chirp, the roar of the mountain torrent or the whirr and twitter of the passing bird. A desolation of centuries, where earth seems heaven-forsaken, where Hermit Nature, watching, waiting, weeps and worships God amid eternal solitudes.

A voice breaks the stillness. It is the voice of Brigham Young. Pale and wasted from his recent illness, and still reclining wearily in the light vehicle which has borne him through the mountains the Pioneer chieftain sweeps with a prescient glance the gorgeous panorama spread before him—the contrasted splendors of mountain, valley, lake and stream, glorious and glittering in the summer sunlight. Far over and beyond all these extends that inspired gaze. It sees not merely the present, but the future; not only that which is, but that which is to be, when from these barren sands shall rise, as rose proud Venice from the sea, a city fair as Adriatic's island queen, and no less wealthy, famed and powerful. It sees the burning plains to blooming gardens turn; the desert change to an oasis; the sterile valley, the reproach of Nature, which naught before had borne, teeming with varied life and yielding rich fruits and rare flowers for the sustenance and delight of man. An inanimate Sarah, a barren Rachel, transformed by the touch of God to a joyful mother of children. The curse of centuries is lifted, the fetters of ages are stricken off, and the redeemed earth, like a freed captive, looks up to heaven and smiles. Cities, towns and hamlets multiply; farms, fields, orchards and vineyards fill all the land. Egypt, the wilderness, are past; another Canaan appears; and here a Moses who shall smite the rock, a Joshua to sit in judgment and divide to Israel his inheritance. The planting season being virtually past, no time was to be lost if they hoped to reap any result from their labors. Within two hours from the time they arrived on City Creek, ground was broken a short distance from camp—in the very business heart of Salt Lake City—and three plows were kept going during the rest of the day. George W. Brown, William Carter and Shadrach Roundy ran the first furrows plowed by white men in Salt Lake Valley. Owing to the extreme dryness of the soil, plowing was at first very difficult, and more than one plow-share was broken in the hard sun-baked earth. But a dam having been placed in the creek, and the surrounding soil well-flooded, the work was rendered comparatively easy. On the morning of the 24th the Pioneers began planting, first putting in their potatoes. Having planted a few acres they turned the waters of the creek upon their little field and gave the soil a "good soaking." THIS WAS THE BEGINNING OF THEIR VAST AND SUCCESSFUL SYSTEM OF IRRIGATION—SINCE FAMOUS THROUGHOUT THE CIVILIZED WORLD—WHICH HAS DONE SO MUCH TOWARD REDEEMING THE DESERT BASIN, AND MAKING UTAH A VERITABLE EDEN IN THE MIDST OF A BARREN WASTE."

THE NATIONAL IRRIGATION LAW

Text of the Measure, Showing The States and Territories Covered.

SECRETARY OF THE INTERIOR.

That Official's Duties in Law's Operations and Regulations as to Practical Work.

For the information of those who are not familiar with its provisions the text of the national irrigation law, the provisions of which add much to the importance of next week's congress, is republished herewith:

THE TITLE.

An act appropriating the receipts from the sale and disposal of public lands in certain states and territories to the construction of irrigation works for the reclamation of arid lands.

TERRITORY COVERED.

Be it enacted by the senate and house of representatives of the United States of America in Congress assembled, That all moneys received from the sale and disposal of public lands in Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington and Wyoming, beginning with the fiscal year ending June 30, 1901, including the surplus of fees and commissions in excess of allowances to registers and receivers, and excepting the five per centum of the proceeds of the sale of public lands in the above states set aside by law for educational and other purposes, shall be, and the same are hereby reserved, set aside, and appropriated as a special fund in the treasury to be known as the "reclamation fund," to be used in the examination and survey for the construction and maintenance of irrigation works for the storage, diversion, and development of water for the reclamation of arid and semi-arid lands in the said states and territories, and for the payment of all other expenditures provided for in this act: Provided, That in case the receipts from the sale and disposal of public lands other than those realized from the sale and disposal of lands referred to in this section are insufficient to meet the requirements for the support of agricultural colleges in the several states and territories, under the act of Aug. 30, 1890, entitled "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agricultural and the mechanical arts, established under the provisions of an act of Congress approved July 2, 1862," the deficiency, if any, in the sum necessary for the support of the said colleges shall be provided for from any moneys in the treasury not otherwise appropriated.

SECRETARY MUST INVESTIGATE.

Sec. 2.—That the secretary of the interior is hereby authorized and directed to make examinations and surveys for, and to locate and construct, as herein provided, irrigation works for the storage, diversion and development

of waters, including artesian wells and to report to Congress at the beginning of each regular session as to the results of such examinations and surveys, giving estimates of cost of all contemplated works, the quantity and location of the lands which can be irrigated therefrom, and all facts relative to the practicability of each irrigation project, also the cost of works in process of construction as well as of those which have been completed.

AS TO LAND WITHDRAWALS.

Sec. 3.—That the secretary of the interior shall, before giving the public notice provided for in section 4 of this act, withdraw from public entry the lands required for any irrigation works contemplated under the provisions of this act, and shall restore to public entry any of the lands so withdrawn when, in his judgment, such lands are not required for the purposes of this act; and the secretary of the interior is hereby authorized, at or immediately prior to the time of beginning the work contemplated by this act, to withdraw from public entry any public lands believed to be susceptible of irrigation, and to make such withdrawals as he may deem proper, and that all lands entered and entries made under the homestead laws within areas so withdrawn during such withdrawal shall be subject to all the provisions, limitations, charges, terms, and conditions of this act; that said surveys shall be prosecuted diligently to completion, and upon the completion thereof, and of the necessary maps, plans and estimates of cost, the secretary of the interior shall determine whether or not said project is practicable and advisable, and if determined to be impracticable or unadvisable he shall thereupon restore said lands to entry, that public lands which it is proposed to irrigate by means of any contemplated project shall be subject to entry only under the provisions of the homestead laws in tracts of not less than 40 nor more than 160 acres, and shall be subject to the limitations, charges, terms and conditions herein provided: Provided, that the commutation provisions of the homestead laws shall not apply to entries made under this act.

LETTING OF CONTRACTS.

Sec. 4.—That upon the determination by the secretary of the interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same, in such portions or sections as it may be practicable to construct and complete as parts of the whole project, providing the necessary funds for such portions or sections are available in the reclamation fund, and thereupon he shall give public notice of the lands irritable under such project, and limit of area per entry which limit shall represent the acreage which, in the opinion of the secretary, may be reasonably required for the support of a family upon the lands in question; also of the charges which shall be made per acre upon the said entries, and upon lands irrigated by the waters of the said irrigation project, and the number of annual installments, not exceeding 10 in which such charges shall be paid and the time when such payments shall commence. The said charges shall be determined with a view of returning to the reclamation fund an estimated cost of construction of the project, and shall be apportioned equitably: Provided, that in all construction work eight hours shall constitute a day's work, and no Mongolian labor shall be employed thereon.

GOVERNING ENTRYMEN.

Sec. 5.—That the entrymen upon lands irrigated by such works shall, in addition to compliance with the homestead laws, reclaim at least one-half of the total irrigable area of his entry for agricultural purposes, and before receiving patent for the lands covered by his entry shall pay to the government the charges apportioned against such tract, as provided in section four.

No right to the use of water for land in private ownership shall be sold for a tract exceeding 160 acres to any one landowner, and no such sale shall be made to any landowner unless he be an actual bona fide resident on such land, or occupant thereof residing in the neighborhood of said land, and no such right shall permanently attach until all payments therefor are made. The annual installments shall be paid to the receiver of the local land office of the district in which the land is situated, and a failure to make any two payments when due shall render the entry subject to cancellation, with the forfeiture of all rights under this act as well as of any moneys already paid thereon. All moneys received from the above sources shall be paid into the reclamation fund. Registers and receivers shall be allowed the usual commissions on all moneys paid for lands entered under this act.

OWNERSHIP OF WORKS.

Sec. 6.—That the secretary of the interior is hereby authorized and directed to use the reclamation fund for the operation and maintenance of all reservoirs and irrigation works constructed under the provisions of this act: Provided, That when the payments required by this act are made for the major portions of the land irrigated from the waters of any of the works herein provided for, the management and operation of such irrigation works shall pass to the owners of the lands irrigated thereby, to be maintained at their expense under such form of organization and under such regulations and rules as may be acceptable to the secretary of the interior. Provided, That the title to and the management and operation of the reservoirs and the works necessary for their protection and operation shall remain in the government until otherwise provided by Congress.

ACQUIRING TITLE.

Sec. 7.—That where in carrying out the provisions of this act it becomes necessary to acquire any rights or property, the secretary of the interior is hereby authorized to acquire the same for the United States by purchase or by condemnation under judicial process, and to pay from the reclamation fund the sums which may be needed for that purpose; and it shall be the duty of the attorney-general of the United States upon every application of the secretary of the interior, under this act, to cause proceedings to be commenced for condemnation within 30 days from the receipt of the application at the department of justice.

STATE LAWS GOVERN.

Sec. 8.—That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any state or territory relating to the control, appropriation, use or distribution of water used in irrigation, or any vested right acquired thereunder, and the secretary of the interior, in carrying out the provisions of this act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any state or of the Federal government, or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof: Provided, that the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right.

FUND APPORTIONMENT.

Sec. 9.—That it is hereby declared to be the duty of the secretary of the interior, in carrying out the provisions of this act, so far as the same may be practicable, to control, appropriate, use or distribute the funds available for the construction of irrigation projects, to expend the major portion of the funds arising from the sale of public lands within each state and territory hereinbefore named for the benefit of arid and semi-arid lands within the limits of such state or territory: Provided,

that the secretary may temporarily use such portion of said funds for the benefit of arid or semi-arid lands in any particular state or territory hereinafter named as he may deem advisable, but when so used the excess shall be restored to the fund as soon as practicable, to the end that ultimately, and in any event, within each 10-year period after the passage of this act, the expenditures for the benefit of the said states and territories shall be equitably according to the proportions and subject to the conditions as to practicability and feasibility aforesaid.

POWERS OF SECRETARY.

Sec. 10.—That the secretary of the interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect.

Approved, June 17, 1902.



IRRIGATION CONGRESS BADGE.

IN GARMENT OF GREEN AND GOLD

Utah, Resplendent, Gives Welcome To Her Coming Distinguished Visitors.

OGDEN READY FOR CONGRESS.

Objects of the Great Gathering—The Place of Meeting and the Officers—About Competitions.

Look all over this mighty republic—from east to west, from north to south and where, among them all, could be found a more appropriate community in which to hold the most important National Irrigation congress ever convened in its history than here in Utah? Utah, the cradle of irrigation.

Utah, whose pioneer arms nurtured sturdy life the infant that now has come to such giant strength. And where, upon all earth, could be found men and women who more appreciate the blessings brought through the reservoir, the canal and the irrigating ditch?

The people who extend their hands in earnest welcome to delegates to the Eleventh National Irrigation congress are sons and daughters of Utah; men and women whose fathers and mothers anxiously watched the parched and burning desert eagerly receive the life-giving fluid fed from their first little canals—who, abridged, turned burning eyes to the quickened soil in hope what their hardened hands had planted the softened heart of nature would bless with verdant life.

And now that Utah has clothed herself in a beautiful garment of green and gold she proudly bids the visitor a most striking example of the efficacy of applied irrigation; and her loyal sons and daughters are proud of the honor of entertaining the men and women who come to her with courage in their hearts and strength in their hands to plan and work for the science that has made her famous.

CONGRESS HALL.

All sessions of the congress will be held in the Tabernacle, corner of Twenty-second street and Washington avenue, Ogden. The building has ample seating capacity, having lately been remodelled to a handsome and conven-

ient structure, with splendid facilities for such an important gathering.

OBJECTS OF THE CONGRESS.

One of the principal objects of the congress will be discussion of effective methods of application of the benefits to accrue from the national irrigation act, whose provisions extend to the states of Utah, Idaho, Wyoming, Arizona, Nevada, Colorado, Montana, California, Kansas, Nebraska, North Dakota, New Mexico, Oklahoma, Oregon, South Dakota and Washington. With the enactment and approval of the great national law came mightier responsibility and importance to the national irrigation congress; and this being the first gathering of its delegates since the passage of the law, the coming sessions will be the most distinguished since its organization. Among the stated subjects to be handled are these: Practical irrigation and forestry lessons. Reports of experts. Application of provisions of the reclamation act. State progress under the national act. Views on settlement of legal complications. Colonization.

A POSSIBLE MERGER.

Dismissing from the primary objects of the congress, it may be held stated that there has been much talk among the delegates of discussing the present action of a plan to the Transmississippi Commercial congress to merge the two great western organizations. In view of the growing importance and usefulness of the irrigation congress and the similarity of purpose of both organizations, it has been thought wise and proper to propose an amalgamation of the two. While there may be no definite action taken with this end in view it is quite probable that discussion of the matter may be had. The greater utility of consolidated effort is recognized by western business interests, and consequently such a step will be properly approached, and should the idea find accomplishment in the near future it will be only through a thorough appreciation of the results of such action.

COMPETITIONS.

Three beautiful solid silver loving cups, each having a value of \$50, have been offered for the most superior exhibits presented by individuals, firms, societies, corporations, counties, states or territories included in the sixteen states and territories hereby named in this article. The best general collection of fresh fruits. The best barley exhibit. The best hop exhibit. Gold medals and prizes also are offered for minor exhibits. The gold medals are all elaborate designs portraying the history of irrigation, and were especially made for the arid states fruit exhibition. These competitions are open only to individuals and firms and include the following products: Apples, peaches, pears, grapes, plums, prunes, quinces, cured figs, raisins, oranges, lemons, pickled olives, sun-dried fruits, evaporated fruits, pickles. A gold medal and \$50 in cash are also held out as a prize for the best display of commercially packed fruits, the collection to be limited to three packages of each kind of fruit exhibited. In each case the exhibit must be the property of the exhibitor or must have been grown by him under irrigation in one or more of the states and territories named. The merits of exhibits will be adjudicated and prizes awarded on Tuesday, September 15, the opening day of the congress, when the names of the exhibitors will be made known and the products on exhibition will become the property of the congress.

ATTENDANCE.

Attendance upon the sessions of the congress will include some of the most distinguished men of the nation. There will be present, governors, mayors, commissioners, members of chambers of commerce, boards of trade, commercial clubs and real estate boards, representatives of irrigation companies, emigration societies, agricultural and livestock associations, professors from universities and agricultural colleges, etc. And besides these will come a splendid body of talented newspaper men and experts from engineering, hydrographic, geodetic and kindred societies, besides an array of government experts in lines

relative to the science of practical irrigation. It will be an intelligent, working assemblage.

THE OFFICIALS.

For the convenience of seekers after information the following list of officers is printed: Hon. W. A. Clark, president, Butte, Mont.

Fred. J. Kiesel, chairman executive committee, Ogden, Utah.

Gilbert McClurg, general representative executive committee and director or promotion and publicity, Ogden, Utah.

L. Bradford Prince, first vice-president, Santa Fe, New Mexico.

A. J. McCune, second vice-president, Denver, Colorado.

E. H. Libby, third vice-president, Clarkson, Washington.

OGDEN.

Ogden, the city so fortunate as to secure the congress for this year, has determined to wear her brightest smile and assume her most entertaining mood. Her whole-souled citizens are thoroughly alive to the occasion, waiting with beaming eyes and ready arms to lead their visitors to profit and pleasure. The door is ajar and the air is sweet with welcome. Strong men and beautiful women—good citizens all—stand ready to receive their distinguished guests. Little children say "Come to us!" and the birds sing "Stay with us!"

H. B. Maxson, secretary.

William T. Beardsley, first assistant secretary, Ogden, Utah.

Board of Control of Local Arrangements—L. W. Shurtliff, president; William Glaesman, vice-president; Fred J. Kiesel, August T. Wright, L. L. Clark, David McKay, Joseph Seaworth.

Arid States Fruit Exhibit Committee—William Craig, chairman; D. Moore, J. Wilson, Charles Ziemer, C. G. McGuff, Gilbert McClurg.

WHEN CASSIUS CLAY FOUGHT.

Then there was his fight at Russell's Cave in 1840 with Samuel M. Brown, a great bully and fighter for slavery. Brown called him a liar, which Clay never stood for. Clay, knowing his man, promptly pulled out his bowie knife. "Let me kill the—rascal," cried Brown, springing forward with the cut of a sword. The crowd fell back on either side and Brown took his place. "You may as well run or advance. He chose the latter, and turning his left side toward Brown, his left arm protecting the vital parts to some extent, he sprang forward, knife in hand. "Seeing I was coming," said Clay, in describing the contest, "and knowing that nothing but a sudden and fatal shot could save him, he held his fire and taking deliberate aim, he fired. I was within an arm's reach he fired at my heart. I came down on his head with a tremendous blow, which would have split open an ordinary skull, but Brown's was as thick as that of an African's. The blow laid open his skull about three inches to the brain, indenting it, but not breaking the texture; but it so stunned him that he was no more able to fire, and feebly attempted to seize me."

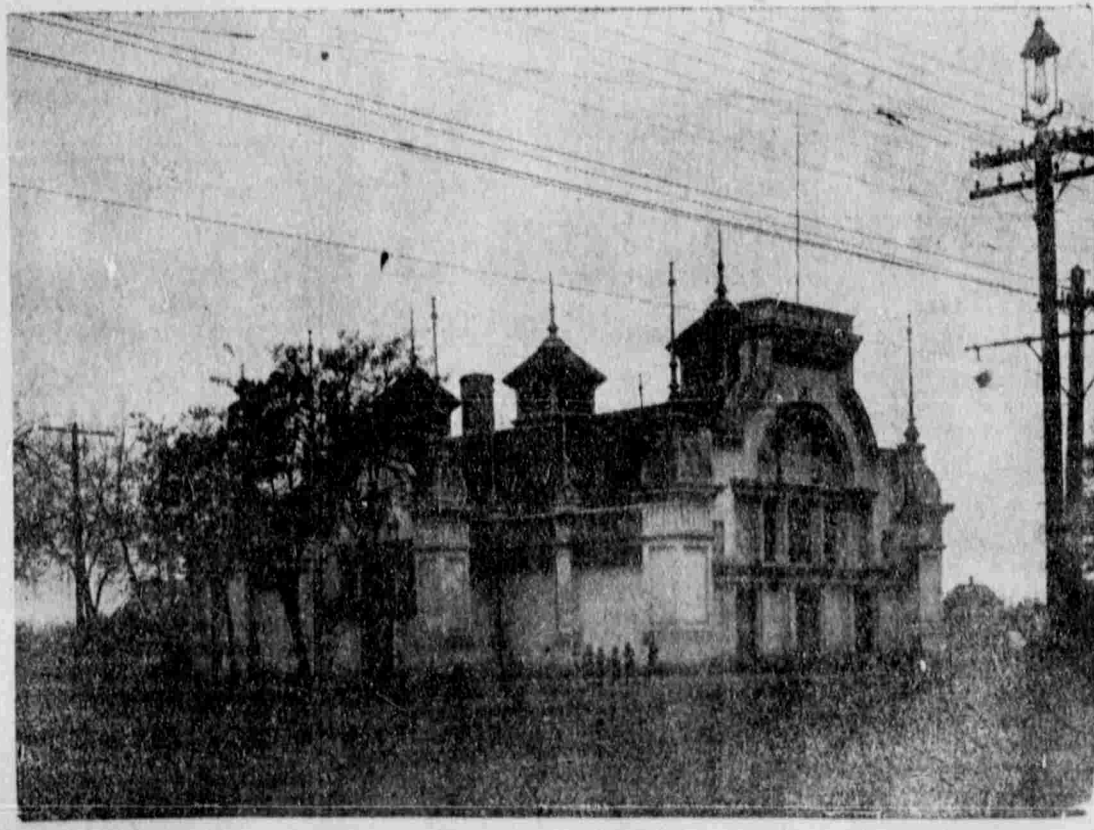
Brown was rapidly being cut to pieces when his friends seized him and threw him over a fence, giving him a bad fall, which ended the fight.

Raising his bloody knife, Clay cried: "I repeat that the statement made by the speaker before Brown's assault has been proven a falsehood, and I stand ready to defend the truth."

No one wanted to go against the terrible bowie, and Clay's friends took him away to look for his wound. The wound was a red spot over his heart. The bullet had lodged in the scabbard of his bowie knife, the contents of which were many times the size of the bullet, and it is typical of the life of one who has been called "the last of the Romans."—New York Tribune.

Only Did His Duty as He Saw It

"I deem it my duty to add a word of praise for Chamberlain's Colic, Cholera and Diarrhoea Remedy," says J. Wiley Park, the well known merchant and post master at Wiley, Ky. "I have been suffering for three or four years, and it gives complete satisfaction. Several of my customers tell me they would not be without it for anything. Very often, to my knowledge, one single dose has cured a severe attack of diarrhoea, and I positively know that it will cure the flux (dysentery). You are at liberty to use this testimonial as you please." Sold by all druggists.



OGDEN TABERNACLE WHERE IRRIGATION CONGRESS WILL MEET.



INTERIOR OF OGDEN TABERNACLE