DESIRET EVENING NEWS: SATURDAY, JULY 29, 1905.

Twin Falls, Its New Railroad PBig Celebration

important event in the history of the state of Idaho. The occasion will be of particular significance to the citizens of Cassia county, for that is the date fixed for a cele. mation in the new city of Twin Falls, marking the completion of the Minidoka Southwestern railroad, a branch of the Oregon Short Line, to that point, the last spike in the new road will protably be driven today; but the jollifeation does not take place till a little pore than a week later.

1.00

RESS.

gates

The business men of Twin Falls are making elaborate arrangements to take care of the crowd and every assurance has been given that visitors will be most royally entertained. The Oregon short Line has announced an excursion where the fore for the round trip from all idahe points. A special train will be run from Minidoka to Twin Falls, arriving at the future metropolis outhern Idaho about 1 o'clock in the when the keys to the town, er due ceremony, will be turned over

a the gueste. Not only is the coming celebration intended but it will also be in the nathrough energy, pluck,

F. H. Euhl, Sharon, Pa.: vice president and general manager, W. G. Filer, Salt Lake: secretary and treasurer, M. B. DeLong, Utica, N. Y.: assistant general manager, M. M. Murtaugh, Milner, Ia.; chief engineer, P. L. A. Bickel, Helena, Mont. Mr. Frank Knox of Salt Lake also became interested in the company, lance D. Schwiger, bydraulic regimeer James, D. Schuyler, hydraulic engineer of Los Angeles, Cal., was appointed consulting engineer.

dam at the head of Cedar Rapids, a point in the Snake river about 26 miles south and west of Kimannua, a small station on the main line of the Oregon Short Line. Here the first townsite was inid out and it received the name of Milner, after Col. Milner. The Boise firm's contract also included the first two miles of the same and the second

doing heavy rock work, massive pump-ing machinery, an electric railroad used the reservoir to the full height at

were placed wooden cribs filled with rock and faced with sheet piling to the solid rock bottom which was cleared by sea divers and a contact piade by concreting the solid rocks and black with coment in bags placed there by the divers. This created a water-light core to the water surface and the stream was thus forced through the

tunnel and the further construction of the dam then proceeded the same as those in the dry channels. The tun-With every detail arranged the com-bany found likelf in position to let the first contracts a little more than two years ago. Ferris & Kescel of Boiss were the successful bidders and in April, 1903, they begun actual cons, ruction on the dam at the head of Cedar Rapids, a nel and its sates cost approximately \$50,000. Now that the sates are closed mission of the tunnel is accomplished and the gates at its entrance may never be opened again. In fact, it is quite probable the open cut forming the en-trance to the tunnel will be permanently filled with rock and cement.

SOLIDITY AND PERMANENCY. The solidity and apparent perma-bad to pay them for work performed approximately \$500,000. Messes, Perds & Kescel made elaborate preparations to execute their work with rapidity. Mr. Ferris spont more than \$25,000 in Chicago in the purchase of machinery and other sources that the head gates. This is within five feet of the backt results to the canal at the head and other equipment. He bought equip-ment elsewhere and ran the expense of "getting ready" many thousands of follars above that figure. Electrical machinery, such as would be needed in log machinery not work, massive pump-ing machinery and electric rallword used

WHO SPEAKERS WILL BE:

Among the speakers who have been invited to participate in the railroad officials, officials of the Twin Falls Land & Water company and others. This will be followed by a barbecue, while races and other sports will be indulged in to complete the festive ities of the day. Suitable prizes will be awarded for the best showing of farm products grown on the Twin Falls tract, of which there will be quite an elaborate

exhibition.

Kimberly, is nearing completion; the Kimberly, is nearing completion; the streets have been graded and other-wise improved. A splendid site for a city park has been cleared of sage brush, seeded to grass and beautified by the plenting of trees. In this con-nection it might be well to state that the Twin Falls Investment company, which has had the management of the selling of the town property, contribut-ed 7,000 shade trees towards the heat tifying of the place. The trees have been planted on either side of the resi-dence streets, along the Blue Lakes been planted on either side of the rest-dence streets, along the Blue Lakes drive, which leads out in the direction of the famous Perrine orchards. The highway to the great Shoshone fails, a distance of about four miles, has not been overlooked in this respect, and in a faw years this will become a popular ayonus for an eventum's drive or a spin venue for an evening's drive or a spin with the automobile.

With the automobile. Originally it was the intention to locate the townsite near 'Twin Falls, from which the place derived its name. Engineer Bickel contended that it would be better to make the location out towards the center of the tract, where it would be surrounded on all prosperous farming won his point with He flicials and no one has ever regretted

A MANUFACTURING CENTER.

Twin Falls seems destined to become a manufacturing city. It should be known as the Niagara of the west, and it probably will be, when the wa-ers of the Electrony raise, second only the Nistarn, are harnessed and to the Nue and a group barrowsed and placed under subjection. Power will be pientiful and cheap. The Shoshone Falls Power company is now construct-ing a plant at Shoshone Falls and withing a plant at Shoshone Falls and with-in three months will be ready to deliv-er electrical energy to the town. The initial plant will be capable of generat-ing 20,000 horse-power. This company has also acquired an electric railroad franchise and early next year will have a line in operation from the town to the falls. As the country settles up rural lines, both railway and lighting, will be built. The town has a temporary water sys. and lighting, will be built. The town has a temporary water sys. tem, which supplies present needs from Rock Creek canyon. A larger system is to be built, however, and the town

Mr. McPherson made a two years' con-tract with the latter and receives a soluty of \$250 per month. Forty acress of ground were net aside, near the town of Twin Falls for experimental purposes. Here experiments are be-ing made with the growing of all kinds of grains, vegetables, fruil, etc., the purpose of which is to determine what and or the or the purpose of which is to determine what prose of which is to determine unit and of crops can be most successfully rown on the soil and what kinds are rown on the soil and what kinds are. Mr. prown on the sell and what kinds are the most profitable to cultivate. Mr. McPherson is an charge of this farm, The fond was all samebrush on May 10th last, but no one would know it without being told now, for he is go-ing to harvest a big crop, notwithstand-ing the season was well advanced be-fore he could get the seed into the ground. He has a corn field that would be hard to excel in the corn states; a potato patch that would take the prize in any country. He has otherwise would have taken them years to learn. WILL FORM FEDERATION.

WILL FORM FEDERATION. The local organizations will lead to the formation of a federation made up of representatives of the lesser or-ganizations. By banding themselves together in this manner the farmers will be better prepared to work united-ly to obtain legislation and other things that will work to their mutual weifare. The associations will bring the leaders, the master minds, to the front: the farmers will learn to do business, as Mr. McPherson expresses it, and when the time comes for them to take over the masgement of the canal system, they will know how to conduct it. The raising of sugar beets is receiv-ing much attention among the farmers of the Twin Falls tract and that will undoubtedly become an important in-dustry before very long in that region. The attitude at the Minee forms is 4,180 feet, and Twin Falls city is at an elevation of a littl emore than 3,800 feet. the prize in any country. He has other things growing, including vari He hus ous kinds of grasses, which clearly demonstrate that the proper application of water to the soil and careful attention is about all that is necessary to get a crop in that portion of southern Idaho.

ORGANIZING THE FARMERS.

The most important duty devolving upon Mr. McPherson is the organiza-tion of the tarmers throughout the tract. He has already organized five associations, and will organize many more as the country settles up. At these meetings matters pertaining to irrigation, stockraising, horticulture and other topics of interest to them are discussed. Farmers tell of their

experiences and by coming together engage in a general exchange of ideas. Where one has made a failure in the raising of a certain kind of grain, vegetable, or something else, another will tell him just where he has made a mistake and how to remedy it. Mr, McPherson has delivered a number of lectures to the farmers at meetings of these associations, and many of his hearers have gained knowledge of how to farm in an irrigated country, which otherwise would have taken them years Walter G. Filer of Salt Lake is the general manager of the land company. Mr. M. M. Murtaugh is the uselstant general manager, and he has had the direction of everything pertaining to the affairs of the company on the ground. His headquarters are at Twin Falls. He is a man of great executive ability and is in every way fitted for directing big enterprises successfully.

BIG BOOM COMING.

Upon the formal opening of the rail-road into Twin Falls next month it is expected the town and country will enjoy a lively building boom. Many who have contemplated the construc-tion of new buildings have deferred do-tion of new buildings have deferred do-tion of new buildings have deferred do-tion of new buildings have deferred do-thorse with the expectation of making a great saying on the cost of material. Heretofore everything has been brought overland from Shoahone, d-distance of 30 miles. Together with the Minidoka tract, embracing nearly 500,000 acres, which is now being reclaimed by the governey

now being reclaimed by the govern-ment, that portion of southern Idaho will become an empire in itself and will furnish homes for several hundred thousand inhabitants. It will become a elevation of a littl emore than 3,800 feet. business getter for the Oregon The tract will contain a number of Short Line railroad.

WILL HAVE SEVERAL TOWNS.



RESIDENCE OF C. D. THOMAS, OF IDAHO LAND BOARD AT TWIN FALLS.





HOTEL KIMBERLY IN COURSE OF CONSTRUCTION AT TWIN FALLS.

preverance and great expenditure of more the movement of rock and material more been responsible for the more the dam construction. At the point where the dam is located the river had three channels, separated by two rock islands, one 40 and the lower island to a height sufficient to carry the full present flow of the river the ware no the rock mander that is taking by two rock islands, one 40 and the lower island to a height sufficient to carry the full present flow of the river the ware no the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to carry the full present flow of the rock mander to the rock

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CANAL DIMENSIONS.

wo to one. The canal and its banks

NO FLUMES.

appy climax to one of the grandest chievements in the history of irrigation. The world has never seen any-thing to compare with the Twin Falls irrigation project for through the con-struction of great dams and the subtion of the waters of the Snake at Miner, a region embracing approxi-mately 270,000 acres of desert lands, covered by sage brush for centuries, has been made available for cultiva-

tion. Today a greater portion of the tract is under the canals of the Twin Falls land & Water company, which has nearly 600 miles of canals and laterals finished and it is the intention to add sveral hundred miles more before the entire system is completed. A year ago nothing green could be seen through-out this broad expanse; but now there are many fields bearing a crop for the first time. The Twin Falls tract, as it is familiarly called, will become a gar-den spot as other places in the arid west have become through the simple application of water. It will be a popu-lous section and 40 and 80 acre tracts will be popular with tillers of the soil.

FATHER OF THE PROJECT.

About twenty years ago, a young man-a tenderfoot, fresh from a down wast farm, landed in Idaho. He came in search of a fortune; for he wasn't fich. On the contrary, he was as poor as the proverhial church manse. He hen. On the contrary, he was as poor as the proverbial church mouse. His ambition was his only bank account and his stock in trade was a dogged determination to succeed. He pictured in his mind a long slege of hardships; yet that did not discourage him. He slighted from the train at Shoshone and in looking ground the place, did signified from the train at Shoshone and, in looking around the place, did not encounter anything that would not encounter anything that would not encounter anything that would end to give him encouragement. Sho-shone was the supply point for the Wood fiver mines at that time, just as it is now. The young man thought of the friends he had left behind and at times that desire to get back among them would come upon him. But no! He would not give up the fight so soon. He had heard of the Shoshone falls and he wanted to see them. He made that way, and while out on the trip, fan aeross the Blue lakes, in a box canyon near the banks of the Snake fiver, which he located; and since then has made his home there. This man is Mr. I. B. Perrine. Mr. I. B. Perrine,

WORK AND PRIVATION.

It took much hard work and years of privation on the part of Mr. Perrine in make his Blue lakes ranch profit-able. The country was new; there were roads to build and a thousand and one other things to do. But he early say the possibilities of that country lying south of the river in Cassia county, where existed the broad ex-panse now irrigated under the canals of the Twin Falls Land & Water com-

<text> scheme which has been carried

e dry, each the stream to the els were dry, except at extreme high being confined north chanwater, the stream being confined ordinarily to the north chan-nel. Conditions were found ideal for the building of a great permanent dam or dams, as the topography was such that three dams were needed to hold the water in check so that it could find its way by gravity through the channels provided later for it across the lands intended to be irrigated. All the dams are securely linked to the rock islands; two of them have walls 76 feet high, while the third is 60 feet. vater,

INTERESTING DESCRIPTION.

Chief Engineer P. L. A. Bickel has kindly furnished the "News" some in-teresting data relative to the construc-

kindly furnished the "News" some in-teresting data relative to the construc-tion of the dams and water ways. "The dams at Irrigation fails, the name given to the fails created artificially at Milner," Mr. Bickel states, "each have a width of 20 feet on the creat, at a height of eight feet above high water mark in the canals. They are con-tructed of massive embankments of rock laid dry, having a minimum width of 150 feet at base, reinforced at the upper side with an embankment of earth having a base width of 300 feet, the total width of bottom being 460 feet, the upper slope being four to one and paved with rock riperap. The ag-gregate length of the three dams is about 1,100 feet, and the spillways will are over 900 feet. The islands are used as spillways, to take care of the canals. The top of the south island has been cut down to the bottom of the canals, and provided with a battery of 99 gates, each £x10 feet in clear, ex-tending across the island, a distance of 630 feet. It is safe to say that no such assembly of gates arrayed in one continuous line has ever been used upon any irrigation works in America. These gates are held in place by steel frames inclosed in concrete, and are expected to control the flow of the river at all times, and have a capacity of 63.-000 second feet without raising the at all times, and have a capacity of 63,-000 second feet without raising the water level beyond the high water mark in the canals. The greatest flood dis-charge of the river is 50,000 feet, and

the canada river is 50,000 feet, and the maximum wasteway provided in spillways, tunnels and canals is 166,000 second feet, three and one-half times the maximum. The dams are provided with a central core of wood, founded on bedroek and anchored thereto by concrete base wall. This core condists of a double thickness of two-inch plank, spiked to uprights two feet apart, Above this core or fence all the ma-terial is carefully puddled with water; below it the rock is large blocks, loose and open and free to drift out any water that may find its way through the ponderous mass of puddled earth befind it and through the core. All the possible leakage water is thus rob-bed of its velocity head, and has no power to do harm to the structure even should it appear. DRY CHANNEL DAMS.

DRY CHANNEL DAMS.

"The two dry channel dams were first constructed. Then the water was di-verted through a tunnel cut under the south island below the normal level of south island below the normal level of the river while the north or main chan-nel dam was put in. This tunnel was cut through solid rock and is 42 feet wide, eight feet high and 80 feet long, part of the distance through the is-land being an open cut. The tunnel is lined with concrete and divided into clebt accurate below of a the

council is now giving the matter conceased to rise. Whatever additional height may be required at any time up sideration

to the maximum, can readily be ob-tained by closing enough of the spill-All lines of business enterprises are represented in Twin Falls. Two banks have been established there, one of them a branch of McCornick & Co. of Salt Lake; it has two progressive newstained by closing enough of the splil-way gates to secure the desired result. The north island is considerably higher than the other and the dams are so constructed that it will also act as a splilway whenever the water gets high enough to run over it, which will be only in flood time. The crest of the dams is several feet higher than the highest island, so that there is not even a possibility of the water ever running over the top of the dams." The width of Irrigation falls is more than 500 feet and about 50 feet in height. papers the News and Times. Both are well edited and are doing their share towards building up the country. They are liberally supported and ought to be, for they are doing lots of good. The citizens of Twin Falls are no slow about providing good educational facilities. Last year by popular subfacilities. Last year by popular sub-scription a school was established and maintained to the end of the school year. This means was necessary as funds could be raised no other way, there be-ing no taxable property in the town at that time. Thirty thousand dollars is being spent in the construction of a school building this year and the con-tractors will cush the building to com-The dimensions of the main canal are 80 feet wide on the bottom. 120 feet at the surface of the water when full, and carries 10 feet of water. The in-take is on the south side of the dam at Miher, and the banks are 13 feet high above the cen-ter of the canal with stopes of more than 500 feet and about 50 feet in height.

tractors will rush the building to com-pletion so that it can be occupied by the beginning of the year. It will prob-ably be built of cement blocks and, when completed, will make an imposing appearance. The Townsite co had the foresite to set aside two The Townsite company in the town for the location of school houses; one on the east side, the other on the west side of the townsite.

UNDER CAREY ACT.

two to one. The canal and its banks occupies a right of way averaging about 200 feet in width. The main canal, 26 miles below the head gates, is divided into what is known as the high low line canals, which continue westward over the tract for nearly 45 miles. Nine hundred miles of canals and laterals will be required to complete the sum UNDER CAREY ACT. Practically all the lands of the Twin Falls tract, which are now under the ditches, have been filed on under the provisions of the Carey land act, which allows all citizens of the United States and those who have declared their in-tention to become such, to 160 acres or any fractional part thereof. The total cost of the land and water is \$25.50 per acre, in addition to the small office fees; the water company gets the \$25 and the state of Idaho the balance, Until the water right is entirely, paid for the settler dees not obtain absolute will be required to complete the sys-tem and it will take several years more in which to build them. This will include waterways necessary to irrigate a tract of 50,000 acres or more on the north side of the river in Lincoln coun-ty. In the construction of the canals there is a conspicuous absence of flumes. One cyphon is used to convey flumes. One cyphon is used to convey the water across the Rock Creek valley and is built of heavy steel. In the first four miles of the canal there is consid-erable solid rock, but beyond that the excavations have been made in soft mellow lava ash soil. Some fills were necessary, but not many; one of them is 34 feet, but short. Eight miles below the dam the canal crosses the Dry Creek valley. Here, in order to avoid a detour of three or four for the settler does not obtain absolute title, as the canal company holds a lein title, as the canal company holds a tein upon the land to the extent of the de-ferrd payments, which bear interest at the rate of 6 per cent per annum, When all payments are made, the set-tler becomes absolute owner of the water rights to his hand and is a stock-holder in the canal to that extent, Eventually, the entire Twin Falls ca-nal system will be owned a. Ad operated by the land owners themselves; thus, in time, the canal company will become in time, the canal company will become a great co-operative concern, the land owners will have entire control of it; will elect their own officers and conduct it as any other big enterprise should be conducted.

FROM ALL DIRECTIONS.

crosses the Dry Creek valley. Here, in order to avoid a detour of three or four miles below the dam the canal crosses the Dry Creek valley. Here, in order to avoid a detour of three or four miles, a dam a mile long was built. This dam is 48 feet high at the lowest place in the valley and has created a reservoir covering about 1,200 acres of land and will hold a three-days sup-ply of water in event of the occurrence of a break above. Gates have been installed at the inlet and outlet of the reservoir, thus the supply is constantly under control. The gates are of the same type as the head gates and the waate gates in use in the system. They are radial gates, semi circle in form and presenting the convex surface to the The people who have taken up land hall from all parts of the country and it is safe to say that every state and territory in the Union is represented, The New England and Mississippi valthe New England and almassimply val-ley states are represented by a great many; some have left the swamps and the plantations of Louisiana and other states of the south to find homes in a are radial gates, semi circle in form and presenting the convex surface to the presenting the convex surface to the pressure. The walls and piers have a steel frame and the gates are all of structural steel except the wooden fac-ing and a rubber flap or belt connect-ing the division walls or gates, against which the water presses to make them tight. The gates are controlled, that is, raised and lowered, by a windliss and chain. states of the south to find homes in a country where fever and chills are un-known; men have come in flocks from the irrigated sections of Oregon and Washington and they are artists when it comes to the application of water on the lands; Colorgdo and Utah have contributed their shake and they un-derstand the duiy of water as applied to land just as thoroughly as their neighbors from the Pacific coast states. is, raised and lowered, by a windling and chain. The main canal has a fail of 79-100 of a foot to the mile,

IRRIGATION INSTRUCTION.

Set capital interested in the pro-try came to the rescue, and it was inserted to the proposition and it was difficult for him by the is rated or lowered at will by a trend the fact of the proposition and the late P. L. Kimberly form on a level with the top of the ontrolling device placed on the plat, form on a level with the top of the ontrolling device placed on the plat, form on a level with the top of the ontrolling device placed on the plat, form on a level with the top of the on signs of streets then. In fact, there or signs of streets then, and the stock of the stock in two wilprovestions was across the river stock in two wilp

