The Big Canal A Sure Go--William Ham Hall, the famous irrigation engineer, left for California Tuesday after several days spent in examing the surveys of the N.P and & Irrigation Co., made by Engineer McIntyre.

It is learned, on reliable authority, that Mr. Hall has pronounced the whole enterprise practicable and that the canal will be built.

A force of engineers commenced cross-sectioning the line vesterday and construction will begin as soon as they can get the stakes set.

Messrs McIntyre, Kleinschmidt and Granger sold out their interests some time ago and the transfer will be made to the N.P. Co. within a few days and the work will henceforth be in the hands of that company--Yakima Herald, July 24, 1890.

The Herald was unintentionally drawn into a lapsus calami in its last issue, in stating that Messrs Granger and Kleinschmidt had disposed of their interest in the N.D. and Yakima Irrigation Co. These gentlemen, we are reliably informed, still retain the large interests they have represented in the company since its inception—Yakima Herald, July 31, 1890,

Cowychee

The vote on forming the Cowychee irrigation district was almst unanimous and we will not have an opportunity to see the effect of the new law--Yakima Hemald, July 31, 1890.

Irrigation
District organizations

Be it remembered that on Monday the fourth day of August, 1890, the same being one of the days of themseting of the board of commissioners, the following etc.:

In the matter of establishing an irrigation district: on the 4th day of August, 1890, the v\_ncass of the votes of the election held July 26, 1890, were found to be as follows:

Whole number of votes cast in the Wide Hollow precinct 23: irrigation district yes, 21; irrigation district No. 1, irrigating district 1.

"hole number of votes cast in the Cowychee precinct 21, irrigating district yes 15, irrigating district no. 6, order for district and boundary follow long description--Yakima Herald August 28, 1890.

C.R. Rockwood, lately of California, has been appointed chief engineer of the Northern Pacific and Yakima irrigation com any.

Mr. Rockwood, accommanied by his wife, arrived here on Monday and are quartered at the Hotel Yakima-Yakima Herald, August 14, 1890.

The North n Pacific, Yakima and Kittitas Irrigation company was incorporated on the 28th of August with Wm. Ker, Paul Schulze, Albert Klienschmidt, Walter N. Granger and Walter Oakes trustees for the first six months of its existence.

The company charter states that it is the purpose of this company to appropriate and divert certain waters from lakes and streams in Yakimas and Kittitas counties, to build ditches, flumes, viaducts, pipe lines anf conduits for the purpose of irrigating the arid lands lying east of the Cascade range.

The operations will not be confined to sumplying water for agricultural urposes but for furnishing water power for manufactories and for supplying cities with water for fire and domestic pur oses--Yakima Herald, September 4, 1890.

Hubbard-Sunnyside

Engineer William Hamilton Hall arrived from California
Tuesday and the next day engineers of the Morthern
Pacific and Yakima Irrigation company established camp on the
Hubbard ditch upon which work was immediately commenced.

It is proposed to enlarge this ditch and make it the main source of supply in watering the Sunnyside country--Yakima Herald, September 18, 1890.

The board of directors of the Cowychee and Wide Hollow irrigation district was organized Thur day by the election of D.W. Stair president and R. Strobach, secretary.

Mr. Stair was commissioned to engage engineers to run the preliminary lines for the south fork of the Tieton project. Then it is to be turned over to John O'Neal to run the line from the main channel of the Tietan.

Bonds of the officers amounting to \$205,000 were approved by the court. It is proposed to observe rigid economy in the work of construction--Yakima Herald, September 18, 1890.

Mr. James Stuart left Monday for Easton with a number of men and a carload of tools and surplies to take charge of the Northern Pacific, Yakima and Kittitas Irrigation Co.'s work at lakes Katchez and Kitchelas.

Houses are to be built and the lakes dammed to be used as sumply reservoirs. This work will be prosecuted until the winter weather interferes.

Wen questioned as to when active work of construction would commence in akima, Mr. Walter Granger replied, "as soon as the surveys are completed."

He further said that the Yakima ditches would be the first ones built--Yakima Herald, October 16, 1890.

Active steps willab once be taken by the Morthern Pacific & Yakima Irrigating commany to irrigate the larges body of land ever put under irrigation ditches in the country.

Thes decision was reached yesterday upon the presentation by William Ham Hall of California, consulting engineer of the government arid land surveys, of the favorable report on the ditch system with a few chan es originally planned by Engineer McIntyre of North Yakima.

Mr. Hall has visited the arid land district of eastern Washington several times during the past year. He is now in this city.

The first ditch to be constructed will cover between 50,000 and 65,000 acres in the Sunnyside country south of North

Yakima.

Later, if the first venture proves succe sful, another ditch covering about the same area, will be constructed.

A final survey of the Sunnyside ditch has been ordered and will be completed by January 1st, 1891, when work will be commenced on the ditch.

Hall says the country is well adapted to the culture of all kinds of fruit. The first ditch will be ready for use in one year.

The Northern Pacific railroad is interested largely in the project--Seattle Press, October, 1890.

Irrigation Hubbard

T.P. Airheart with men and teams, started n on the work of enlarging the Hubbard ditch on Tuesday in conformity of the plans and specifications of the N.P. Yakima and Kittitas Irrigation company—Yakima Herald, November 27, 1890.

The N.P., Yakima & Kittitas Irrigation Co.'s Engineers have all been called in from the field and were paid off on Thursday.

Work will be suspended until the 1st of March, when it will be prosecuted with vigor. The agreement between the irrigation company and the Knoewock Ditch Co. has been perfected and bonds have been executed by the former company to comply with the condition of the contract.

Maager Walter Granger of Montana left Thursday for a 10 day's absence and a number of engineers have gone to the Sound to spend the vacation--Yakima Herald, January 8, 1891.

A meeting of the property owners within the boundaries of the Cowychee and Wide Hollow irrigation district was held on Tuesday at which a committee was appointed to secure the service of a competent engineer and complete the surveys for the ditch--Yakima Herald, February 5, 1891.

The Iowa Flat and Wenas Ditch company are going to work at once to build five miles of ditch with a carrying capacity of 1000 cubic inches of water/

It is estimated that this additional sumply of water will be sufficient to irrigate the major portion of the Wenas country--Yakima Herald, April 30, 1891.

Engineer Guy Sterling and party returned from the survey of the Cowychee & Wide Hollow Irrigation ditch line Wednesday and pronounces it feasible in every way.

He estimates that water can be taken from the Nile and cover 60,000 acres of arid land, suitable for agricultural purposes, for \$250,000. As this is only about \$4 per acre, the scheme is one that certainly should be carried out—Yakima Herald, April 23, 1891.

It is not the residents of Yakima alone who love the beauty and fertility it possesses so much that in speaking or whiting of it they sometimes lapse into words of intimate poetery rather than accuracy of statement, butevery casual visitor finds the same enjoyment in the sight of the various charms and gives utterance of praise.

For years people of Yakima have lo oked with longing eyes to the opens of the great se tion of the country to the east of North Yakima and extending to the Columbia river....

Preliminary surveys wer slow and always resulted in the abandonment of the project until a year ago when the Northern Pacific, Yakima and Kittitas Irrigation company was incorporated and immediatedly began arranging preliminary surveys.

It has taken a year to get the surveys in shape ... the engineering work is done and an actual outlay of \$40,000 has been the cost.

At first the surveying was unsatisfactory but with the engagement of C.R. Rockwood, an irrigation engineer of great ability, as chief engineer and William Hammond Hall, state irrigation engineer of California as consulting engineer, the work moved rapidly and in a manner gratifying to the company.

The plans laid out contemplate a series of great canals, and to Mr. Paul Schulze president of the irrigation company, is mainly due the credit of inaugurating and bringing to a successful issue this huge undertaking. He has worked intelligently and tirelessly to this end. In this work he has been ably assisted by Mr. Walter N. Granger, the manager of the company, a genteeman of culture and great executive force, who has had much experience in large irrigation projects which have been broughtto a successful conclusion.

a distance of 10 miles, will be an immesse of air, carrying

five times the amount of water of the lower canal or 165,000 cubic feet a minute. At Union gap, the waters will be separated, one branch being carried across the river by a pipe line at an elevation of 200 feet thence along the upper Sunnyside and finally through a gap in the Rattlesnakes to the Columbia slope, a distance of 115 miles.

The second branch will follow around the hills at Union gap and out upon t e reservation lands and thence along the base of the hills to below Prosser, a distance of 76 miles.

In order to secure sufficient water to cover the vast
bodies of land contemplated the engineers found it was necessary to
secure mammouth storage reservoirs so as to board up the water
at those seasons when not needed and when it would otherwise go to
waste.

With this in view the company last year appropriated Lake Kitchelas, Katchees(eez) and Cle-Elum at the headqwaters of the Yakima and Bumping or Tanum lake at the head of the Natcheez

Some improvements have already been made on these water sources but the work of preparing for storage will begun at once and large forces of men will be sent up to build dams.

The dams at the lakes wf the Yakima will be twenty feet in height, while that of Bumping lake will be forty feet. Work on these dams will be continued until they are completed so that water will be there when needed.

Granger said what it was the intention of the company
to give the people cheap water. They have un@@peodedd unexcelled
facilities for advertising in all of the desirable portions of
the world and particlar efforts would be made to colonize the lands
with people of California, Colorado and other sections where the methods
and means of irrigation are well known and very shortly agents will

[Box 37 Irmigation]

Irrigation

Dams--California

Judge J.R. Lewis of Seattle spent several days in the city during the past week, returning home Wednesday.

The judge whohas an orchard in California as well as here, says that the irrigation methods pursued in the former place will have be be adopted here; that is, that the storage system of water for such streams as the Ahtanum and Wenas, which fail in a dequate supply during some seasons, will solve the problem of irrigation in these sections.

In some counties in California streams with no greater volume of water than the Ahtanum are made to water a much greater dependent country through storing the water in reservoirs during the season when it is not required for the crops—Yakima Herald, June 3, 1891.

(The great canal of the Morthern Pacific, Yakima & Kittitas Irrigation district christened in champagne and formerly opened Saturday March 26,1892 California is the pioneer state in irrigation. There this

great factor to prosperity was brought through Moxee from Spain along with the holy cross, by the Mission fathers, in the latter half of the last century.

But for irrigation her fame would be confined to the products of themines and the fruits and wines from which so muchof her prosperity exists, would not be known.

The same undesirable condition has prevailed throughout much of Eastern Washington, only to a greater extent, for we had not even the producing and surporting mines to fall back on.

As late as the sixties all of that portion of Washington east of the Cascades was known under the generic name of the Walla Walla and Yakima countries and was considered of little value except as a cattle range; in fact it has only been within the last few years that Yakima has been considered in the leat from an agricultural and horticultural standpoint.

Tis true that small natches of land along thestreams were utilized for the growing of hay and vegetables, but if anyone had maintained that the higher lands and plains would someday be brought under successful cultivation and that hops, alfalfa, fruit and vegetables wer destined to crowd the cattle from the ranges, he would be considered a visionary and a fit subject for public charge; but such has come to be the case, and the former sterile plains are now looked upon as the equal for productiveness of the historic gardens watered by the Po and the Nile. This condition has been brought about he through the science of practical application of water to arid soil and the investment of capital.

means of convenance possible to secure.

Paul Schulze, president of the company, arrived in his special car at 8 o'clock by train from Tacoma, accompanied by a number of distinguished guests, including T.B. Wallace, president of Fidelity bank; Theodore Hosmer, president of the Tacoma Light and Water company; I.W. Anderson, president of the Tacoma Land company; President Strong of Eastman Kodca company and Architect Pickles who were desirous of witnessing the ceremonies and inspecting the great work.

The intake of the canal, where the dams and headgates are located is seven miles from North Yakima and within sight of the Two Buttes, the historical Indian battle grounds.

There a platform had been built and at 1 o'clock Hon R.K.

Nichols, as master of ceremonies, called the assembled people to order

His introductory remarks related mainly to the extent of the work

and the reusults of which would accrue therefrom.

To show the importance of the canal he made some calculating, taking as a basis the 75,000 acres to be watered by this means and the maximum amount of land which would be cultivated to the crops for which this land is especially adapted at 40 acres to the farm.

Fro these figures he found that there would be 1,875 farms su porting something like 20,000 producers and non-producers and adding fifteen millions of dollars to the taxable wealth of Yakima county. Mr. Nichols words were interpolated with the applause of his audience and he closed with the tribute to those who were carrying on this great work and with introducing the next speake, Hon Edward Whitson.—Yakima Herald March 21, 1892.

Canal Dedication. Sunnyside

Address of Hon H.H. Reavis

Nearly nine years ago Senator John B. Allen, Judges John P. Hoyt and R.O. Dunbar, now of the supreme court, Hon. Edward Whitson and myself, each applied to Uncle Sam for 640 acres of desert land in the Sunnyside.

Shortly afterwards came my first interview with the new president of the Northern Pacific Yakima & Kittitas Irrigation district.

I was supremely enthusiastic in my description of the possibilities and endeavored to spread out the prospective of the grand future of this fruitful vallwy when watered. We had then some surveys and estimates of the expense of the reclamiation of our claims. All this I mentioned. I was encouraged in my estimates of the cost of irrigation which met a merry twinkle of the eye. We did not succeed.

Uncle Sam perhaps not trusting the sincerity of our intentions, est weary of waiting for our reclamation and canceled our entries.

We all with one exception applied to the people of the state for different lines of business; but owing to some slight misunderstanding and differences of ppinion among the people, the other gentlemen were engaged and your speaker was relegated tohis efforts in desert land reclamation. I have seen that same twinkle in the eye of the president of the canal company boday, but it is one of deserved triumph. --Yakima Herald, March 31, 1892.