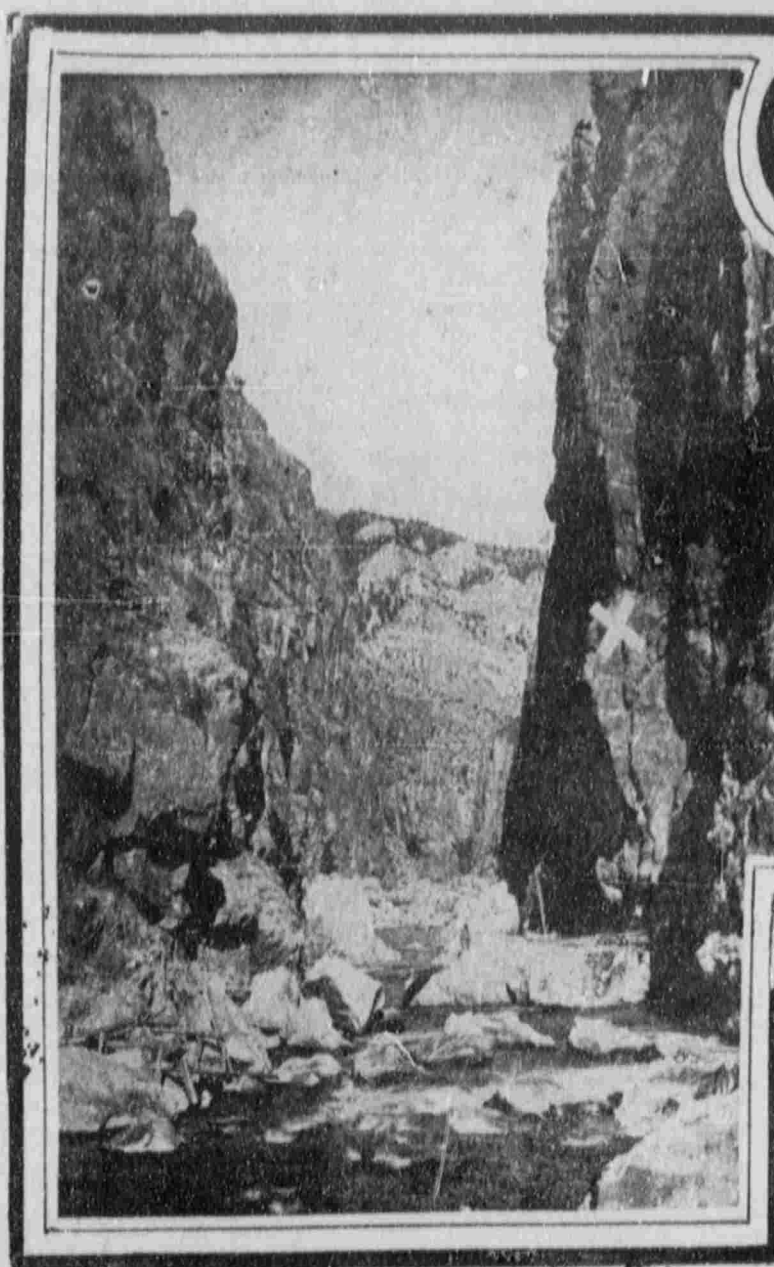
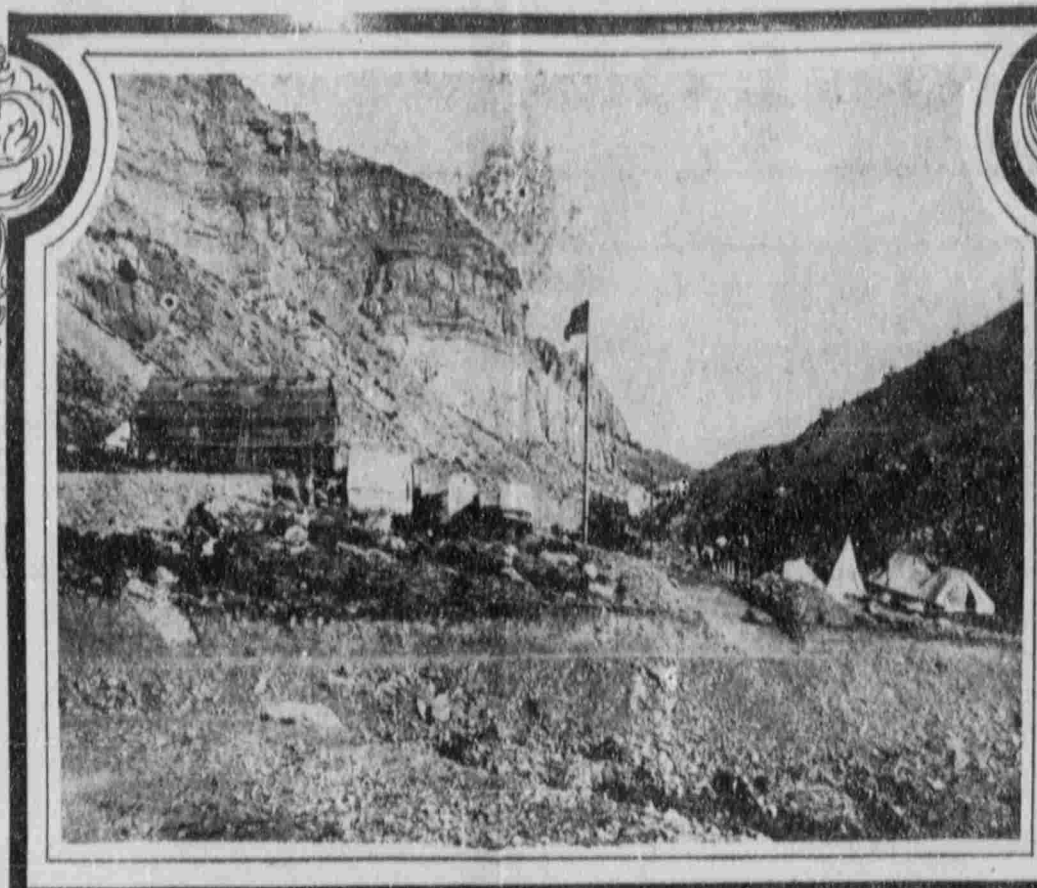


UNCLE SAM'S IMMENSE IRRIGATION SCHEME NEAR MORMON SETTLEMENTS IN THE BIG HORN.



Where Canyon Will Be Dammed
Will Reach To Cross 2000 ft.



Headquarters of The Engineering Corps

BEING WATCHED ALL OVER THE WEST.

THE enterprise with which this article deals is one of the hugest undertakings of the kind that Uncle Sam has yet engaged in. Its success—and that is already assured—is of the highest importance to the reclamation service. In Utah, as elsewhere throughout the west, its progress will be watched with marked interest. In this city from which the work is being directed and supervised, it is of especial interest among irrigation experts. And to the people who have gone from Utah to settle and reclaim waste places in Wyoming it means a future prosperity that cannot well be estimated at this time. What it will do for them on a large scale the success of the Utah lake project however, when carried to its completion, will do on an infinitely larger scale for the people of the Salt Lake valley.



Wagon Road Will Be Bored
Through Rock Where Cattle Is

ONE of the greatest of the irrigation projects now being undertaken by the government in the arid regions of the far west, is what is known in official circles as the Shoshone project, in Big Horn county, Wyoming. This is nothing less than a scheme, now fairly launched and under way, for the redemption, through irrigation, of 100,000 acres of hitherto desert land spread out to the northeast of the Shoshone river from the town of Cody, and formerly known among the Indians of that section as the "Stinking Water," because of the rank sulphurous fumes arising from various vents and crevices in the earth adjoining the stream, which is also more or less impregnated with the chemical. In fact there are places where, after removing some of the top crust of soil, the pure sulphur can be shoveled up ready for commercial purposes. At one location where the gas blows out from a subterranean source may be found any quantity of dead porcupines, rabbits, weasels and birds which came too near the vent, and presently their spirits took permanent flight.

STARTED BY BUFFALO BILL.

Some years ago, Buffalo Bill (Col. W. F. Cody) sensed what might be done in this section in the way of irrigation, and started out to organize a big irrigating company with a view to doing just what the government is now proposing to do. But it was not long before the immensity of the undertaking impelled him to halt, and enter into negotiations with the government to take the job off his hands. Finally, about two years ago, Cody was induced to sign off all his claims to the lands immediately under the scope of the project, and then the government took hold. The scheme was placed under the immediate direction of Civil Engineer J. A. Ahern of the reclamation bureau of the geological survey for

Wyoming, and the necessary topographical surveys made. Special interest in the scheme obtains in this city and Utah because of the existence of two "Mormon" settlements some 15 miles below the site of the proposed dam, and where nearly 1,000 of the Saints have established prosperous communities. The good people of these settlements will come within the immediate sphere of the project's operations, as their lands extend out under the lines being laid for the lateral to be connected with the main canal which is to be 50 miles long.

IN BOX CANYON.

The site of the proposed dam has been located in the Box canyon, half a mile below the junction of the north and south forks and six miles above the town of Cody, where the walls of the canyon are 1,100 feet high, 60 feet wide at the surface of the stream, and 100 feet wide at the top of the dam. The dam is to be 200 feet above the water, and 90 feet beneath where it will be necessary to penetrate to reach solid bedrock. Through the operations of nature, this 90 feet has been filled in with boulders and slabs from the cliffs above some of them being 30 feet thick. This has been established by Capt. G. A. Hammond, drill expert of the geological

survey, whose headquarters are in this city, with Prof. Svendsen. So it will be necessary to excavate for that depth, and in the meantime, a short tunnel and canal will be run around the south side of the dam site, through which the stream will run. The size of the cross section of the dam has not yet been determined, but will be ample for any pressure that may be brought to bear by 200 feet of water.

SET BACK MANY MILES.

The water will be set back some 18 or 20 miles, the Forts above being widened from one to three miles, and with such a depth of water, Capt. Hammond sees no reason why pretty sizeable steamers could not be placed thereon; and this combined with the remarkable scenery and the glorious climate, ought to make any scheme to build here a summer watering resort, a reasonable one. The elevation at the dam is 5,300 feet above the level of the sea, which is neither too high nor too low for health purposes. The country is a mixture of mountain and wide valley lands, the latter at present covered with sagebrush and greasewood, but of such a character as will warrant expectations of immense crops of alfalfa, grain and potatoes when once water is spread over it. In fact Capt. Hammond says

for a potato country, this can not be surpassed, some of the tubers growing to the dimensions of respectable sized pumpkins—that is, local enthusiasts make that claim. Immense beets are also grown there. The Burlington has a terminal at Cody, and when the dam is built, the spur will be extended into the Yellowstone country beyond.

THE COUNTRY.

The country is a mixture of limestone and sandstone which has been tilted, and in many places thrown to one side by an erosion of silurian granite from the beginnings of first things in geology. This granite is very hard, and has pushed its way through to the tops of the various peaks, and will furnish the material for the dam. Capt. Hammond began drilling operations last August to ascertain what was to be done in building foundations and preparations will be continued so that as early as possible in the spring, active construction can begin. The river will furnish 400,000 acre feet per annum, and 80 feet up from the stream bottom, headgates will be put in and a tunnel cut through the side hill to the main canal beyond, capable of discharging 1,800 second feet. There is more water in the local sources of supply than can be entirely utilized, and when the res-

ervoir is once full, part of the year some of the water will have to run to waste.

FOR POWER PURPOSES.

Seven miles below the dam, water will be taken from the canal and dropped 100 feet, where it will be utilized in an electrical power plant for pumping water from the canal to one of a higher level for high line distribution.

BUILDING GREAT ROAD.

Engineer Ahern is building a permanent road 300 feet up the canyon and along the line of the canal, to be 4½ miles long, two miles of which will be cut through solid rock. He is expending about \$7,000 per month for labor hire in this connection, and it will be a fine piece of engineering when he is through with it. The entire cost of the project will be \$2,500,000, and the time required for its completion will be three years.

Down the river 100 miles, at Big Horn canyon, the government proposes to build another Box canyon dam for a reservoir that shall irrigate an immense tract of country in southern Montana in the Custer military and Crow reservations. But this scheme has not yet so matured that any detailed information can be given about it.

The first photograph represents the site of the proposed government dam to be built across the gorge immediately where Capt. Hammond, the government drill expert can be seen standing. The height of the dam is indicated by the cross on the jutting rock at the right hand, or 200 feet above the stream. The view is east, looking down stream.

The second photograph shows the left side of the canyon, half a mile below the dam, and gives some idea of the tremendous rocky formations. The excavation to the left is where a beginning has been made of a tunnel for the wagon road that is to run along the side of the cliff 300 feet above the bed of the canyon. The road will come out just on the other side of the great mass of perpendicular rock where the light is striking. The wooden bridge is a temporary saving affair, and the party posing thereon is the drill expert.

The third photograph represents the headquarters of the supervising engineer. To the rear and up from the house where perpendicular and parallel seams may be seen in the rock, is where a tunnel is to be cut for the irrigating canal that is to run clean through and under the tall cliffs into the valley beyond. A new road is noticed in the picture, and the tents of the party of engineers.

STORY OF THE HABEAS CORPUS.

The idea of liberty is very old, much older than the idea of parliaments or constitutional governments. The latter came in to formulate, regulate and preserve liberty. The great English sources of liberty are well defined and readily recognized.

First is Magna Charta, granted in 1215. King John, prior to granting this charter, had exercised almost unlimited power. The greatest provision of magna charta is: "No freeman shall be taken or imprisoned or diseized or outlawed or banished or in any way destroyed, nor will the king pass upon him or commit him to prison, unless by the judgment of his peers or the laws of the land."

Upon this foundation constitutional government was erected. This guarantee of uniform administration of law was many times violated, but the people never yielded the rights won by the guarantee. By the petition of right in 1628, 413 years after, in the reign of Charles I, the rights gained under Magna Charta were reaffirmed and strengthened.

The Petition of Right prayed "that no man be compelled to make or yield any gift, loan, benevolence tax or such like charge without common consent by act of parliament; that none be

called upon to make answer for refusal so to do; that freemen be imprisoned or diseized only by law and not by the king's special command without any charge."

The provisions of both these charters of liberty were constantly disregarded and the people complained that unless there were some way to enforce the rights granted arbitrary kings would deny them; that they should have some way of showing that men were imprisoned without a trial by their peers and that they were passed upon by the command of the king, and not by the "due process of law."

The habeas corpus act was adopted to meet the condition and to relieve the people from all unjust imprisonments. It compelled judges and other officers to give deliverance where it appeared that the law of the land had been disregarded in their imprisonment. The habeas corpus act came in 1679, 51 years after the Petition of Right and 464 years after Magna Charta. It is a great charter of constitutional liberty.

There is a common belief that the issuance of writ of habeas corpus frees the prisoner. This is not so. The petition for a writ of habeas corpus states in substance that the petitioner is illegally restrained of his liberty and prays that the court will issue its writ directing and commanding that the custodian of the petitioner bring the body before the judge, and that inquiry

be made as to the petitioner's imprisonment. The judge issues the writ, for it is all but compulsory upon him to do so. Upon a hearing the prisoner is remanded or released, according as the judge decides upon the facts and law. The writ is used to inquire into and determine the custody of children. It is the great writ of inquiry as to how and why any one is detained in custody.

But while it is true that "the habeas corpus act" was passed in 1679, that act, in the opinion of the Chronicle, was merely declaratory of what had been English law for longer than there was any record of. Lator's Political Cyclopedia says it was "one of the great, unrepeatable laws which without the aid of legislation, became part of the common law of England and is of greater age than Magna Charta itself." Hallam, in his "History of the Middle Ages," declares that whether the courts framed the writ after Magna Charta, according to the spirit of its declaration, or "found it already in their register, it became from that era the right of every subject to demand it." He also says that from the very earliest records of English law "any freeman might as matter of right demand the issuance of this writ."

There was more or less of evasion and dodging by imperious kings and truckling judges, and during the stormy reign of Charles I this increased, for Charles was a bigot and had less tact and more courage than had James I in carrying out the methods of the Scottish Stuarts, which James had introduced. The famous Petition of Right did ask for the express recognition of this right, among others, in 1628, but

the act was not passed until 1679 under Charles II. Cromwell's legislators did not enact it.

Of this act of 1679 Lator says that, though the origin of the writ is somewhat erroneously stated to have been in this act, the fact is that this act "netted added to nor detracted from the fundamental principles of that efficacious writ, but was passed in order to define with clear precision the appropriate remedies attendant upon the invasion of personal rights."

The thing had existed for centuries. In 1579 it was given a new suit of clothes, and it was not until George III had been king for 56 years that the right was extended to civil causes in the courts—Chicago Chronicle.

Coughing Spell Caused Death.

"Harry Duckwell, aged 25 years, choked to death early yesterday morning at his home, in the presence of his wife and child. He contracted a slight cold a few days ago and paid but little attention to it. Yesterday morning he was seized with a fit of coughing which continued for some time. His wife sent for a physician but before he could arrive another coughing spell came on and Duckwell died from suffocation.—St. Louis Globe-Democrat, Dec. 1, 1904. Ballard's Horehound Syrup would have saved him. 25c, 50c and \$1.00. Sold by Z. C. M. I. Drug Dept.

ONE FARE FOR ROUND TRIP.

Via Salt Lake Route. Tickets sold Dec. 23, 24, 25 and Jan. 1. Limit for return Jan. 3, 1905. See agents for particulars.

DEWEY THE LEVEL-HEADED.

The Hague commission could not have a more content chairman than Admiral George Dewey of the United States navy. He is a man of the keenest judgment, quick preception and absolute integrity. I sat out the weeks of the Schley Naval court. Times without number Dewey clarified the situation before he allowed a witness to leave the stand. He sought only the truth. He is a good lawyer as well as a perfect master of the art of war. He knows what it means to command a ship, a squadron and a fleet. The great court at The Hague, which will immortalize every man associated with it, will have one of the most mature minds at its head that exists today in the naval service of the world. Should Dewey be chosen, as I hope, I'd be willing to leave my life in his hands; and the same statement would be unhesitatingly made by any man who has ever seen him in command of a ship. George Dewey is one of the few men living today who would not lose his head under the most unforeseen and trying circumstances. That is saying much for any mortal, but this is the one of which is may be truthfully spoken.

The real story of the entrance of Manila harbor, every square rod of

which was believed to be mined, was sublime. Dewey stood on the bridge of the Olympia in a white duck suit, a conspicuous mark for every sharpshooter at Cavite. That was not all. That was courage right enough, but he had every detail of the prospective battle worked out in his head. When the moment came Dewey merely said: "Gridley, you may begin with the port guns."—Julius Chambers in Pittsburg

DOCTORS COULD NOT HELP HER.

"I had kidney trouble for years," writes Mrs. Raymond Corner of Shelton, Wash. "and the doctors could not help me. I tried Foley's Kidney Cure, and the very first dose gave me relief and I am now cured. I cannot say too much for Foley's Kidney Cure." It makes the diseased kidneys sound so they will eliminate the poisons from the blood. Unless they do this, good health is impossible. F. J. Hill Drug Co.

FOR CHRISTMAS COOKING



the White Fawn Mills Flour stands supreme upon the pinnacle of its own greatness. Its superiority is unquestioned for all culinary purposes wherein flour is a requirement. Bread made from it is ideal in its delicious flavor. Cakes are always light, dainty and luscious. Pies and Pastry have a wholesome healthfulness that is unsurpassed. Telephone, 682.

Salt Lake & Jordan Mill & Elevator Co.

Page 8 in Monday's Paper Will Tell Particulars!

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