the United States into a great pawnbroking establishment, it certainly has a right to improve what remains of its own domain, and to sell it to the thronging thousands and tens of thousands of hardy and industrious men that are seeking for homes. For this purpose the government would be justified in spending four or five hundred millions of dollars on improving these arid lands, and of issuing for that purpose a special currency which, in addition to its legal tender quality, would be specially valuable because it would have a preference in being receivable for arid lands which had been improved and furnished with water rights by the government of the United States. As the notes were paid into the government for lands they could be canceled, if thought desirable. They would have the highly desirable function of adding to the per capita of our circulation, and the government could take its own time in canceling them. Besides, they would bear no interest.

There would be nothing wild or adventurous in such a programme. By it the government would create a great outlet for our surplus population, would sensibly increase the circulating medium and would make money, and a great sum of money. From the proceeds of the sales of these hundreds of millions of arid lands supplied with a good water right, a sinking fund could in time be created that would extinguish the whole national debt. In addition to relieving the money stringency of our people, the great west would be divided and started anew on its glorious productive mission. There is absolutely no drawback to such a plan. It is recommended by every consideration of both patriotism and expediency. It would make money plenty, stimulate enterprise and inconceivably enrich the government and the people.

ANCIENT AND MODERN.

A Sketch of Irrigation History and Methods From Antiquity.

Irrigation is the watering of lands by currents distributed over or near the surface, and also by temporarily flooding them. It is one of the oldest of arts, was practiced by the ancient Egyptians, Arabians, Assyrians, Babylonians and Chinese, and has always formed a part of the agriculture of the countries bordering on the Mediterranean.

The valley of Mareb in Yemen, Arabia, was irrigated by waters distributed from a vast reservoir made by a dam 2000 feet long and 120 feet high, constructed by an Adite monarch of Saba, probably long before the time of Solomon. This dam was built of enormous blocks of hewn stone, and must have been a work of no mean engineering skill, as it stood and restrained the current of a large stream of 70 tributaries for about 200 years, when it burst with desolating effect.

The canal of the Pharoahs, connecting ancient Pelusium with the Red sea, was constructed for purposes of irrigation. The plains of Oman in Arabia were watered by subterranean canals supplied by reservoirs in the mountains, and a vegetation of rare luxuriance, consisting of most of the fruits and grains of Persia and India, is produced in consequence. The plains of Assyria and Babylonia were covered with an immense system of canals, some of them hundreds of miles in length, intended partly for irrigation and partly for navigation; and their ruins are among the interesting antiquities of those countries. Into some of these canals the water was raised by machines which consisted of rude buckets worked by oxen, in much the same manner still practiced on the banks of the Tigris and Euphrates.

Among the ancient Egyptians irrigation was performed with water flowing directly from the Nile, or raised out of it, or, as was often the case, from wells. The most ancient machine was the sweep, or bucket suspended from a balanced pole, such as was generally used many years ago in this country, and is still in some parts at the present time. Afterward the chain of pots, or sakiyeh, was used, as it also was by the Assyrians and Babylonians. At present water is raised from the Nile by means of Persian wheels, which differ from the chain of pots by the vessels being hung upon the periphery of a large wheel, and so adjusted as to tip over and empty their contents into a trough when they arrive at a certain height, instead of being placed upon an endless chain or rope.

In the agriculture of Italy, France and Spain, great attention is paid to irrigation. The Romans during several centuries constructed extensive works, which are still in use. The water is carried not only over the grass lands and rice fields, but between the ridges in the grain fields and through the vineyards round the roots of the vines. The distribution of it is controlled by a regular system. The state itself claims the waters of all the rivers of Lombardy; and in the Venetian territories all the springs and collections of rain water belong to the government.

The use of the waters of the rivers is rented out at a certain price by the hour or half hour, or for so many days at certain seasons of the year. Persons are entitled to make canals through the lands of others lying between them and the river, on paying for the damage thus caused.

The channels for leading the water into the lands and the parallel channels alternating with them, placed at about 6 inches lower elevation for conveying the water away, are laid out with great regularity at distances usually of about 22 feet between them. In summer the water is allowed to flow through them for several hours about once a week, but the flow is steadily kept up from October to April, except at the time of cutting the grass.

In Northern Italy lands that can be irrigated, rent for one-third more than the same class of lands not thus improved.

On the American continent the ancient inhabitants of Peru were found by their Spanish conquerors in the use of the most costly works constructed for irrigating their lands. Prescott says: "Canals and aqueducts were seen crossing the low lands in all directions and spreading over the country like a vast network, diffusing fertility and beauty around them." The Aztecs of Mexico also made use of similar means to counteract the natural dryness of their atmosphere; and in the beautiful gardens of Iztapalapan, watered by canals and aqueducts, and moistened by the spray of fountains, was exhibited to the astonished Spaniards a perfection of horticulture at that time unknown in their own country.

Irrigation on a large scale and by the Italian method was attempted in England in the sixteenth century on the estate of Babraham in Cambridgeshire; but the system was not fairly established as an important branch of agriculture until the commencement of the present century. Of late years what are called water meadows have become a common feature in some of the best cultivated counties, especially in Wilts, Devon, Somersetshire and Gloucester, and also in the southern part of Scotland.

Some peculiar methods have been introduced, as that of irrigating with currents of liquid manure; and the sewerage of Edinburgh is distributed on the same principle with the most beneficial results over the meadows that lie below the level of the city. The grass grown upon the meadows thus watered has to be cut about once a month from April to November, and is described as remarkably tender and succulent and admirably adapted as a milk-producing food for cows.

With some exceptions the general practice is not to leave the water standing upon the lands, but taking it from a running stream (which should be tapped if practicable far enough above the meadow for the water to flow in from the bottom of the current, where it is most charged with sediment), it is conveyed in a main channel around the further margin of the meadow, and numerous side branches lead off in nearly parallel lines into its central portions, each tapering to a point.

These are commonly interlocked by others proceeding in the opposite direction from the main channel, on the lower side of its circuit, as it passes back to the river. The second set, being at a lower level than the first, serve as drains, conveying the water that overflows from the first to the main channel, which in the latter part of its course is no longer a feeder but a drain.

The water is allowed to flow through this system as often as required, care being taken that it shall not lie at rest at any time, the effect of which is found to be a tendency to cause the growth of a coarse grass. This method is called bed work irrigation, from the ground being laid out in nearly regular beds by the channels. It is applicable only to tolerably level land.

By another method called catch work, irrigation is conveniently applied to uneven ground. One set of channels follow the contour lines of the ground, each retaining its own level. These are crossed nearly at right angles by numerous other small channels, which are fed at their upper ends by the main gutter, and the water is directed by stops of clods of earth into the level side channels, which are filled as may be desired.

The laying out of the work and the management of the operation, so as to distribute the water uniformly, in the proper quantities, and at the right times, require good judgment, close attention, and much experience.

The irrigating season in England is the colder portion of the year, commencing in October and November, and terminating in March or April. The letting the water on or off during frosty weather is to be avoided, as a crust of ice may root out the grass as it thaws. As nearly as may be, with reference to this danger, the water is allowed to flow through the channels for two or three weeks at a time, and is then drawn completely off, so that the ground may become as thoroughly dry as possible. In this condition it is left for five or six days, when if there is no fear of freezing the operation is repeated; and so on through the winter.

When the grass begins to vegetate, the periods of irrigation should be shortened, and cease entirely when it is sufficiently forward to make good pasture. The effect of this practice is often very striking; the grass is brought forward very early in the spring. After feeding off one crop or mowing the grass, the land is sometimes again irrigated for a short time to great advantage. A second crop is ready to be cut by the time the first has ripened on the dry meadows. Three or four crops of grass are thus obtained in each season.

But the perfection of irrigation is when it is combined with thorough underdraining. The water flowing in brings with it in solution and suspension various mineral and organic substances suitable for the good of plants. By evaporation and by various chemical reactions the soluble ingredient may be set free, when they become entangled with the other foreign matters in the grass and in the soil beneath, both of which act as filters.

Thus the finely comminuted sediments and the soluble salts are equally distributed among the rootlets, and these are refreshed by the new supplies furnished by each repetition of the process.

By the drains the excess of moisture is soon removed, stagnation, so injurious to vegetation, is prevented, and the elements that feed the plants below the surface are kept in a similar condition of healthy renewal with those of the air circulating among the branches and adding to the vegetable growth by assimilation going on through the leaves. The benefits derived from the process vary of course with the quality of the ingredients brought in by the water, according as these are more or less suited to the requirements of the soil and of the crops.

The hard water, charged with carbonate of lime, which it has gathered in flowing through a limestone region, brings a valuable fertilizing ingredient to silicious soils deficient in lime; and the clayey sediment washed out of alluvial bottoms is spread with the most beneficial effect over loose sandy soils. Sometimes organic liquid manure, such as the drainage of farmyards and leachings of compost heaps, are supplied to the soil by being mingled with the water used in irrigating; but the principal object of irrigation is to supply moisture, as it is always easy to add manure in a solid form.

Much attention is now given to the subject of irrigation in that portion of the United States lying between the Mississippi river and the Rocky mountains; so that a vast region, some of which was long known as the great American desert, bids fair in time to be for the most part brought under fair cultivation.

The Mormons in Utah by means of irrigation render their barren country fertile. The general plan with them, and also in California, is to lead the water in canals from the rivers or the mountains, and to allow it to flow over the fields, either through small channels made in the soil or over the even surface.

THE DEVELOPMENT OF WATER.

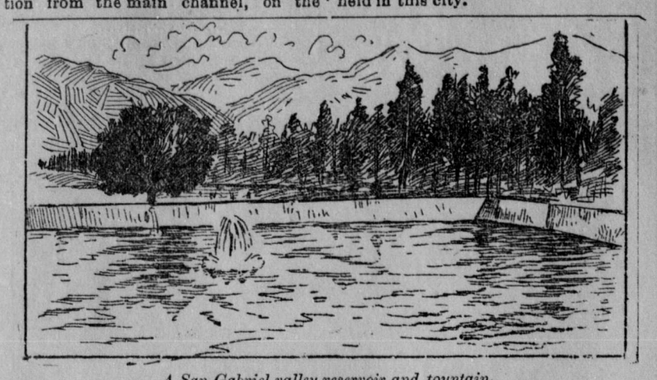
What Irrigation Has Done in Southern California.

Some Statistics and Facts Which Are Instructive.

The Forthcoming International Irrigation Congress—The Work Which Irrigation Has Done for the State.

The eyes of the arid world are directed toward Los Angeles at the present time because of the session of the international irrigation congress, which meets in this city today.

The first congress of the kind was held in Salt Lake City in September, 1891, and now the second session is to be held in this city.



A San Gabriel valley reservoir and fountain.

Mr. L. M. Holt, an old-time citizen of Los Angeles, an acknowledged authority on irrigation matters, having returned to this city to live after an absence of 13 years in Riverside and San Bernardino counties, was found by a HERALD representative in his office, No. 110½ South Broadway, and, being desirous of giving the HERALD readers some reliable information on the all-important question now so prominently before the public, the reporter applied the pumping process with the following good results:

"Yes," said Mr. Holt, "I was one of the California delegates to the Salt Lake irrigation congress in September, 1891, but took no active part therein, as I was on the verge of a severe attack of malaria fever, which put me to bed on my arrival home, and did not feel like doing anything at that time that was not necessary.

"The Salt Lake congress was largely attended by able representatives from all the arid states and territories of the United States. The representatives at that time did not come from beyond our own country. The presidency of that convention was given to California, and Hon. C. C. Wright, author of the Wright irrigation law, was called to preside. This was done as a recognition of the great services rendered this state and the irrigation interests of the country by that gentleman. I had the honor to propose his name for that position in a caucus of the California delegation, and it met with a hearty and unanimous endorsement.

"Hon. W. H. Mills, John P. Irish and M. M. Estee of this state, were prominent among the members of the congress and their eloquence and sound judgment did much to shape the action of that body.

"The congress was composed entirely of delegates appointed by governors of the states and territories—each state or territory being entitled to 30 delegates. The coming congress will have a larger attendance, as delegates are being received from counties, agricultural and horticultural societies, irrigation companies and other bodies as well as by appointment of governors. I think that under the call, irrigation districts would be entitled to representation and they should avail themselves of that privilege."

"By the way, how are the irrigation districts of the state getting along?"

"Very well. There are some defects in the law but these defects are being remedied at each season of the legislature. One defect is that the law does not provide that the districts shall report to any one—any state officer; hence no official information concerning them can be obtained. In 1890 I compiled a report of the various districts in the state at that time, and that report was placed before the legislature for its guidance. There had been 26 districts organized at that time, covering 1,542,453 acres. Twenty-one of these districts had voted bonds to the extent of $9,452,000, and bonds had been sold and traded to the extent of $1,903,000.

"Last December I compiled another report for the benefit of the last legislature, and I am now compiling another report, which will be more complete than any other ever gotten up, and it will show a very satisfactory progress being made in the districts of the state. This report will appear in the forthcoming illustrated irrigation edition of the Rural Californian, which will be issued in October, just prior to the meeting of the irrigation congress. I am engaged on that edition at the present time, and am succeeding beyond my most sanguine expectations in getting irrigation data from all over Southern California, the state at large and Arizona.

"Among other matters I am getting the data for a table which shall name every irrigation system, large or small, in the counties of Los Angeles, San Bernardino, Riverside, Orange and San Diego, the number of inches of water in each system, the number of acres that can be irrigated and the number that are now actually being irrigated. This will be a most valuable compilation—one that has never heretofore been attempted.

"It seems strange. Fifteen years ago our people thought that the limit of irrigating arid lands in Southern California had been very nearly reached. We are today irrigating 10 times as much land as we irrigated then, and there is water in sight in some of the counties to irrigate 10 times as much land as is being irrigated now. San Bernardino county, for instance, is irrigating at present something over 40,000 acres of land, and when its systems are fully utilized and the reservoir systems now outlined are completed, the capacity to irrigate will be over 10 times the area under water now. If 40,000 acres of irrigated lands produce $20,000,000 of assessed wealth, what will 400,000 acres produce?"

"'Prospects for storage water.' did you say? I have always been considered a few years ahead of the times, but I am willing to put myself on record and take the chances of being right or wrong.

"Southern California has but just begun to develop. The horizon of development is broader today than it was 15 years ago. Then we thought the limit was almost reached; now we know it is not.

"The future development of wealth in Southern California lies in storage reservoirs. This has been amply illustrated. In the first place the man who puts money into storage reservoirs makes money at a rate that is more than satisfactory, and the man who owns the land to be irrigated makes more money than the man who furnishes the water. For instance, the Bear Valley reservoir was built in 1884. The original stockholders put in $150,000. They then drew out in water dividends $540,000. Three years ago they reorganized the company and put in $200,000 more, and then the face value of their stock amounted to $2,400,000. Two years ago a 10 per cent dividend on that stock was paid amounting to $250,000. One year ago another similar dividend was paid, and this last May another dividend of 15 per cent was paid, amounting to $360,000—a total of $1,380,000 in dividends on an investment of $350,000."

"But what about the land irrigated?" asked the reporter.

"Why, the Alessandro tract was bought three years ago for an average of $18 an acre, and today it sells for $100 an acre and upward, and during the three seasons 5000 acres have been placed under irrigation, while 1200 acres more have met the same fate in the Perris district, irrigated from the same source.

"Col. E. L. Mayberry and his associates are doing a similar work at the Hemet reservoir for the celebrated Hemet tract near San Jacinto.

"The Sweetwater reservoir is making a paradise along the bay front below National City, where a few years ago the land was practically worthless for want of water. And there is solid wealth in that paradise, too.

"Then there is the Linda Vista irrigation district, which is contracting for a supply of water to irrigate another large tract of land this side of San Diego.

"The Jamacha district in San Diego county has also contracted with the Mt. Tecarto Water company to build another reservoir that will add millions of wealth to the back country of the City on the Bay.

"In San Bernardino county the Arrowhead company are at work on a system of reservoirs that will furnish 7500 inches of water to irrigate 60,000 of land, more land than there is under actual irrigation today in either San Bernardino or Riverside counties.

"Then there is the Victor reservoir company, which is larger than any other south of Tehachepi. It will irrigate over 200,000 acres of land with a dam 150 feet high, or 350,000 acres with a dam 175 feet high. The 150 foot dam will supply the water to irrigate more land than there is irrigated today south of the Tehachepi pass.

"These are startling figures; our people will fail to grasp them at first, but they are true, and these irrigation works are being built, whether we coin our silver into legal tender dollars or melt it up and cast it into cooking stoves.

"Then there is the Colorado River Irrigation company, which will soon commence work to divert a portion of the Colorado river out upon the Colorado desert, through a canal 118 feet wide on the bottom and 14 feet deep, carrying 3500 cubic feet of water per second, or 175,000 inches of water—enough water to irrigate 1,750,000 acres of land on a basis of one inch to 10 acres, or less land if more water is used to the acre.

"Southern California is considered the tail of the California dog, but if our present development and growth keeps up at the present rate, it will be but a few years before the tail will wag the dog in a very vigorous manner.

"Since 1880 Southern California has increased in population at a wonderful rate. Then it had 64,378 inhabitants, but now, 13 years later, it has a population of 242,618. During this same period of 13 years, 30 of the 46 counties north of the Tehachepi have gained in population only 68, while the estimated decrease in the population of San Francisco in the past three years has been over 18,000.

"Central and Southern California are being saved from decay and dry rot by irrigation in some localities, for the San Joaquin valley is actually making a vigorous growth under the stimulating effects of water for irrigation only."

STATE DIVISION THE ONLY REMEDY.

No Favors from Northern California in Irrigation.

The HERALD called attention to the crude condition of the water laws of California. The fact is, the matter has never been fully considered in all of its different aspects. No better opportunity has ever been afforded to thoroughly discuss the question than at the irrigation congress.

The first legislature which met at San Jose in December, 1849, unfortunately for Southern California, adopted the common law. Far better would it have been for us if the civil law had been adopted as the rule of action in this state, as long as Southern California was forcibly incorporated into, and in the same manner kept under Northern California rule.

The principal reason which led to the adoption of the common law was that all the argonautic lawyers were already familiar with its principles, and that if the civil law were adopted they would have to unlearn their practice and begin again with unfamiliar forms.

There were many good, strong and clear reasons why preference should have been given the civil law. No one who will read the debates of the first legislature can doubt the truth of this proposition. The civil law is codified, and comes down as the experience of the highest civilized nation which ever existed and whose government at one period ruled the whole known world. It is the result of the highest civilized intelligence. It is the mental product after all processes have been arranged, classified, analyzed and digested. It is the most perfect system of law ever designed, eclipsing in its justice and mercy the famed Mosaic ethics of an alleged greater antiquity.

On the other hand the common law is a kind of a go-as-you-please proposition. It claims to be the perfection of human reason, and lays down the principle that the law ceases when the reason for its existence exists no longer.

The common law mainly consists of a lot of English parliamentary enactments and court decisions, bound nearly to death with red tape and other forms. It rests upon no written constitution. It is ill-arranged, unclassified, almost incapable of analysis and nearly so of digestion. It is a very creditable legal system, considering the semi-barbaric people from which it sprung.

Louisiana is one of the few, if not the only one, of the states in which the civil law prevails. All the older states were burdened with a common law, and a common law it is when compared with the civil.

The common law recognizes riparian (that is, bank) rights. Patrick Hamilton, author of a book on irrigation, says:

"Suppose a man owns land on both sides of a stream at its mouth. Under the application of the law of riparian (bank) rights he would be entitled to receive the entire volume of water in the stream, undiminished in quantity and unimpaired in quality."

Such a law, of course, shuts out all irrigation by those above the man who lives at the mouth of the stream. Not so with the civil law. Written and codified by those old nations of the great arid belts of the world, it recognizes and provides for irrigation rights. Under the civil law grew up some of the grandest civilizations of the old world. Irrigation was the foundation of their polity.

But the state constitution, which had been ratified in November, 1849, said that all laws then in force consistent with itself should remain binding until repealed by the legislature. Although that body adopted the common law in several instances, it adopted the civil law. Thus the city of Los Angeles was invested with the same power and control over the distribution of water for the purposes of irrigation as was possessed by the old pueblo. Here commenced a mixture of these two great legal systems.

In 1872 the legislature passed an act to promote irrigation. The same year the statutes were codified on the civil law plan, and in went section 1422 of the code of civil procedure: "The rights of riparian [bank] proprietors are not affected by this title. [Title VIII on water rights.]"

Then came the illogical supreme court decision in 1884 sustaining riparian rights. Then the legislature repealed section 1422, and left 1410, which reads: "The right to the use of running water in a river or stream or down a cañon or ravine may be acquired by appropriation." Then came the Wright irrigation districts with power of eminent domain to destroy riparian right. The Wright law is only a sop. California has certainly been cursed with a lot of asinine legislators and judges.

The pitiful decision of the supreme court for riparian rights was founded on the now repealed section 1422. They further alleged there must be riparian of bank rights on Kern river because it had no pueblo!

In 1880 Lieutenant-Governor John Mansfield endeavored to get a law passed dividing the state into two districts, namely Northern and Southern California. The bill provided that on irrigation matters Northern California should be goverened by the common law and Southern California by the civil law. This was a common sense proposition, as the heavy rainfall renders riparian rights just in that section, while in Southern California, on account of the lighter rainfall, they are manifestly unjust. The measure met with an overwhelming defeat.

Northern California has proven by her persistent opposition for over 40 years that she never will consent to the enactment of a fair irrigation law. Southern California cannot exist without irrigation. This being the fact, the only remedy for Southern California is to get the state divided and thus obtain the privilege to make her own laws. Then, and not till then, can this section get justice in matters of irrigation.

IRRIGATION LAWS OF ARIZONA.

A Historical Sketch of Water Legislation in the Sun-Kissed Land.

By Hon. C. C. Stephens, ex-Member of Council, Thirteenth Legislature.

On the 26th day of September, 1864, the first legislature of Arizona assembled at Prescott, and after some preliminary work on the 4th day of October following the legislature adopted a bill of rights, the equivalent of a state constitution, wherein it was declared in the 221 article thereof, that "all streams, lakes and ponds of water capable of being used for the purposes of navigation or irrigation, are hereby declared to be public property, and no individual or corporation shall have the right to appropriate them exclusively, except under such equitable regulations and restrictions as the legislature shall provide for that purpose."

At that time there were irrigating ditches in the southern part of the territory being managed under the equitable Spanish-Mexican laws, their construction dating from prehistoric times, and which had been in use by the Spanish pioneer settlers for more than 100 years, notably those in the valley of the Santa Cruz river at Tucson.

At the same session of the legislature, November 10, 1864, a code was adopted and named from its author, Hon. William S. Howell, associate justice of the territorial supreme court, the Howell code, and the fifty-fifth chapter is entitled "Of acequias or irrigating canals." It consists of 28 sections, and provides that all rivers, creeks and streams of running water in the territory are public and applicable to the purposes of irrigation and mining. It further provides, among other matters, for public and private acequias analogous to the common system of public and private roads, and were to be constructed and maintained in a corresponding manner. No damages were payable for running the public acequia through private lands if those lands were benefited therefrom. In times of scarcity of water, the proprietors having the oldest title to the lands had the precedence in right of using the water. A water overseer was provided for, to see to keeping the ditches in repair, and the impartial and proper distribution of the water. All disputes concerning the ditches, the use of the water, etc., were summarily disposed of by the alcalde or justice of the peace, right of appeal from his decision being allowed; though to the honor of the alcaldes it must be said that such was the natural equity of their decisions that appeals were almost unknown. This chapter is substantially a re-enactment of the Spanish-Mexican rules and regulations in force prior thereto.

Chapter 61 of said code, section 7, also provided that the common law of England, so far as it was not repugnant to or inconsistent with the constitution and laws of the United States, or the bill of rights, or the laws of our territory, is hereby adopted, and shall be the rule of decision in all the courts of this territory.

Some minor and unimportant amendments to this act were made by the legislature of 1887, but no impairment or change of its general scope of procedure was attempted.

In the legislature (13th) of 1885 there was some minor legislation in relation to regulating unincorporated acequias on the south side of Salt river, in Maricopa county, providing for inflicting penalties for refusing to work on the acequias, making the work done in such case a lien on the land of the person so refusing, giving justices' courts jurisdiction of such matters, in which judgment could be taken and execution issued upon the foreclosure of the liens. The using of water without the proper gates or impeding its flow were declared misdemeanors.

In October, 1884, strangely misinterpreting the spirit of section 4468 of the political code of the state of California in relation to the common law, which section is identical in language with the Arizona bill of rights hereinabove referred to, a bare majority of the supreme court of California decided substantially in Lux vs. Haggin that under the common law as applicable in California a riparian proprietor is entitled to have all the water of the stream flowing by his land to flow undeteriorated in quality and undiminished in quantity, forgetting that England was a drainage and not an irrigating country, and that these very principles of the common law were involved in that decision. On the contrary in India, under English educated common law, lawyers and judges had created and maintained the grandest irrigation undertakings of the age. No greater or more indefensible misconception of the English common law stands of record in any land or by any court than this decision, and its far-reaching, disastrous consequences will be felt in Southern California long after the judges who rendered it are dead and deservedly forgotten.

Section of Bear valley dam.

In January, 1885, the thirteenth legislature of Arizona convened at Prescott, and the writer of this article was a member of the upper house, elected from the five southern counties of Arizona. Foreseeing the disastrous effects upon the busy infant commonwealth of Arizona if the false and pernicious doctrines announced in Lux vs. Haggin should become planted in its jurisprudence, he immediately introduced an act in that legislature which in due course became the law and reads as follows:

No. 68.—An act to amend section 7, chapter 61 of the compiled laws of Arizona.

Be it enacted by the legislative assembly of the territory of Arizona:

Section 1. That section 7 of chapter 61 of the compiled laws of Arizona is hereby amended to read as follows: The common law of England, so far as it is consistent with and adapted to the natural and physical condition of this territory and the necessities of the people thereof, and not repugnant to or inconsistent with the constitution and by-laws of the United States or bill of rights or laws of this territory or the established customs of the people of this territory, is hereby adopted and shall be the rule of decision in all the courts of this territory.

The second section provided for the repeal of all acts in conflict, and the third section put the act in force immediately.

In the revision of the territorial laws in 1887 this section, as amended in 1885, is retained, and it is now of the organic law of the territory.

The legislature of 1893 passed two minor acts concerning irrigating waters (session laws, pages 135—149). The first act relates to the appropriation of water and the construction and maintenance of dams, reservoirs and canals, and a proper record of appropriations and titles, and the second act is in relation to regulating canals and ditches built and maintained for the purpose of conveying water to consumers for hire. The provisions of these acts are few, simple, easily understood and not onerous, and are mostly matters of detail in the construction and maintenance of such ditches. Freed from the threatened dangers of the dangerous principles laid down in Lux vs. Haggin, and unburdened by any impracticable, top-heavy, unsaleable, hand-ridden California Wrights act, and stimulated by wise and appropriate legislation, the initiation, growth and expansion of irrigating enterprises in Southern Arizona in the last few years are almost beyond belief. Hundreds of thousands of acres of as fertile land as the delta of the Nile, and in the most genial, health-giving and enloyable climate in North America, are under the ditches of the Salt river, Santa Cruz river and Gila river and the Colorado river valleys.

The prehistoric ditches which ages before Caluja de Vaca and his companions tramped their weary way over towards Culiacar, in the early part of the sixteenth century, supplied the plain and the great city of the Casa Grande with water, has been again re-opened and the desert plain is again blossoming as the rose; and amid the ruins of the dead city the laugh of children in place of the yelp of the coyote is now heard, and old men are now living who will see in those once desert valleys a million people dwelling in their happy homes, having an abundance of all the good things of this life, wishing for no other home and envying the possessions of no other people on the earth.

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A Great Concern Which Successfully Stood the Financial Pressure.

Its Deposits and Depositors—Stockholders Who Are Identified with Many of the Solid Institutions of Southern California.

Probably no bank in the United States can point with as much pride to unpleasant calls as can the Los Angeles National bank of this city. The manner in which they withstood the pressure brought to bear on them during the late financial trouble is indeed a marvel, for it was openly stated by many leading business men that few banks in the state could have withstood such a pronounced run at that time without surrendering. It was an experience that was unprecedented in the history of the city, but its officers stood like adamant and met every onslaught with a pleasant greeting externally, while at the same time their heads and hearts ached. They were among the first to experience the result of the fright which had taken possession of the people, who had seemingly run mad without cause. Depositors crowded about the doors, clamoring for their money, as if they feared that their life depended upon reaching the teller's window. In every case they were met at the door by the president and given the assurance that their money was safe, as indeed it was. In four days' time checks were honored to the amount of 50 per cent of the demand deposits, and when the people had collected their senses the fact that the bank was truly most solvent was proven beyond the peradventure of a doubt. After quiet had been restored Major George H. Bonebrake, the president, told a HERALD reporter that no money could induce him to undergo such a strain again, but the major still remains at the helm, and the public have demonstrated to him that they have confidence in his management by increasing the patronage of the bank. In connection with this it may be stated that the other officers and directors of the bank proved to be able supports and a strong help during those times of trouble, and to the cool heads and clear foresight of these gentlemen can be attributed the fact that the bank was able to withstand the pressure and keep its doors open. The stockholders endorsed their every act, and the public offered their congratulations when quiet was restored with a heartiness that was merited. The business of the bank was never in a more prosperous condition than it is at the present time. The deposits amount to about $750,000, and among its depositors will be found many of the leading business men and corporations doing business in this section of the country, several of which came to the bank and opened accounts after they had seen how cooly its management was conducted during the hours of adversity. The capital stock of the bank is $500,000, with a surplus of $55,000. In addition to this surplus the bank shows sufficient earnings to pay a semi-annual dividend of 4 per cent, which it has always done since the bank was incorporated, 10 years ago.

"In times of peace prepare for war" is an old adage, and it seems as if it was a predominent trait with the officers of this institution.

The old confidence has been restored and many of the customers who have had their money hidden away in vaults are returning and asking to open their accounts again.

Conservatism is a leading factor in the transaction of business, and as those connected with the bank are men who are thoroughly informed in and about Los Angeles, they are able to place their loans with every degree of safety.

Its stockholders are identified with many of the solid institutions of Southern California, and have done much in aiding and abetting every sound project that has ever been brought forward for the purpose of advancing public enterprise.

The bank is located in its own building, which is situated at the northeast corner of First and Spring streets, a valuable piece of property, inasmuch as it is the most prominent corner in the City of the Angels.

B. SENS & SON.

A Select and First-Class Merchant Tailoring Establishment.

The merchant tailoring establishment of B. Sens & Son is one of the finest and most comprehensive on the Pacific coast, and the firm has more than earned the distinction of being one of the most reliable in the state of California. Their fine tailoring stock is all brand new, every conceivable fabric that the looms produce being found upon the tables in their store, which is one of the best adapted, in light and general acquirements, for a first-class tailoring business. Messrs. B. Sens & Son always guarantee a perfect fit, all work being done under the personal supervision of B. Sens, the senior of the firm, who has had many years' experience in the intricate art of cutting and fitting, and every garment is cut in the latest style. All the stock embraces the newest patterns and weaves in all the shades of the season in first-class goods, such as would guarantee such a reliable firm the patronage of the most fastidious. Messrs. B. Sens & Son are located at 208 South Broadway (near the California Bank building), Los Angeles.

State Loan and Trust Company.

The State Loan and Trust company is one of the substantial institutions of California. It has an authorized capital of $1,000,000, of which $750,000 is paid up. Some of the wealthiest men in Los Angeles and Southern California are among its stockholders, who are liable for $1,300,000 in addition to the $700,000 paid up. This fact had a material effect, which was demonstrated during the recent panic, as there was scarcely an unusual ripple noticeable with them during the entire excitement which prevailed at the time throughout the city. Their business is that of general banking and loans, and their directors are considered most conservative. The officers are as follows: President, Dr. W. G. Cochran; vice president, H. J. Woollacott; secretary, James F. Towell.

Anthony Schwamm.

The above named gentleman is a leading member of the Ticket Brokers' association, and is also a notary public. He sells railroad tickets to all points at reduced rates, and his place of business, corner Spring and Market streets, Temple Block, is open every evening until 10 o'clock.