Kibbey

IN THE DISTRICT COURT

of the

Second Judicial District

Of the Territory of Arizona,

in and for the County of Maricopa.

M. WORMSER, et al,	)	
Plaintiffs,	)	
vs.	)	No. 708.
THE SALT RIVER VALLEY CANAL CO., et al,	)	
Defendants.	)	

DECISION

Joseph H. Kibbey, Judge

March 31, 1892

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SALT RIVER PROJECT
Phoenix, Arizona
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This is a suit instituted for the purpose of enjoining certain parties to it from the diversion of water from the Salt River in derogation of the rights of plaintiffs. Historically the facts out of which the present litigation has grown are briefly as follows:

The Salt River enters the County of Maricopa from the east, and after flowing some distance through a mountainous country, at a point about a mile below its confluence with the Verde, its valley broadens rapidly into a level alluvial plain, the soil of which when supplied with sufficient water is extremely fertile. The climate in the valley is extremely arid, the average annual rainfall not exceeding seven and a half inches, most of which is precipitated in the winter months. No crop of any agricultural product can be produced in the valley without the artificial application of water to the land. The water-shed of Salt River is extensive, and the river is consequently subjected to very great variations in the volume of water which it carries. During the winter months of December, January, February, and until the middle of May, there is a large volume flowing in the river, more than adequate for the irrigation of all the lands in the valley. The Salt River valley spoken of, is that part of the valley of Salt River extending from the mouth of the Verde river westerly to the Agua Fria.

In 1867, attracted by the fertile plain and the then superabundance of water in the Salt River, and by the demand for hay, grain and other agricultural products necessary to supply the neighboring military posts, Jack Swilling and some of his associates began the construction of a ditch for the diversion of the water of the Salt River for the purpose of irrigating fields for the cultivation of those products. This ditch, then known as the Swilling ditch, and very frequently so designated at the trial of this cause, was taken out on the north side of the river, heading about four miles east of the present site of Phoenix. The Swilling ditch is now claimed by various mesne conveyances by the Salt River valley and the Maricopa Canal companies, corporations, parties to this suit, and as incident to their ownership of the ditch they claim a right to divert certain definite quantities of the water of Salt River.

In the year 1870, certain other persons attracted by the natural advantages of the location, began the construction of a ditch for the diversion of the water of Salt River for the purpose of irrigation, beginning at a point on the south side of the river about seven miles above the point whence the Swilling makes its diversion. This ditch was constructed and has been maintained until now, and is and has been operated as a community ditch, the water diverted by it being chiefly claimed by shareholders who are also the owners of land irrigated by the waters of the ditch. The shareholders are unincorporated, but their association is known by the name of the "Tempe Irrigating canal," and its affairs are managed after the manner of those of a corporation. The owners of the shares of this ditch are the plaintiffs in this action.

Some time after the construction of the original Swilling ditch, it was extended and a branch was taken from it at a point about three miles below its divergence from the river, and constructed northwardly, and became known as the "Maricopa canal."

In 1874 and '75 the construction of a ditch on the south side of the river emerging therefrom about a mile above the head of the Salt River valley canal, and about six and a half miles below the head of the Tempe canal, was begun, and since that time has been constructed, repaired and probably enlarged, which ditch has become known as the San Francisco canal and is, with its alleged incidental rights to divert water from Salt River, claimed by M. Wormser, who is also a plaintiff in this case.

In 1877, the construction of another ditch for the diversion of water for irrigation was begun on the south side of the river, emerging at a point about five miles above the head (the point of diversion) of the Tempe canal, which ditch is now known as the "Utah Canal," and is so designated in the pleadings in this case. The Utah canal was constructed and is now maintained and operated by the owners of and occupants of lands which are irrigated by water conveyed by it, who have associated themselves together and entrust the actual administration of their affairs to officers after the manner of a corporation. The several interests of the associates are evidenced by certificates reciting the ownership of definite shares, which certificates are transferable. The associate owners of the Utah canal are parties defendant to this suit.

In 1878, the construction of another ditch was begun on the north side of the river, emerging therefrom at a point about two miles and a half above the head of the Swilling canal, by a corporation known as the Grand canal company, which company is a party to this suit.

In 1879, there was begun by the Mesa canal company, a corporation, the construction of a ditch upon the south side of the river emerging therefrom about two miles and a half above the head of the Utah canal, being above the head of all the canals or ditches before mentioned. This last ditch is known and designated in the proceedings in this case as the "Mesa Canal", and the Mesa canal company is made a party to this suit.

In 1882, certain persons posted a written notice on the north bank of the Salt River at a point a short distance below its confluence with the Verde, of their intention to divert 50,000 inches (miner's measurement) of water from Salt River at that point, for the purpose of irrigation, and a copy of this notice was filed in the recorder's office of Maricopa county. Any rights that may have been acquired or initiated by the posting of that notice, were conveyed to the Arizona canal company, a defendant in this case.

In 1883, the Arizona canal company, a corporation duly organized under the laws of this territory, began the construction of and with reasonable diligence prosecuted work until the completion of its canal, beginning the diversion of water at the point where the notice before mentioned was posted, and claiming the right thereunder to divert the water. The head of this canal (its point of divergence from the river) is above that of all the other canals or ditches in

the suit instituted by him should be consolidated and tried with this, and his rights determined in the consolidated suits.

The earlier efforts of the settlers under these older ditches toward cultivation was confined to the production of hay and grain, and a few garden vegetables, the cultivation of which was confined to that period of the year when the water in the river was very abundant. As the settlement became older and its population increased, a more extended cultivation began to be undertaken. Instead of confining themselves to hay and grain, as above mentioned, the ranchers gradually began the planting of alfalfa, fruits and vines which required water during the entire year. Under the conditions as they originally existed, and as is usual in such cases, there were many usurpations and concessions of rights to the diversion of water, unnoticed at the time, or if noticed, tacitly and without objection acquiesced in because of the then abundance of water. As the population increased and with it the more extended form of cultivation, a deficiency in water began to be noticed. While the river during the months in which hay and grain and the ordinary agricultural crops are being grown had in it a vast volume of water, this volume diminished with the advance of the season, from thousands of cubic feet per second to about, at a minimum of, three hundred cubic feet per second, and as both the increase of population and the different products to which the land was cultivated increased, the demand for water in the summer months when the supply is the least, aggravated by an unnecessary and very considerable waste of water, exceeded the supply. This deficiency of supply made at once the question of priority of the right to appropriate water, important, and that question is the subject matter of this suit.

On the 7th day of February, 1887, the Salt River Valley canal company, a corporation; the Maricopa canal company, a corporation; M. Wormser, alleging himself to be the owner of the San Francisco ditch; the Mesa canal company, a corporation; and C. T. Hayden, M. Wormser and forty-nine others alleging themselves to be the owners of the Tempe irrigating canal and constituent members of the Tempe Irrigating Co., and Henry C. Rogers and forty-five others alleging themselves to be owners of the Utah canal and the constituent members of the Utah canal company, and the Grand canal company, a corporation, filed their complaint in this court against the Arizona canal company, alleging that the Salt

River is a natural unnavigable stream rising in the mountains in the eastern part of the territory and running thence in a westerly direction to its junction with the Gila river in Maricopa county. That the said river during its course in its natural channel flows in and through a tract of country situated in Maricopa county known and called the "Salt River valley," and that the river at and before the times hereafter mentioned flowed through land that belonged to the domain of the United States. The Salt River valley begins at a point about twenty miles east of the city of Phoenix, and continues on both sides of the river to its junction with the Gila river, and includes in its area 150,000 acres of land fit for cultivation and the production of crops, when irrigated. That the climate of the valley is dry and arid, and the said lands are only capable of cultivation when irrigated, and without irrigation they are unfit for cultivation and will not produce any crops. That through the dry season of the year the volume of water in that river is reduced to a very great extent, so that at times during the dry season the amount of water flowing in the river does not exceed 13,000 inches of water. (A "miner's inch" as used in these proceedings is a unit of measurement of water, and while varying in different states and territories on the coast, here is held to be an amount equal to the fortieth part of a cubic foot flow per second.)

That during the year 1867 a number of persons owning and possessing lands in the valley, desiring to cultivate the same, associated themselves together under the name of the "Swilling Irrigating Canal Company," and did locate, appropriate and claim for the purpose aforesaid, 12,000 inches of water of said river; and constructed at great expense a dam over and across the river, and two ditches commencing on the north bank of the river in the vicinity of each other, at points about five miles southeast of Phoenix, running thence in a northwesterly direction over and across lands then being a part of the public domain, each of which ditches were capable of carrying 6,000 inches of water, for the irrigation and cultivation of such lands. That afterwards, in 1875, the Salt River Valley canal company by divers mesne conveyances succeeded to all and every right, title and interest of the said association the Swilling Irrigating Canal company, in the lower or westerly of the two aforesaid ditches and to the water and water-rights appropriated by said ditch, and the plaintiff, the Salt

River Valley canal company, has since that time been, and is now, the lawful owner and in the possession of that ditch, and to all the rights appurtenant thereto. That the Salt River Valley canal company was incorporated by the owners of the lands theretofore irrigated by means of that ditch, and was organized for the purpose of and has been continuously at all times engaged and employed in carrying and conducting the water of said river in and by that ditch to the land for which said ditch was designed and intended to irrigate, and which has been irrigated by it, and the stockholders of the said Salt River Valley canal company have at all times been and are now owners of the land irrigated by means of the water conveyed by the said ditch, and assert a claim to 6,000 inches of water.

That in the year 1875, the plaintiff, the Maricopa canal company, by divers mesne conveyances succeeded to all the rights of the Swilling irrigating canal company in the upper or easterly of the two aforesaid ditches, and to all the rights appurtenant thereto, and since that time has been and is now the lawful owner, entitled to have and enjoy all the rights and privileges of the Swilling Irrigating canal company in and to the waters of the river carried and used in and by the upper or easterly of the two ditches aforesaid. That the Maricopa canal company was incorporated by the owners of the lands theretofore irrigated by the waters conveyed through said upper or easterly of said ditches, and was organized for the purpose and has at all times been engaged and employed in carrying and conveying the water for the purpose of irrigating said land; and its stockholders are the owners of the lands irrigated by waters conveyed through the ditch. That for the purpose of protecting themselves against damage by freshets the said two corporations the Salt River valley canal company and the Maricopa canal company have combined the heads of their ditches and take the water used by each of them from one point on river.

That on or about the sixth day of December, 1870, the grantors and predecessors in interest of the plaintiffs, C. T. Hayden and others, alleging themselves to be constituent members of the Tempe irrigating canal company being then the owners or occupants of certain lands in the Salt River valley and intending to cultivate the same, associated themselves together by the name of the Tempe irrigating canal company, and located and appropriated of the waters of said river 11,000 inches, and did thereupon proceed to

and did construct at great expense, a dam across the river and an irrigating ditch commencing at the south bank of the river at a point about sixteen miles east of the city of Phoenix and running thence in a southwesterly direction over and across lands then being a part of the public domain, said ditch being capable of carrying said 11,000 inches of water, and they thereafter did continuously appropriate, use and employ said 11,000 inches of water for the irrigation of lands so owned and possessed by them. That the plaintiffs now composing the said association the Tempe irrigating canal company have succeeded by divers mesne convenances to all the rights of the original claimants of said 11,000 inches of water diverted and carried by said Tempe canal, and of the lands irrigated thereby.

That in 1877, the grantors, in interest of the plaintiff, Henry C. Rogers, and others constituting the Utah canal company, formed and associated themselves together by that name and took up, located and claimed of the waters of the Salt River, 2,500 inches of water, and proceeded to and did construct at great expense, a dam over and across the river, and a ditch commencing on the south bank of Salt River at a point about twenty miles east of Phoenix, and running thence in a southwesterly direction across land then being a part of the public domain, the ditch being capable of carrying said 2,500 inches, and that the persons composing said association thereafter by means of said ditch did continuously appropriate, use and employ 2,500 inches of water for the cultivation of the land owned and actually cultivated by them. That the plaintiffs last named now constitute the Utah canal company, and have succeeded by divers mesne conveyances to all and every the rights of the original locators and claimants of the said 2,500 inches used by means of the ditch of the Utah canal company, and the land irrigated thereby, and have so continuously used the said water.

That about the middle of December, 1870, divers persons the grantors and predecessors in interest of the plaintiff, M. Wormser, being the owners and possessed of land in Salt River valley, desiring to cultivate the same, appropriated 4,500 inches of water and constructed at great expense a dam across the river, and an irrigating ditch known as the San Francisco ditch commencing on the south bank of the river at a point about nine miles east of Phoenix, and running thence in a southwesterly direction across land then being a part of the public domain, the ditch being capable

of carrying the 4,500 inches of water so appropriated, and such persons did thereafter by means of that ditch continuously use and employ 4,500 inches of water in the cultivation of said lands. The plaintiff, M. Wormser, heretofore and more than five years before the commencement of this suit, by divers mesne conveyances succeeded to all the rights of the owners of said San Francisco ditch, and is now the owner and possessor of the same and has been continuously using the same.

That during the month of July 1870, divers persons being the owners and possessors of land in the Salt River valley, desiring to cultivate the same appropriated 1,500 inches of water of said river and constructed at great expense a dam across the river, and an irrigating ditch called and known as the Griffin ditch, commencing on the north bank of Salt River at a point about a mile and a half south of the city of Phoenix, and running thence in a northwesterly direction across land then being a part of the public domain and capable of carrying 1,500 inches of water, and the persons so mentioned by means of that ditch continuously diverted and appropriated and used said 1,500 inches of water for the cultivation of the land owned and possessed by them. The plaintiff, M. Wormser, thereafter and more than five years before the commencement of this suit, by divers mesne conveyances succeeded to all the rights of said persons, and continues now to be the owner of the same.

That on or about the 24th day of June, 1878, divers persons being the owners and possessors of land in the Salt River valley and desiring to cultivate the same, formed and caused to be created a corporation known as the Grand canal company, and thereupon the said company appropriated 10,000 inches of the water of said river, and thereafter constructed at great expense a dam across the river, and an irrigating canal commencing at a point about twelve miles east of the city of Phoenix, running thence in a northwesterly direction and through and across land then being a part of the public domain, capable of carrying 10,000 inches of water, and used the waters of said river in and about the cultivation of the lands of the persons forming such corporation and owning its capital stock, and for their use and benefit, using the said 10,000 inches of water.

That on or about the second day of March, 1878, divers persons being the owners and possessors of land in Salt River valley and desiring to cultivate the same, organized the Mesa canal company and appropriated 10,000 inches of the water of said river for the purpose of the irrigation

of said lands, and constructed at great expense a dam across the river, and an irrigating ditch commencing on the south bank of the river at a point about twenty-five miles east of Phoenix, and running thence in a southwesterly direction over and across the land then being a part of the public domain, capable of carrying 10,000 inches of water, and by means of that ditch did thereafter appropriate, use and employ for the purpose of cultivation of said lands of the persons forming the corporation and owning its capital stock, said 10,000 inches of water.

The plaintiffs further allege that the aggregate quantity of water which they had appropriated and used for the purposes aforementioned, is 62,500 inches of water, and that they and their predecessors in interest have expended in and about the construction of the several dams and ditches mentioned, a sum aggregating $350,000 and upwards. They further allege that the then present season was dry and that the quantity of water in the river was then insufficient to supply the plaintiffs with the several quantities to which they were then entitled. And the plaintiffs allege that at the then present time a great portion of the crops in the valley had been planted and that the water was required for their irrigation, and that but for the wrongful acts of the defendants hereinafter alleged, all the water flowing in the natural channel of the river would have flowed down and through their several ditches, and then would have been able to secure whatever water there was in the river, and that by a judicious and economical use of it preserved portions of their crops planted as aforesaid. The plaintiffs further allege that on or about the 1st day of January, 1887, being long subsequent to the appropriation and use by them and their grantors of the several quantities of water hereinbefore mentioned, the Arizona canal company, defendant in violation of the plaintiff's rights entered upon the river at a point above any of the dams and ditches of plaintiffs and about twenty-eight miles east of the city of Phoenix, and by means of a dam constructed by it across the river, there, capable of holding all of the waters flowing in the river, and by means of a canal commencing at the dam and running thence northwesterly, of a size sufficient to carry all the waters flowing in the river during a dry season at a time when the water is needed by the plaintiffs, diverted and turned out of the river a large quantity of the water of the river, and by such diversion prevented the water from reaching the ditches of the plaintiffs, and had diminished the quantity of water to such an extent that the

plaintiffs and each of them was prevented from procuring a sufficient supply of water for their crops aforesaid, whereby such crops are now suffering and are in immediate danger of actual destruction.

That without the use of the water naturally flowing in the river the plaintiffs cannot receive and take the amounts of water to which they are severally entitled and of which they are actually in need, and that the continued diversion of the waters by the defendants as aforesaid would prevent the cultivation of the lands under the ditches of plaintiffs, and work irreparable damage to them. That the defendant, the Arizona Canal company, threatens to continue its diversion of said water and threatens to divert all the water flowing in the river and thereby to deprive the plaintiffs of procuring any water from the river. The plaintiffs further allege that the defendant does not divert any water for any useful or beneficial purpose. That of the water so diverted, and carried away by the defendant, a small quantity not exceeding 1,000 inches is being sold and being disposed of by defendant for the purpose of irrigation, and that the remaining portion of the water so diverted by the defendant is carried away and allowed to run to waste and wholly lost, and is not thereafter restored to the river. Wherefore the plaintiffs pray that pending the action the defendant be enjoined from in any way or by any means interfering with or obstructing the present flow of water in the river or the waters to flow therein at any times hereafter, whereby the plaintiffs or any of them shall be impeded in their right to the use thereof. That defendant may be ordered to remove from the river its dam and any other obstructions placed in the river by it whereby the flow of the water in the river is impeded or obstructed, and that it be required at all times to permit the water of the river to so flow in its natural channel that the plaintiffs and each of them can receive the several quantities of water to which they allege themselves in this complaint to be entitled.

This complaint was sworn to by the president of the Salt River Valley canal company, the president of the Maricopa canal company, the president of the Mesa canal company, the president of the Grand canal company, and by M. Wormser, Winchester Miller and E. R. Jones, constituent members of the San Francisco, Tempe, and Utah canal companies. The complaint was presented on the 4th day of February, 1887, to J. W. Crenshaw, the then court commissioner of this court,

who ordered that the defendant show cause on or before the 14th day of February, 1887, why an injunction pendente lite should not be granted, and further ordered that upon the plaintiffs giving an undertaking in the sum of $10,000, the defendant in the meantime be restrained from in any manner interfering with or obstructing the flow of water in the river and suffer all the water therein flowing to flow through its natural channel.

On the 17th of December, 1888, an amended complaint was filed by those plaintiffs in the original complaint who constituted the Tempe Irrigation canal company and the Utah canal company, making the Salt River valley canal company, the Maricopa canal company, the Grand canal company, the Arizona canal company and the Mesa canal company, defendants. This complaint, after alleging the manner in which they acquired their right to divert and to appropriate the water from the Salt River alleges that during the year 1867, divers persons owning and possessing lands in Salt River valley, associated themselves together under the name of the Swilling Irrigating canal company, and located, appropriated and claimed for the purpose of irrigating lands, 1,500 inches of water of the river, and constructed a dam across the river, and thereafter constructed two certain ditches over and across the lands which they desired to irrigate, each capable of carrying 750 inches, and that the said Swilling Irrigating canal company and the persons composing the same became thereafter entitled to and continued to appropriate, use and employ 750 inches of water and no more. And that during the year 1875 the defendant, the Salt River valley canal company, by divers mesne conveyances succeeded to all and every the right, title and interest of the said association, the Swilling Irrigating canal company, and of the persons composing the same, in the lower or westerly of the two aforementioned ditches. And that during the year 1875, the Maricopa canal company, defendant by divers mesne conveyances succeeded to all and every the right, title and interest of the Swilling Irrigation canal company, in and to the upper or easterly of the two aforesaid ditches, and since that time has been and is now the lawful owner and possessor of all and every rights, privileges, and franchises of the Swilling irrigation canal company, in and to said upper or eastern ditch. And that while said Salt River valley canal company and the Maricopa canal company have been using said water, they have for certain purposes connected the heads of their two ditches, and for some time heretofore the two ditches have been and now are taken out

at one head at one point on the river. That hereafter the defendants, the Maricopa canal company and the Salt River valley canal company in violation of the rights of the plaintiffs have diverted from the river quantities of water in excess of the rights that the plaintiffs had to divert, depriving the plaintiffs of water to which they were entitled. That the defendants, the Maricopa canal company and the Salt River valley canal company threaten to continue to claim, assert and exercise their alleged right each to take out of the river 6,000 inches by means of the canal of the defendant, the Arizona canal company, and that the Arizona canal company permits and consents to it, and threatens to continue to permit, and consent to the use of its canal by each of the aforementioned defendants for the purpose of diverting such excessive quantities of the water from the river for the use and benefit of the aforementioned defendants at a point upon said river above the place where the plaintiffs take their water from said river, when in fact the places where each of the said defendants, the Salt River valley canal company and the Maricopa canal company, originally took the water from the river into their ditches at the time the plaintiffs first acquired their rights to the quantities of water herein alleged, were below the place on the river where the plaintiffs then took and now take their water. That such proposed diversion through and by means of the Arizona canal will diminish the quantity of the water in the river out of which plaintiffs may obtain the supply to which they allege themselves to be entitled.

And plaintiffs further allege that the Grand canal company on or about the 24th of June, 1878, did without right and in violation of the rights of the plaintiffs, take up, locate, appropriate, and claim, 10,000 inches of the water of the Salt River, and constructed a dam across the river, and an irrigating ditch commencing at a point about twelve miles east of Phoenix, and running thence in a northwesterly direction over and across the land being a part of the public domain, capable of carrying 10,000 inches of water, and by means of such ditch and dam thereafter diverted 10,000 inches of water, thereby diminishing the quantity of water in the river so that plaintiffs could not supply themselves.

That the point at the river where the Grand canal company first took out the water into its ditch is below the point in the river where the head of the ditch of the Tempe irrigating canal company originally was taken out and now is situated, and below that of the Utah canal company, and is above the point on said river where the head of the San

Francisco ditch was originally taken out and is now situated. That the said defendant has, subsequent to the appropriation of the plaintiffs above set forth, diverted the water and threatens to continue to do so, by means of the Arizona canal company's canal.

That the Mesa canal company has made appropriation of the water of Salt River long subsequent to the appropriation made by the plaintiffs, and that its point of diversion is above the place where the plaintiffs take the water into their respective ditches. That the quantity of water that the Mesa canal company claims and asserts the right to divert, is 10,000 inches, and that when that defendant made its appropriation of water the plaintiffs were in the peaceful and undisturbed possession of their right to use and employ the waters of the river which they had theretofore appropriated.

That the defendant, the Mesa canal company, wrongfully prevents the waters of the river flowing down the ditches of the plaintiffs and threatens to continue to do so. That such diversion lessens and diminishes the quantity of water flowing in the river so such an extent that the plaintiffs cannot obtain the supply to which they are entitled by their prior appropriation.

Plaintiffs further allege that long subsequent to the appropriation by them, their grantors and predecessors in interest, namely on or about the 1st of January, 1887, the Arizona canal company, without right and in violation of the rights of the plaintiff to use the waters of the Salt River at a point about 28 miles east of Phoenix by means of a dam across the river and a canal commencing at said dam capable of carrying all the waters flowing in the river during the dry or rainless seasons, diverted and turned out of the river a large quantity of waters flowing therein, thereby preventing the water from flowing to or reaching the ditches of the plaintiffs, and thereby lessens the quantity of water in the river to such an extent that the plaintiffs are prevented from receiving in their ditches or any of them, a sufficient quantity of water for the purposes to which they allege themselves to be entitled to use it. That without the use of all the water now flowing in the river the plaintiffs cannot take or receive therefrom the several quantities thereof to which they are entitled and of which they have actual need.

That the defendant, the Arizona canal company does not divert the said water for any useful or beneficial purpose. That of the said waters so diverted and carried away by the

Arizona canal company, a small quantity not exceeding a thousand inches is sold and disposed of by that company for the purpose of irrigation, and that the remaining portion of the water except what is being carried through the canal as before-mentioned, is allowed to run to waste and be wholly lost, and no part thereof is ever restored to the river.

That the defendant is insolvent and unable to respond in damages.

Plaintiffs further allege that the aggregate quantity of the water of the river which they have appropriated and used is 20,000 inches of water. That they have expended large sums of money in and about the construction of their several dams and ditches.

Plaintiffs further allege that during the dry and rainless season of the year the quantity of water in the river is greatly diminished; that the entire amount thereof is insufficient to supply the plaintiffs with the quantities to which they are entitled after first making an allowance therefrom of the quantity of 750 inches due each of the defendants, the Maricopa and the Salt River valley canal companies.

The plaintiffs further allege that the defendants, the Salt River valley canal company, the Maricopa canal company and the Grand canal company, have since the filing of the original complaint, by means of a transfer of a certain share of the stock of those companies to divers persons acting in concert with the Arizona canal company in order to aid that company in its efforts to wrongfully continue its alleged appropriation of the waters of the river against the rights of the plaintiffs, combined with the Arizona canal company to injure the plaintiffs and prevent the plaintiffs from proceeding with this action. That the persons who have received the said transfers of stock of the above companies respectively, are now holding control of the management of the said respective companies, and subordinating the claims and rights and interests thereof in such a manner as to seriously impair the rights of the plaintiffs by collusively permitting the said transfers of the stocks to the said Arizona canal company in order to enable it to secure an undue and wrongful advantage over the plaintiff, and to control the diversion of the water of the river; in violation of the rights of the plaintiffs.

This complaint is sworn to by Winchester Miller, one of the plaintiffs, and by M. Wormser and others.

On the 28th of January, 1889, a third amended complaint was filed, wherein an addition to the allegations of the foregoing complaint, the amendment consisted in the substitution of the Utah canal company as a party defendant instead of a party plaintiff; and on the 11th of June, 1889, by a still further amendment, the Highland land and water company, a corporation, was made a defendant. It is alleged that the Highland land and water company was a corporation, and that in January 1889, it diverted waters of Salt River by means of its canal, beginning at a point on the river about twenty-seven miles east of Phoenix, and above the point of diversion by the plaintiff, whereby they deprived the plaintiffs of the ability to divert to the uses to which they were entitled, as before alleged.

On the 14th of July, 1890, an amended complaint was filed wherein the alleged owner of the San Francisco ditch and the alleged owner and constituent members of the Tempe canal company were plaintiffs and the Salt River valley canal company, the Maricopa canal company, the Grand canal company, and Arizona canal company, and Mesa canal company, the Highland land and water company and the constituent members of the Utah canal company were defendants. In addition to the allegations made in the original complaint, it is alleged in this amended complaint that the defendants, the Salt River valley canal company, and the Maricopa canal company, and the Grand canal company, original plaintiffs, have since the filing of the original complaint by means of the transfer of certain shares of stock of those companies to divers persons acting, and designing and intending, to aid in concert with the Arizona canal company, and to aid that company in its effort to wrongfully maintain its alleged appropriation and use of water against the rights of plaintiffs, combined with the Arizona canal company to injure the plaintiffs and to prevent plaintiffs from proceeding with its suit and obtaining the relief sought.

That the persons who received the said transfers of stock above mentioned, are now holding control of the same and subordinating the claim and rights and interests of those companies so as to seriously impair the rights of the plaintiffs. That the above named companies have collusively permitted and acquiesced in such transfer of stock to the Arizona canal company in order to enable that company to secure and enjoy a wrongful advantage over the plaintiffs and to control the diversion of the water of the river in violation of the rights of the plaintiffs. It is also

alleged in the amended complaint that in January, 1889, the Highland land and water company, a corporation, entered upon the said river above and east of the dams and ditches of the plaintiffs at a point about twenty-seven miles east of Phoenix, and there by means of a dam which it constructed across the river and a canal beginning at said point and running thence in a southwesterly direction, capable of carrying 6,000 inches of water, diverted and turned out of the river a large quantity of water, and has by such diversion prevented the water from flowing through or reaching the ditches of the plaintiffs, thereby diminishing the quantity to which they were entitled, and the crops and orchards and the vineyards planted by the plaintiffs have become thereby endangered. To the last amended complaint the Arizona canal company, the Grand canal company, the Maricopa canal company and the Salt River valley canal company filed their several answers; first, demurring to the complaint upon the ground that it does not state facts sufficient to constitute a cause of action against them or either of them.

Second. That the several defendants have each of them separately been severally and in the peaceable and adverse, open and notorious and actual possession and use and enjoyment of the waters and of the rights and franchises described and referred to in the amended complaint, and every part thereof, under color of title for more than three years next preceding the commencement of the action and before the filing of the amended complaint.

Third. Alleging that the cause of action set out in the amended complaint had not accrued within two years before the commencement of the action or the filing of the complaint.

Fourth. That neither the plaintiffs nor their grantors or predecessors have been in the possession of the franchises or rights they claim, wherein five years next preceding the commencement of the action and filing of the amended complaint.

Fifth. Denying specifically the allegations of the plaintiffs that they had in 1870, or at any time, appropriated any water of Salt River in a quantity exceeding 300 inches, except that sometime in the year 1871, certain persons constructed a small temporary dam across Salt River, and a very small irrigating ditch in the vicinity of the place where it is alleged plaintiffs predecessors constructed a dam and ditch in the complaint described. That by means of that dam and ditch, water was taken out of the

river during said year after the construction of the said dam and ditch, in sufficient quantities to irrigate small patches of summer crops covering not to exceed a small number of acres of land. That thereafter and sometime about the year 1871, the said ditch was from time to time enlarged and increased in its capacity to some extent, but the total amount of water diverted therefor did not at any time exceed 300 inches of water, miner's measurement, until the year 1873. That thereafter and up to the month of January, 1877, the ditch was enlarged from time to time to enable it to carry water for irrigating purposes to such an extent that on or about that date the ditch was capable of carrying about a thousand inches of water in addition to the water carried for mechanical purposes, as hereinafter mentioned. That sometime in the year 1873, one of the plaintiffs, Charles T. Hayden, having constructed a flouring mill on the ditch with a water wheel whereby the same was intended to be driven, by some arrangement the details whereof are unknown to the defendants, enlarged the ditch and increased its carrying capacity sufficient to enable it to carry about 1,500 inches of water in addition to the said quantity it was capable of carrying before that. And that thereafter from time to time while said mill was running, the ditch was used to carry about not exceeding 1,000 inches of water, miner's measurement, for irrigating purposes, and not exceeding 1,500 inches of water for said mechanical purpose of driving said water wheel.

That all of said water which was diverted and used to run the mill except such part as was lost by evaporation and seepage was by means of a tail race below the mill immediately after passing through and over the water wheel of said mill, permitted to flow and did flow back into the river at a point above the dam and head of the canal of the defendants, the Salt River valley canal company and the Maricopa canal company, and the same and every part thereof except what was lost by evaporation and seepage flowed to said dam and ditches of said defendants and was available to them and each of them for the purposes of irrigation. That thereafter from time to time said ditch was enlarged in capacity. That up to the year 1883, it was not capable of and did not carry for any purpose, more than 3,000 inches of water, miner's measurement. That not more than 1,500 inches of said water was at any time diverted for the purpose of being used by any person or persons, by means of the ditch and dam for any purpose except the driving of the

mill. That thereafter from time to time the ditch was enlarged to such an extent that in January, 1886, it was capable of carrying about 3,500 inches of water calculating said 3,500 inches of water by miner's measurement, diverted by means thereof for the propulsion of the mill.

That no more than 2,000 inches of water was used for any other purpose than the driving of said mill, and that the proper irrigation of the lands could and ought to have been had with the use of at least twenty-five per cent less than the quantity the ditch was capable of carrying, after deducting from its total capacity the 1,500 inches it carried for the propulsion of the mill.

And further answering, those defendants deny that the predecessors in interest of the plaintiff, M. Wormser, appropriated 5,000 inches, or any other quantity of the water of Salt River in December, 1870, or at any other time, or that he or they ever applied 5,000 inches to the irrigation of any lands, or that he ever acquired by any conveyance the interest of any person who had any such right to appropriate water, but allege that sometime in the year 1872, some person or persons to the defendants unknown constructed a small irrigation ditch at or near the place where the alleged San Francisco ditch is alleged to have been excavated, but it was not capable of carrying more than fifty inches of water. That thereafter that ditch or some other one constructed near by the place where that one had been made, was from time to time enlarged to some extent, but that up to and in the year 1877 and '78 it was capable of carrying not more than one hundred and fifty inches of water. That thereafter the said ditch was enlarged from time to time until in 1883 it was capable of carrying not more than 200 inches of water. That the ditch was again enlarged from time to time to some extent, but that up to the present time it has not been nor is it now, capable of carrying more than 400 inches of water.

The answer further denies that the water of the river in dry and rainless seasons is ever diminished to a quantity not exceeding 13,000 miner's inches. They further allege that the amount of water appropriated by the Swilling irrigation canal company was, instead of 1,500 inches, 12,000 inches, and the two ditches constructed by the Swilling canal company were each capable of carrying 6,000 inches instead of 750 inches as alleged in the complaint, and that the whole amount thereof was and has been continuously used

in good faith in the irrigation of lands by the owners of lands under those ditches, and asserts their right to divert the same.

It is further averred that on or about the 24th day of June, 1878, divers persons being then the owners and possessors of land in Salt River valley and desirous of irrigating the same and requiring water for that purpose, formed and caused to be created the Grand canal company, and thereupon appropriated 10,000 inches of water of the river for that purpose, and proceeded to and did construct a dam over and across Salt River, and an irrigating ditch commencing at a point about twelve miles east of the city of Phoenix and running thence in a northwesterly direction over and across the lands then being a part of the public domain, the ditch being capable of carrying 10,000 inches of water and that thereafter they applied the said 10,000 inches of water for the purpose of the irrigation of those lands. And they make a similar allegation as to the Arizona canal company, and deny that since the filing of the original complaint that by means of any transfer of stock in any of the companies to any person or persons whatsoever that they sought to act in concert or in collusion whereby the rights of the plaintiffs should anywise be injured, or to prevent the plaintiffs or any of them from proceeding with their action.

The answers of the other defendants raise substantially the same issues, asserting in themselves the rights to divert and appropriate water of the river in the order suggested in the original complaint.

During the pendency of this action the court has attempted as best it could be means of commissioners appointed for that purpose, to control the distribution of water among the various claimants in accordance with the rights of the consumers as nearly as that could be ascertained on preliminary hearings, and the waters of the Salt River are now being distributed under the supervision of such a commissioner.

The final trial of this cause was begun in March, 1890, the evidence being adduced before a commissioner appointed for that purpose, and before whom about 3,000 pages of evidence were taken and reported to the court. The continuation of the trial was begun before the court in July, 1890, and continued until its conclusion in August of that year. The amount of evidence taken in the case is very voluminous, consisting of 6,000 pages of typewritten matter. Counsel

desiring to argue the case and their engagements and the business of the court being such that it could not be heard then, the further trial of the case was continued till February 1891, at which time the cause was fully and ably argued, the argument occupying 15 days.

This resume of the origin and progress of this case as brief as the multiplicity of the issue involved would permit, suggests at once its importance. From the time of the construction of the first ditch in 1867 until now, there has been expended in the construction, operation and maintenance of irrigating ditches in the Salt River valley a sum exceeding a million of dollars. The population of the valley has grown from 200 or 300 to 10,000 people. Its products from being simply barley and hay, now range through all the long list of grain, fruits and vines, to the production of which the soil and climate are peculiarly adapted. From a valueless desert, lands have been reclaimed, aggregating millions of dollars in value. The city of Phoenix itself began its existance since the Swilling ditch was constructed. Without water the Salt River valley would still be a desert uninhabited save by the jack rabbit, coyote, and the rattlesnake, and devoid of vegetation except the sage brush and the cactus. Water is just as essential to the maintenance of the population now there, and the production of the means of its subsistance, as the air itself.

Before proceeding to the finding of facts I shall to some extent discuss the law as I have found it and believe it to be, relevent to the issues of the cause to illustrate the import of the facts the finding of which will follow.

That part of Arizona in which the Salt River valley is situated, from the time of the Spanish conquest until the establishment of the republic of Mexico was under the dominion of Spain, and thence until 1847 under the dominion of the republic of Mexico, and was subject, of course, during those periods, to the laws of Spain and the republic of Mexico, respectively.

It might be interesting and instructing to study the laws and customs which prevailed under those governments concerning the appropriation and use of water, but it would here be out of place to discuss or even cite them, further than to state that the common law doctrine of rights of riparian proprietors did not there prevail, because, as disclosed by the evidence in this case, no rights whatsoever

were acquired until at least twenty years after the acquisition of that territory by the United States under the treaty of Guadalupe Hidalgo.

In 1848, and from that time to 1863, that part of the territory of Arizona within which is the Salt River valley was a part of the territory of New Mexico, and there were expressly enacted by that territory laws governing the appropriation and use of water for irrigation. In 1863 a part of the then territory of New Mexico was erected into a temporary government by the name of the territory of Arizona, and the laws of New Mexico were by the act of congress establishing the territory of Arizona, made applicable to that territory. In 1864, the first legislative assembly of the territory convened and enacted the code of laws commonly known and cited as the Howell code. By article 22 of an act of that legislature, known and designated as the "bill of rights," it was provided 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 to their own private use except under such equitable regulations and restrictions as the legislature shall provide for that purpose." This act went into force on the first day of January, 1865.

This provision has been incorporated in the successive revisions of our code, and is still a part of our statutory law. At the same session of the legislature and by a law taking effect at the same time, an act governing acequias and irrigating canals was adopted. The first section of that act provides that "all rivers, creeks and streams of running water in the territory of Arizona are hereby declared to be public and applicable to the purposes of irrigation and mining," as afterwards provided. Section 2 saves all vested rights. Section 3 provides that "all inhabitants of this territory who own or possess arable or irrigable lands shall have the right to construct public or private acequias and obtain the necessary water for the same from any convenient river, creek, or stream of running water." Section 4 provides for the assessment of damages resulting from the construction of ditches across private property of individuals. Section 5 provides that no inhabitant of this territory shall have the right to erect any dam, or build a mill, or place any machinery, or open any sluice, or make any dyke, except such as are used for mining purposes or the reduction of metals, as provided for in section six and

and seven of the act that may impede or obstruct the irrigation of any lands or fields, as the right to irrigate the fields and arable lands shall be prefereable to all others; and the justices of the respective precincts shall hear and determine in a summary manner, and cause the removal of the same by order directed to a constable of the precinct or sheriff of the county who shall proceed to execute the same without delay.

By section 7 it is provided that when any ditch or acequia shall be taken out for agricultural purposes, the person or persons so taking out such ditch or acequia shall have the exclusive right to the water, or so much thereof as shall be necessary for the said purposes, and if at any time the water so required shall be taken for mining operations, the person or persons owning said water shall be entitled to damages to be assessed in the manner provided in section six of this chapter. Section 8 prohibits the construction or maintenance of by-paths and foot-paths across cultivated fields. Section 9 provides that all owners and proprietors of arable and irrigable land bordering on, or irrigable by, any public acequia, shall labor on such public acequia, whether such owners or proprietors cultivate the land or not. Section 10 provides that persons interested in a public acequia, whether owners or lessees of land, shall labor thereon in proportion to the amount of land owned or held by them, which may be irrigated by the ditch. Section 11 provides that animals shall be herded to prevent trespass upon cultivated fields. Section 12 provides that in case a community desire to construct an acequia and the persons desiring to construct the same are the owners or proprietors of the land upon which they design constructing the acequia, no one shall be bound to pay damages for the land taken. Section 13 provides for the election of overseers of public acequias. Section 14 prescribes the manner of the election of overseers. Section 15 provides for the payment for services of the overseers. Section 16 prescribes the duty of the overseers, which, among others, is enumerated his duty to distribute and apportion the water in proportion to the quantity to which each one is entitled according to the land cultivated by him; and that in making such apportionment he shall take into consideration the nature of the seed sown or planted, and the crops and plants cultivated.

Section 17 provides that "during years when a scarcity of water shall exist, owners of fields shall have precedence

of the water for irrigation, according to the dates of their respective titles or their occupation of their lands, either by themselves or their grantors. The oldest titles shall have the precedence always." Section 18 provides for the contribution of labor by irrigators, to the maintenance of the acequia. Section 19 prescribes penalties for malfeasance or nonfeasance of the overseer in discharging his duties, and provides for his removal in certain events. Section 20 provides for the filling of a vacancy occasioned by the removal of an overseer. Section 21 imposes a penalty upon the owner or proprietor of land irrigated by an acequia for neglect or refusal to furnish the number of laborers required by the overseer for the maintenance and repair of the acequia. Section 22 prescribes the penalties against any person who shall in any manner interfere with, impede or obstruct any such acequia, or use the water from it without the consent of the overseer. Section 23 provides that the fines and forfeitures recovered under the provisions of the act shall be applied by the overseers to the improvement, excavation and repair of the acequia, and for the construction of bridges at points where they may be crossed by public streets or roads. Section 24 provides for the appeal from judgment of conviction under any of the provisions of the act.

Section 25 is, "The regulation of acequias" which have been worked according to the laws and customs of Sonora and the usages of the people of Arizona, shall remain as they were made and used, up to this day, and the provisions of this chapter shall be enforced and observed from the day of its publication." Section 26 provides that plants and trees growing on the banks of any acequia shall belong to the owners of the land through which the acequia runs. Section 27 provides that any person owning lands which may include a spring or stream of running water, or owning lands upon a river where there is not population sufficient to form a public acequia, may construct a private acequia for his own uses, subject to his own regulations, provided he does not interfere with the rights of others.

In the year 1866, the national congress enacted a law for the disposal of its lands containing valuable minerals, and among the provisions of that act, with some subsequent slight verbal changes not affecting the substance or meaning, is the following:

(Section 2339, revised statutes of the United States.)

"Whenever by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws and decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right-of-way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed: but whenever any person, in the construction of a ditch or canal injures or damages the possession of any settler upon the public land, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

Section 2340 provides that all patents granted or preemption or homestead allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights as may have been acquired under or recognized by the preceding section." This provision of the act of congress has been held by the supreme courts of the United States and of some of the states not only to confirm rights that have been initiated or had vested prior to the passage of the act, but that it was continuous in its operation and was the license of the government to persons to thereafter appropriate water on the public domain for agricultural, mining, manufacturing or other purposes.

98 United States 453.
13 Oregon 596.

On the 3rd of March 1877, there went into effect an act of congress providing that any citizen of the United States, or any who had declared his intention to become such, upon the payment of twenty-five cents per acre may file a declaration with the registerand receiver of the land district in which any desert land is situated, of his intent to reclaim a tract of land not exceeding one section, by conducting water thereon within the period of three years thereafter. It provides that the right to the use of the water by the person so conducting the same on or to any tract of desert land of 640 acres "shall depend upon bona fide prior appropriation: and such rights shall not exceed the amount of water actually appropriated, and necessarily used for the purposes of irrigation and

reclamation: and all surplus water over and above such actual appropriation and use, together with the water of all lakes, rivers, and other sources of water supply upon the public lands and not navigable, shall remain and be held free for the appropriation and use of the public for irrigation, mining, and manufacturing purposes, subject to existing rights."

By an act of the legislative assembly of the territory of Arizona, approved February 19th, 1877, all the laws of the territory then in force were directed to be recompiled, which was done; and the compilation is known and cited as the "Compiled laws of 1877" among which are the section of Bill of Rights and the various provisions governing the constructions of private and public acequias, and the appropriation and use of water for irrigation, that we have above quoted from the Howell Code. The same laws have been carried forward into the revision of 1887. In 1887, the acequia law was not re-enacted, but not having been repealed, it is still in force, and the editors of the revision of 1887 have incorporated in that revision:

Sections 3199-3226 R. W. 1887 Arizona.

In 1887, the legislative assembly enacted a law providing that the common law doctrine of riparian rights shall not obtain or be of any force or effect in this territory:

Sections 3198 R. S. 1887, Arizona.

CUSTOM AS A SOURCE OF WATER-RIGHTS.

There has during the argument of this case been much reference to customs prevailing in this territory and in the Pacific slope states and territories as a guide to determine the rights of parties to the appropriation of water. I am of the opinion that we cannot refer to customs, because we have covering the subject, express statutory law. There is no evidence in this case of any customs prevailing, and if the court may revert to its judicial knowledge of what customs have prevailed, resorting to whatsoever means it may to ascertain them, the court would have to say that there are as many customs

prevailing as there are persons who have enunciated them. In short, there has been no custom; there has on the contrary been an entire want of uniformity of practice among appropriators, and no two attorneys in this case who have agreed upon what has been the custom. There has until recently been no two canal companies or associations who have concurred in their practice of either appropriation, distribution, or application of water. It may be noted here that there seems to have prevailed a practice of posting a notice of intention to appropriate water, this notice being posted at the point whence they expected to divert it from the river, and thereafter to record that notice in the recorder's office. This practice has been imported from California where by express statutory provision a person who seeks to appropriate water may initiate a right by posting such a notice, but it is there further provided that such posting must be followed within sixty days by actual work of construction of means of diversion. This practice has prevailed to such an extent in the Salt River valley that notices of intention to appropriate many times more water than ever did flow down the Salt River, have been given; and so in the Gila River valley. It has been an impression quite commonly prevailing, that by posting such a notice some rights were acquired. Yet in the argument of this case none of counsel refer to it as a source of right, or a means of initiating one.

I am unable to understand how such a notice can vest in the person who posted it, any right whatsoever. On the contrary, it does not, and the most that can be said of it is, that it is a mere expression of intention, and may serve to limit the person who thereafter appropriates the water, to the amount of water which it was his declared intention to appropriate. So far as I am able to determine after a careful and continuous study of this subject for more than three years among those among whom it would be supposed customs would prevail if any existed, or from the evidence in this case, that any customs exist in this territory relative to the appropriation and use of water. Until after the organization of the Territory the use of water for irrigation was almost unknown here. There is no evidence that there was any use of it in Salt River Valley prior to that time. Our Bill of Rights says, that the water can only be

appropriated under regulations prescribed by legislature, and at the same session of the legislature that body did prescribe regulations for the appropriation of this water for the purpose of irrigation, and to those statutes we must resort to determine the rights of those who seek to appropriate water for that purpose.

With all due respect to the very able opinion of Judge Silent in the case of Kelsey vs. McAteer before him in the District Court, and the opinion of our own Supreme Court in the case of Clough against Wing, I cannot accede to the doctrine that any of the rights of the appropriators of water in this Territory may have their origin in any local customs or the decisions of the courts: they are statutory, purely and simply. Even if there had prevailed any customs, they must yield to the express statutory enactments.

87 U. S. 684.

And a careful review of the cases elsewhere, of which there are at least one hundred and fifty in California alone, discloses that there as well as elsewhere, the right does not rest in custom. It was there held that the right was by the implied license of the state and national government--that upon public lands the riparian proprietor was the national government, and that as between mere possessors of public lands the old maxim, "Qui prior est in tempore, potior est in jure," controlled and defined their rights as among themselves--that the first possessor could not avail himself of the riparian rights of the true owner against subsequent occupants of the public domain.

It is true that in most of the cases something is said about custom of the country and about local conditions making the old rules inapplicable, but I think that as a source of right to appropriate water mere custom cannot be referred to. Custom might in some cases regulate the use of it; the right to appropriate it in this Territory at least, emanates clearly from congressional and legislative grant. The conditions existing on this coast making impracticable the strict application of rules of right prevalent elsewhere may have been and no doubt did suggest the legislation on the subject to which we refer for the right to appropriate water.

RIPARIAN RIGHTS.

The diversion of water and its proper application to the irrigation of lands necessarily results in an entire consumption of the water so applied, so that the amount of water taken from a natural water-course for irrigation, to the extent, diminishes the quantity left in the stream. In the Salt River Valley where there has been at least an attempted appropriation of the entire amount of water flowing in Salt River, there is an entire consumption of the water of that stream. Naturally there occurs to the mind of anyone whose knowledge of the rules governing the rights of property has been derived from the study of the common law of England as it exists there and in the United States, in considering the subject of appropriation of water for irrigation, the question of the effect of the common law doctrine of riparian rights, and whether that doctrine exists in Arizona.

The United States at the time of the cession by the Republic of Mexico, to it of the territory which now constitutes the Territory of Arizona, became possessed of all the rights of a proprietor of the lands the title to which had not been theretofore vested in private ownership by grant from the Mexican or Spanish governments, and as incident thereto acquired those rights relative to water in streams running over its land which are denominated "riparian rights" at Common Law, notwithstanding the non-prevalence of that doctrine in that particular territory prior to such cession. The first legislature of the territory enacted (1864) the law concerning public and private acequias which we have heretofore recited, which law was and is utterly inconsistent with the assertion by a riparian proprietor of his "Common Law rights" to have the water run as it was wont to run, undiminished in quantity and undeteriorated in quality. From the time of the enactment of that law to the time of the act of Congress of 1866, the United States was the only proprietor of the lands in the Salt River Valley. There is no evidence of any private ownership, and as a matter of fact the United States had not granted to any individual any part of the lands in the Salt River Valley of which it was the primary owner. By the act of Congress of 1866, the United States being then the riparian proprietor of all the lands in Salt River Valley, expressly acknowledged the right of occupants and owners of land on the streams

of the territory to appropriate water, inter alia, for the purpose of irrigation, and thereby acquiesced in the implied abrogation of the Common Law doctrine of riparian rights; for the use of water for irrigation does diminish the quantity of water in the stream whence it is taken even to its entire and exclusive consumption by another than a riparian owner. The difficulties attending the use by a riparian proprietor of the water of Salt River render the right under the rules of the Common Law valueless. Under the homestead, the pre-emption and the timber culture laws providing for the acquisition of public lands by citizens, only a quarter section could be acquired. Under the Desert Land Act, 640 acres could be acquired. The surface of the water of Salt River at ordinary stages is at least twenty feet below the surface of the lands not subject to annual inundation through which it flows, and as the river itself has a fall of only eight or ten feet to the mile, it is impossible for any such owner to divert the water to his own land unless he should begin his diversion at the river at a point more than two miles above his own boundary, necessarily thereby trespassing upon the rights of some other riparian owner. There is not an owner of land in the Salt River Valley, whether that land be bordering upon or be crossed by Salt River or not, who can irrigate his land without constructing a greater part of his works therefor on the lands of others. It cannot be maintained that the doctrine of riparian rights gives the right to trespass upon the rights of others. To apply the doctrine of riparian rights would at once render valueless every foot of arable land in the Salt River Valley. During the entire progress of this case, it was conceded, practically, by all the counsel, that the Common Law doctrine of riparian rights had no place in the policy of our law, and to it no one has referred for any right he claims; nor has any person directly or indirectly asserted that the doctrine of the right of prior appropriation of water for the purposes of irrigation has been in derogation of any rights that he might have as a riparian proprietor, except in the one instance of C. T. Hayden, to which we will hereafter refer.

Mr. Pomeroy, in his work on riparian rights, deprecates an attempt to inject into American institutions practices or customs in derogation of common law; but as

the conditions which give rise to the common law are entirely different from those existing here which give rise to the doctrine of exclusive appropriation of water for irrigation, mining, or manufacturing purposes, the rule and practice themselves must necessarily differ. It has been said by courts in repeated cases, that the conditions in an arid country like that of Arizona where the artificial application of water to the soil is necessary to make it productive are so radically different from those in a humid country, like England, where arose the common law doctrine, and where instead of the artificial application of water to the soil to make it productive, there is required a constant effort to remove from it a superabundance of water, that it would not be strange that we should require different rules and different regulations governing the rights of persons to water running in the streams, than those prevailing in England: and if there is anything anomalous in the doctrines of our local law it is an anomaly arising from conditions over which we have no control. It is unnecessary for us here to note or discuss those cases arising chiefly in California, Nevada and Oregon, which maintain the existence of the common law rule. The result there has not been happy, and we fortunately are relieved of any effort to reconcile the rights of riparian owners with those of irrigators or other appropriators of water. The conditions which gave rise to the celebrated case of Lux vs. Haggin in 69th California, do not and cannot exist in the Salt River Valley--had Arizona in 1866 or in 1877 been a state and had a constitution like that of California, we might now have been confronted with this difficulty. It has been distinctly enunciated by our Supreme Court that the common law doctrine of riparian rights does not exist in this Territory.

Clough vs. Wing, 17th Pac. Rep. 453.

In California the doctrine of riparian rights is held to obtain:

Lux vs. Haggin, 69th Cal.

In Colorado it is as positively denied application there:

Coffin vs. Ditch Co., 6th Colo. 443.
Hammond vs. Rose, 11th Colo. 524.

In Nevada, the Common Law doctrine of riparian rights prevails. And for an able and elaborate decision of that question and as well the power of territorial

legislatures relative to these rights, see the leading case of "Vansickle vs. Haines, 7th Nev. 249.

The common law doctrine prevails in Oregon:

Weiss vs. Oregon &c Co., 13th Ore., 496.

As I have before said, we have been relieved of the difficult task of reconciling this apparent conflict, by the abrogation of the doctrine necessarily implied from congressional legislation, supplementing our local legislation.

THE APPROPRIATION OF WATER.

As appropriation of water consists of the actual diversion of it from its natural course and its application to a useful purpose, as irrigation, mining, or manufacturing. Until there has been this actual diversion and application of the water, there can be no valid right of appropriation. The extent of the right of appropriation depends upon and is limited by the intention of the person making the appropriation. So, although intent is not a necessary element of appropriation, yet it is important to be taken into consideration in determining the extent of the right of appropriation. Water may be taken and used one single season for a purpose which may be accomplished during that season, and the appropriation would have been simply for that season, and its extent would be limited by the expiration of that season. In other words, the purpose having been accomplished for which the water was appropriated, the right of appropriation ceases. It has been decided by a number of courts, that water may be appropriated for the irrigation of a crop the maturing of which requires only a portion of a year, and that the water thereafter running in the stream from whence it was taken, may be subject to appropriation by other persons for other purposes, at a time different from that at which it was used by the original appropriator.

Smith vs. O'Harra, 43 Calif., 371.
Barnes vs. Sabron, 10 Nevada, 217.
Edgar vs. Stevenson (Calif.), 11th Pac. Rep. 704.

And so, if of two persons on a stream of water carrying a volume sufficient only for the irrigation of a hundred acres of land, one may have made a valid appropriation for the cultivation from year to year of one hundred

acres of barley, which matures and is harvested by the middle of May, while another and different person upon another and different piece of land may use the water in that stream at a period of time in each year beginning with the middle of May and ending with the time for replanting barley. We have, then, two appropriations, and so long as the appropriators continue the same use for which they appropriated, there cannot be any conflict of right. But assuming that the first settler appropriated all of the water and for a number of years has used it for the irrigation of barley, which as we have said, matures and is harvested by the middle of May, and that during the remainder of the year water is allowed to flow down the stream unused and is wasted, and that later a settler comes, and seeing the unused water running down the stream to waste during a part of each year, appropriates it and begins the use of it after the middle of May in each year for the cultivation of crops that may be grown during that period. Then if the first settler should conclude even after a series of years of cropping during only a portion of each year, to attempt the cultivation of a crop that requires irrigation for the entire year, there would be, as between himself and the subsequent settler, a conflict of claims to the use of water, and this conflict can only be determined by ascertaining as a matter of fact for what purpose the first settler did appropriate the water, and, consequently the extent of his right of appropriation. The earlier settlers in this valley confined their efforts to the cultivation of crops during only a portion of the year--that portion, which under the natural conditions existing here, the water was the most plentiful. By the middle of May more than nineteen-twentieths of the land which was under actual cultivation, did not need irrigation because the crop that was grown upon it was harvested. There ran down the river after that date in each year and until a succeeding crop for the next year had been planted a large quantity of water which was permitted to flow upon its way to the sea unused and unappropriated. But as time went on, new settlers came in and began the cultivation finding the products they had theretofore raised were less profitable, or that the cultivation of different and other products was more profitable, and from time to time gradually adopted a culture that required for its successful prosecution, irrigation for the entire year.

We think that it might be safely assumed that when a man enters upon a piece of government land and has conformed to the requirements imposed by the national government as conditions to the acquisition of the title to that land, makes improvements upon it and finally becomes the owner of it, that he intended from the time of the initiation of such proceedings to make that land produce all that it could to his profit; that if he discovered that it was adapted to a more profitable production though requiring more extended cultivation and irrigation he would have the right to avail himself of those possibilities. But he could not do this unless he had the water for such new culture, at a time he had not theretofore used it, and we are again reverted to the extent of the appropriation. It is a question of fact to be determined as any other question of fact is. If, as a matter of fact, the settlement upon the land was with an intention to appropriate water simply for the raising of hay and grain, the settler could not by virtue of that appropriation use it for any other purpose, as against subsequent appropriators. The question is one of great practical difficulty. As before noted, the first cultivation in the valley was to grain. Subsequent settlers finding the water flowing down the river unappropriated and being wasted after the harvesting of the grain crops, settled upon lands, reclaimed them and planted therein alfalfa, and orchards and vineyards. So long as the earlier settler continued the use of the water as he had theretofore, so long there was no dispute as to the right to use the water, for there was an abundance for both, but as the earlier settler in the pursuance of his right, if such right he had, planted his field which he had formerly cultivated only to barley, to alfalfa and trees, the supply of water was insufficient.

Public policy requires that this question should be determined in such a way as shall conduce to the greatest good of the greatest number, or that the question of the appropriation, use, and distribution of water shall be determined in such a manner as to encourage the highest development of the lands and increase their products to the greatest extent. It may be that the earlier settler intended only to plant barley. It may be that if he did change the cultivation of his land to a culture that required water for the greater period of the year, that

he was induced to do so by the example of the newer settler, and that had it not been for the newer settler the older settler would not have attempted the new culture. It is desirable that the new culture be encouraged. But to say that while that is desirable, and that while the water was wasting at a definite period of the year no one could appropriate it for the purpose of a cultivation resulting in a greater public benefit than that which had theretofore followed unless the new settler made his appropriation subject to the right of the earlier settler and made possible, by the exercise of the earlier settler of his right, his deprivation of water necessary for this culture, and the consequent loss of immense labor is, to say, practically, that there shall not be an advancement in the methods of cultivation and improvement in the character of the products of the valley. Yet, as we have just noted, the first settler may be presumed to have taken his land and appropriated the water for the irrigation thereof, with a view and intent then formed, to make that land produce the most profitably that it can. There would seem to me to be but one solution of the difficulty--the difficulty arising from want of specific evidence as to the actual intent of the first appropriator other than that which may be afforded by his use of the water, and that is to presume that the first proprietor of land intended to and in fact did acquire the right to appropriate water for any culture of his land that inured best to his benefit and profit.

As before stated, having determined the extent of appropriation, by which we mean the determination of the purpose for which the appropriation was made, we determine the superiority of right of several appropriations by determining the question of fact: Who first appropriated? As we have said, appropriation of water consists in the actual diversion of it from its natural course and its application to a beneficial use, and that that appropriator's rights are superior to those of others in the order of time in which their several appropriations were made, the first in time being superior. To determine the question of the time when an appropriation is made, we are not confined to the point of time at which an actual application of the water was made in the accomplishment of the purpose for which it was appropriated, but we may go back to a time when the first efforts were made

to make an appropriation that were followed with reasonable diligence and resulted in the actual appropriation, and that point of time will be deemed the time of the actual appropriation, by relation back thereto. In the case before us, large works were undertaken occupying years in their completion before the water could be actually appropriated. But if the construction of these works was prosecuted with reasonable diligence to completion, the right to appropriate water, if the right existed at all, dates from the beginning of the work. So it may have happened that persons may have made appropriations intermediate to the time of the beginning and completion of such works, yet their appropriation must be deemed subsequent to the appropriation accomplished by the former. The question of what constitutes reasonable diligence is not one of peculiar difficulty; the natural conditions and the difficulties of the work must be taken into consideration: and it is not the policy of the law to presume abandonments.

THE RELATION OF CANAL COMPANIES TO CONSUMERS.

Among the parties to this case are a number of corporations organized under the laws of this Territory, which claim the right to divert water from Salt River. The law of the Territory under which they were organized is not one especially providing for the creation of irrigating companies, but is a general incorporation law. These irrigating companies so incorporated have simply by virtue of their incorporation, the rights generally incident to corporations. Some of them were organized as disclosed by their constating instruments, for the purpose of constructing ditches, diverting the water from the river and selling it for consumption in irrigation to the occupants of land lying under the lines of their respective canals.

The question has arisen in this case, as to the right of a corporation to thus appropriate the water; whether it can make a valid appropriation of water, and whether it can appropriate water for sale. The water in the streams in Arizona is public, subject to be appropriated "for a beneficial use." It seems to me that this means the actual use of the water in irrigation,

mining, milling and domestic uses; that that is what is meant by "useful purposes," and that water cannot be appropriated for sale. Indeed, it seems to me that in this Territory there is no private property in water. It is public property subject to the uses that we have before defined. If in that use it is entirely consumed, it does not matter, for consumption is not an incident to ownership of water any more than the consumption of the amount of air that we breathe into the lungs and vitiate and destroy as air, thereby makes the air our property. We have a right to use it, and if the use results in its destruction or vitiation, the right is none the less nor greater. It then becomes important to consider what rights, if any, corporations which have constructed at large expense these irrigating canals, have. It is a familiar principle governing dealings among men, that whatever one may do himself he may do by another, as by an agent. There is not doubt that a community may by joining together and contributing labor or money, or both, to the construction of a ditch of sufficient capacity to divert and carry water necessary for the irrigation of their lands, accomplish the result more cheaply, better, with less waste and more promptly, than if each attempted by a separate ditch to divert and appropriate the water which he himself needed, and it seems to me that there can be no doubt of the right of a community or an association of valid appropriators to thus combine. It is but a step further and in the same direction to say that this community can select or appoint an agency to construct their works and do the actual work of diversion and delivery of water for their use; and there is nothing in the law of this territory that prevents a corporation from sustaining just this relation to the water appropriators. Many of these corporations claim the absolute right of appropriation; and their business affairs are conducted on the theory that they as corporations are the owners of the water. There are many cases reported in the books wherein the courts refer to a sale of water by corporations as a business, seemingly thereby to recognize the right of a corporation to acquire by diversion a property in water. My attention has not been called, however to a case that expressly decides that either an individual or a corporation can acquire such a right. In applying the rules laid down in California by her courts, a distinction which is often

lost sight of should be observed. California is a state, sovereign in all matters not expressly of national concern, and may regulate and define the tenure upon which property may be held within its territory. It may declare or abrogate the Common Law doctrine of riparian rights. It may declare ownership in water running in the streams and water-courses of the state in others than riparian proprietors, and may allow such ownership for purposes other than that of immediate beneficial use. It may delcare the diversion of water for sale to be for a beneficial use; and the constitution of that state taking effect January 1, 1880, Art. 14, Sec. 1, prescribes:

"Art. 14, Sec. 1. The use of all water now appropriated or that may hereafter be appropriated for sale, rental or distribution; is hereby declared to be a public use." * * *

(And we may add here, passim, that the same article provides that such use shall be subject to the regulation, and control of the state.) On the other hand, the Territory of Arizona is only a temporary government erected by the national government. We possess none of the attributes of sovereignty--those all inhere in the United States. The legislative power conferred by Congress upon this territory to legislate upon all rightful subjects of legislation, does not vest the territory with sovereignty, any more than does the charter of the city of Phoenix by conferring upon its Common Council certain legislative power--as of taxation--make the city of Phoenix a sovereignty. Indeed the political status of our territory to the United States government is almost if not quite strictly analogous to that of a subordinate municipal corporation to the sovereignty that creates it. We can look alone, then, to the legislation of Congress and to our own legislation within the limits prescribed by our own organic act, to ascertain the rights that may be acquired to divert and use water. We cannot go further than Congress has expressly and impliedly authorized it, for the doctrine of appropriation of water is in derogation of the common law rights of the United States as proprietor, and of the rights of its grantees. Reference to the acts of Congress, the one of 1866 and of 1877, (the Desert Land

Act), * will disclose the purposes for which Congress has authorized an appropriation of water. The act of 1866 defines those uses to be mining, agricultural, manufacturing, or other purposes. I do not think that a sale of water is a use of water, any more than a sale of wheat or any other commodity is a use of it; and that that was the intent of Congress we derive from its subsequent legislation of 1877 wherein it is provided that the water * * *
"shall remain and be held free for the appropriation and use of the public for irrigation, mining, and manufacturing purposes." But whether the act of 1866 authorized an appropriation of water for sale it is hardly necessary here to determine, for it is not claimed by any party to this suit that it acquired or initiated any right to divert water for sale, prior to the act of 1877. ** The act of our own legislature, providing for the appropriation of water which was in effect at the time of the adoption of the act of 1866, recognized the appropriation of water for mining, agricultural and mechanical purposes, and suggests no others, and that law is a "local law" which by the act of 1866 is made a measure of the right of appropriation. It would seem to me under this state of our law, even prior to the act of Congress of 1877, that neither a corporation nor an individual can by the construction of a canal and of a dam, no matter how elaborate or expensive, become the owners of an amount of water equal to the capacity of its or his canal, nor become vested with a right to divert any greater quantity of water than may be necessary to supply its or his needs as an irrigator, miner or manufacturer, and as a

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* The provisions of the act of Congress of March 3, 1891, amendatory of the desert land act of 1877 are elsewhere noted.

** The professed purpose of the organization of the Salt River Valley and the Maricopa Canal Companies as disclosed by their constating instruments and their practice relative to distribution of water will be noted in the finding of facts which is to follow. These were the only corporations in the Salt River Valley organized for the purpose of diversion of water prior to the act of Congress of 1877 known as the desert land act.

quasi-agent to supply them sufficient for their needs, irrigators, miners or manufacturers. To say otherwise is to say that they may divert water and refuse to deliver it to those who may have use for it. If they are the owners of it they may store and impound it, or waste it and discharge it upon the desert, to the advantage of nobody. To say that they are the owners of it is to say that they have the right to control it, and they are at once a monopoly which it seems to me to be against the public policy to permit to be created. So, in my opinion, a canal company whether it be a mere association of persons who may or may not be land owners, or may consist indifferently of both, whether it be a corporation or whether it be an individual, cannot become the owner of water. The total amount of water that a canal company, as well as either an individual or an association of land owners may divert from a stream in this territory, is the amount they devote immediately and not mediately to a useful purpose. In other words, the amount of water needed by those to whom water can be supplied through such canal and to whom such water is actually supplied and no more.

The Constitution of Colorado provides:

"Art. XVI. Sec. 5. The water of every natural stream not heretofore appropriated, within the State of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided." A comparison of this language with that employed in the Desert Land Act, while there appears a difference in phraseology, discloses no difference in substance. The language of the Desert Land Act is. * * * "and all surplus water over and above such actual appropriation and use, together with the water of all lakes, rivers, and other sources of water supply upon the public lands and not navigable, shall remain and be held free for the appropriation and use of the public for irrigation, mining and manufacturing purposes, subject to existing rights."

"See act of Congress entitled "An Act to Provide for the Sale of Desert Lands in certain States and Territories," approved March 3, 1877.)

U. S. Stat. 2d Sess. 44th Cong. p. 377.

Sec. 8. Art. 14 of the Colorado statutes provides that the general assembly of the state shall provide * * *

to establish reasonable maximum rates to be charged for the use of water, whether furnished by individuals or corporations. Certain of the statutes of that state contain provisions for the regulation of the purchase and sale of water.

In the case of Wheeler vs. Northern & Co., 10th Colo. 582, the Supreme Court of that state discusses at some length the power of a corporation to acquire property in water. After noticing the provisions of the Constitution, and thereafter the statutes which seem to recognize such a right, Helm, C. J., speaking for the Court, says: "But giving these rights all due significance, I cannot consent to the proposition that the carrier becomes a proprietor of the water diverted."

QUANTITY OF WATER THAT MAY BE APPROPRIATED.

The quantity of water to which a person may be entitled for irrigation is necessarily an indefinite quantity. Definite quantities of water have been spoken of throughout the proceedings in this case; the Tempe Canal Company, for instance, claiming 11,000 inches of water, etc. An inch of water is a definite quantity of water, as before stated, and is a unit of measurement in this valley. The law is, that water may be appropriated for a useful purpose, and a valid appropriation is necessarily limited to the accomplishment of that purpose, and there can be no definite appropriation of any amount of water over and above that which the necessity requires. The amount of water necessary for irrigation even on the same identical piece of land and for the same crop, may not be constant. It varies with the season, varies with the rain-fall, varies with the temperature, varies with the manner of cultivation.

The amount of water necessary for irrigation in this valley varies between very wide extremes, being affected by the character of the soil, which varies greatly, by its location, by the length of time during which it has been irrigated and cultivated, by the character of the crop, by the method of its irrigation, by temperature, by amount of rain-fall, and by the prevalence of the winds. It cannot be determined in advance what amount of land an inch of water will irrigate. If an inch of water

is too small for a given quantity of land and the appropriator is limited to that amount, though he may have a valid right of appropriation of an amount sufficient for the irrigation of the land, he is deprived of his right; and on the other hand, if an inch of water is too much for the irrigation of the given extent of land, then the amount taken by an appropriator who takes an inch for such land exceeds that to which he is entitled, and others are deprived of its use. While it is to be desired to limit to the smallest possible quantity the amount of water that may be used by the land owners in this valley consistent with the proper cultivation of the soil, yet, as I have before said, the conditions are so varied that it cannot be done by fixing any definite quantity in advance of its use. The best that can be said is, that the extent of a man's appropriation must be measured by the necessity as it exists at the time it is attempted to be measured. It is in evidence in this case that there are lands which produce a full crop of alfalfa throughout the year with the use of not more than one inch of water to ten acres. It is also in evidence, as to other lands planted to alfalfa, that it requires for the production of a full crop on them, the use of half an inch to the acre. To fix a definite quantity to which the respective owners of lands might be entitled, we must resort to an average of the requirements of all the lands; so in the cases we just mentioned, taking them for the purpose of illustration an average between half an inch per acre and the tenth of an inch per acre would be three-tenths of an inch per acre, and in that event he whose land was irrigated with one-tenth of an inch per acre would have two-tenths of an inch per acre too much water, while the alfalfa on the land requiring one-half an inch per acre, if limited to the average found, would for the lack of water be destroyed. An average is never right, except accidentally; it is always too much or too little for any particular case.

PRO-RATING AND OTHER AGREEMENTS.

It appears from the evidence in this case that the owners of lands under a number of the canals, have entered into contracts with the corporations who claimed

to be owners of those canals, for the delivery of water to them for the purposes of irrigation. These contracts in general terms, between the Arizona Canal Company, the Grand Canal Company, the Maricopa Canal Company, the Salt River Valley Canal Company, and the Highland Land and Water Company, are similar. It is provided in those contracts that in the event of an insufficiency of the water in the river to supply all who may need it, those companies may respectively distribute the water among their customers, pro rata. This presents a question somewhat novel in this Territory, and one of very considerable importance. Its importance is suggested by what has elsewhere been said, that the right of a canal or ditch company or owner to divert water is dependent upon the needs of those whom it supplies who have a valid right of appropriation. It is always the policy of the law to declare that principle governing the dealings among men, which shall conduce to the greatest public good and as will best accomplish the result contemplated by the law makers--the observance of the public good being really the purpose of the law makers. The law of this Territory is, as before stated, that he who is first in point of time in the matter of the appropriation of water for the purpose of irrigation, is first in right to take that water. These pro-rating agreements render this provision of law practically nugatory, for it places all who are under these canals upon an equality so far as priority is concerned. There is no limit to the extent of land to which these canal companies may agree to furnish water, and therefore he who was first in the valley and took from Salt River the first water that was applied to the cultivation of the soil, may by these agreements be required to submit to a distribution of the water among the owners of such an extent of land that the water applicable thereto will not produce a crop. The carrying out of these agreements, then, may result in the deprivation of some who are entitled to water sufficient for the cultivation of their crops, and in the attempt to irrigate so considerable an extent of land none of them may be properly irrigated and thereby crops may be lost. This is a direct public injury and, as I think is hereafter shown, directly contravenes the policy of Congress as found outlined in its acts relative to that subject, and of our own local legislation, and the courts should not give countenance to that which so results. I shall discuss later, when

considering the question whether a right to appropriate water for irrigation is appurtenant to the land for which the water was actually first appropriated, the policy of the national government in authorizing the appropriation of water. If I am correct in the conclusion reached (hereafter discussed), that the right to appropriate water for irrigation is appurtenant to the lands for which the water was originally appropriated (of course subject to forfeiture by abandonment), the same policy that forbids a segregation of the right of appropriation from the land, equally prohibits a diminution by agreement of the right to appropriate the quantity of water an appropriator has the right to take for the proper irrigation of his land--otherwise he might do indirectly that which he cannot do directly.

If he may by means of these pro-rating agreements consent to a diminution of his right to any extent, however slight, I see no reason why it may not be continued to an absolute destruction of the right itself. We are then confronted with the question: If these contracts be against the policy of the law and therefore invalid, what is the situation of these companies who are the real as well as the nominal parties in this proceeding? If what I have said as to the right of appropriation being simply a right to take and apply water to a useful purpose be true, then the right of a canal company to divert water from the river depends upon the right of those who have acquired a right of appropriation and who by agreement or otherwise have the right to have the water diverted through and carried by that canal for the purpose of irrigation, and if any agreement between such consumers and the canal companies is invalid because of being against public policy, we have presented for our consideration this further question as to the right of the consumer to water at all whether they have abandoned their right to the use of water, or whether their agreement with the company is simply invalid to the extent that it violates, if it does violate, the public policy outlined in the course of Congressional legislation, and that in that event they are entitled to the use of the water just in that order of time and priority as if the agreements had not been made. It appears that those persons who are now the owners of the lands originally irrigated by water taken by and carried through the Swilling Ditch, have entered into these agreements with

some one or more of these corporations. They have accepted from such corporations what purports on its face to be a grant of the right to the use of the water of the corporation. Have they then abandoned the right which had inured to the owners of these lands under that old ditch? And when I speak of the Swilling, I do so merely for illustration, for the same question applies to nearly all if not all of the canals in the valley. If there has been an abandonment by this acceptance by the land owners of the grant to the use of water, then the priority that the owners of these lands which were first irrigated had, has been lost.

The law does not favor abandonments or forfeitures. It can hardly be said, considering the evidence in the case, that these persons intended to abandon their rights, nor has there been an abandonment through laches, for the evidence discloses that there has been a continuous use by these persons of the water formerly appropriated by them or their grantors. Nor would a declaration of a forfeiture or abandonment now by the courts subserve that policy which we have conceived to be the one that prompted our congressional legislation.

I am then, of the opinion that these agreements to pro rate are void because in violation of our express statutory provision that he who is first in point of time, shall be first in right supplemented by the act of Congress of 1866, and of the express provisions of the act of Congress known as the Desert Land Act, and the amendments thereto of 1891, and of the policy of the government there outlined.

In Colorado the Supreme Court announced a doctrine relative to agreements among appropriators to pro rate apparently in conflict with the conclusion to which I have come:

Schilling v. Rominger, 4th Colo., 100.

In that case, however, which was decided in 1878, the particular agreement which was under consideration was made and had been acted upon before the enactment of the Desert Land Act. In that state there is a statute providing for a pro rating among consumers in certain cases, and the question came up again in the case of:

Farmer's Highline & Co. vs. Southworth, 21 Pac. Rep., 1028.

Each of the three justices delivered an opinion. The case is instructive and emphasises the difficulty of

the question. Justice Hayt declined to give an opinion upon that particular question, stating that it would be time enough to do so when it was properly presented by the pleadings. Justice Elliott very vigorously assails the constitutionality of the statute, and among other things, says:

"A single illustration will suffice to show the disasterous consequences which would ensue if the pro rating statute should be made the rule for the distribution of water for irrigation, instead of the rule of priority:

"An irrigating ditch is constructed, the first and only one taking water from a small and natural stream. The first year, five consumers applied for and received, each, one hundred inches of water for the irrigation of their lands. The next year, the ditch being enlarged, five more apply and receive the like quantity. The third year, five more, and so on successively until thirty or forty consumers are located under the ditch. Perhaps the first five might be required to pro rate with each other in times of scarcity and their appropriation being practically equal in point of time. But under the statute the first five would also be compelled to pro rate with all subsequent consumers until the amount of water that each would receive would become so infinitesimally small as to be of no practical value, and would eventually be entirely wasted before it could-be applied. It requires volume or head of water to irrigate successfully. Under circumstances like these, what mockery to pretend that the pro rating statute is a reasonable regulation provided for the distribution of water for the early settlers and prior appropriators who bought and improved their lands and expended their money, relying upon the doctrine that priority of appropriation shall give the better right as between those using water for the same purpose.

"It may be said that the foregoing illustration is founded upon an extreme and unusual case; but extreme cases are often necessary to test the correctness of a general rule."

Chief Justice Helm, on the contrary, maintains the constitutionality of the statute upon the grounds, first, that it would be wholly impractical to apply the rule of prior right among a large number of consumers, and second, the view that that statute be unconstitutional, rendered

other legislation delusive; that other provisions beside the pro-rating section must fall.

The second reason assigned by Chief Justice Helm does not concern us, because the result he anticipates is one dependent upon their statute, and would be inapplicable here. I cannot concede that his first reason is valid--that it is difficult to ascertain facts upon which rights are predicated is not a reason why a court should refuse to administer justice. In a dispute between two the question of priority is ordinarily easily ascertained, and the Court will restrain an infringement by one upon the rights of the other. Why the Court should decline so to do when the right of the first is infringed by twenty or by five thousand persons I cannot understand. The mere difficulty of ascertaining the fact cannot and ought not to change the rule of law.

The distinction between the Colorado case and the one at bar, in that that was based upon a statute compelling pro rating, and this involves the right to effect the same by voluntary agreement of the parties affected, is noted; but I, as stated before, am of the opinion that parties cannot by their agreements thwart the whole scheme of Congress devised for the reclamation and cultivation of the desert lands.

While the relations existing between the several corporations and their customers cannot in this proceeding be directly adjudicated and the judgment of the Court cannot bind those customers, nevertheless, as I have before said, the determination of the right of these corporations to divert water must depend upon the right of their customers to have water supplied to them--hence the consideration of the validity of these contracts.

It might be suggested that there is a limit to the extent of lands for which canal companies might contract to deliver water; that the canal companies themselves have fixed a limit; the Tempe, for instance claiming a right to divert 11,000 inches of water, the Salt River Valley Canal Company 6,000 inches, the Maricopa 6,000, the San Francisco 4,500, the Grand 10,000, the Utah 2,500, the Mesa 6,000, the Highland 6,000 and the Arizona 50,000--this makes an aggregate of 96,000 inches. It may be argued that none of them would attempt to contract to deliver water in excess of their carrying capacity. But this statement of their claim shows a capacity seven or eight times as great as the volume of water in the river

at its lowest stages. So the limit to which they should be confined is already passed--were it not this suit would not be pending.

There is another provision of some of these contracts, which has been the subject of much discussion among counsel in this case, that requires the attention of the Court. The contract into which some of the purchasers entered with certain incorporated companies, parties to this proceeding, for what have been termed "water rights," provides that neither the selling of water to the purchaser nor the fact that the purchaser uses water out of the canal, or that the water sold by the canal company shall be used to irrigate any particular tract of land, shall give any right to the purchaser or to the owner of the land to the continuance of the supply, or give to the purchaser any claim to the use of water for any other time or times than that mentioned in the contract, nor shall such use be construed into a custom or usage or precedent for the use of water for any other year or time than that mentioned in the contract, nor shall such use be construed into a custom or usage or precedent for the use of water for any other year or time than that mentioned in the contract; and it is further provided in those contracts that the purchaser waives any and all right or claim which he may have by virtue of any statute, custom or law, of the use of water from the canal after the expiration of the period of time limited by the contract.

It is argued by the plaintiffs that the provisions of this contract constitute an express waiver by the purchaser, of any right of appropriation of water which he may theretofore have had. It will be noted that the waiver is a waiver of any right which the purchaser may have by virtue of any statute, custom or law to the use of water from that particular canal after the expiration of the period of time limited by the contract.

Counsel for the defendants very ingeniously and plausibly argue that this does not constitute a waiver or abandonment by the purchaser of any right he may have acquired before entering into the contract to appropriate water from the river, but that it only defines his rights as against the canal company. It seems improbable that owners of land the cultivation of which depends upon the use of water, should voluntarily abandon a right, once acquired, of appropriation of water--there is nothing in the evidence indicating that there was any consideration

for an abandonment. On the contrary it appears that the owners of these lands continued the use of water for their cultivation and made improvements, and planted trees and vines for the enjoyment and maintenance of which the right to use water for a time extending far beyond the period limited by the contract is necessary. By their acts, by their conduct, they evinced anything but a purpose to abandon a right, the possession of which was so essential.

In the case of South Boulder vs. Marfell, reported in 25th Pacific Reporter, at page 504, the Supreme Court of Colorado, in discussing the rights of a consumer who had entered into an agreement with a canal company, in which agreement there was a provision that upon the failure of the consumer to pay a certain annual rent or delivery charge, he should forfeit and relinquish all rights and claims whatsoever, both against the company and in and to the use of water from the ditch of the company. It appeared that the consumer had refused to pay the water rental, and litigation arose. Chief Justice Helm, speaking for the Court, says:

"Whether appellees could by contract forever relinquish rights relating to the water conferred upon them by the Constitution and statutes, we need not determine. The instrument itself in our judgment does not indicate any such intent. It contains no declaration that upon a failure to accept the annual proposition and make the annual contract the consumer abandons all right to obtain in any manner water from the carrier's canal. In the absence of an express declaration or clear implication to the effect that such omission or failure should produce a forfeiture of constitutional and statutory rights collaterally provided for in the agreement, such collateral rights would in any event, unquestionably remain. The simple and obvious meaning of the provision is, that the rights and claims intended to be forfeited are those mentioned by the instrument itself."

The canal company is but a carrier, and I know of no principle of law in the absence of statutory provisions that compels it to carry against its consent or will.

That one has a valid prior right of appropriation of water from Salt River, in itself gives him no right to have that water conveyed to him through the works constructed by another whether that other be an individual or a corporation. He can only do that by and with the

consent of the carrier. Nor is there, it seems to me, any reason why the carrier may not limit the period of time during which he or it will consent to carry the water that another has appropriated. But however that may be, it is only necessary to decide for the purpose of this case, that these agreements do not operate to deprive the consumer of his right of appropriation.

As has been before said, the right of a canal owner, whether a corporation or not, to divert water, depends upon the fact that there are persons, the owners or occupants of land having the right of appropriation of water for their irrigation, whom they supply with the water for that purpose. If, then, a canal company have agreements with its customers or any of them limiting the time during which it will carry water to such of those who have a valid right of appropriation, it would after the expiration of that time have no right to divert the water to which such persons are entitled.

RIGHT TO APPROPRIATE WATER APPURTENANT TO THE LAND.

It appears from the evidence that some of the canals, the owners of which are parties to this proceeding, were constructed by associations of individuals without any attempt at corporate organization. The associations have a nominal capital stock, and certificates of the ownership of that stock were issued to persons who were the constituent members of the organizations, and by the practice of the association there was incident to the ownership of each of these certificates or shares of the stock, the right to the use of a proportionate part of the water diverted by and conducted through the association's ditch. In the first place not all of the shares were issued, but have from time to time been issued, so that the whole amount of the capital stock is now outstanding. These shares were transferable much as shares of the capital stock of a corporation are, by assignment and transfer thereof on the books of the association. Most, if not all of the shares of this association have in that manner changed hands, and persons now the owners of such shares by such transfers, claim as incident to their ownership, certain rights to the use of water. It is urged by some of the defendants in this case that the right to use water

is a right lying in grant, and that it cannot be transferred by parol, but that it must be done by deed, and that the attempt to pass such rights by assignment of the shares of the stock in the manner adopted, results in an abandonment by the original appropriator of his appropriation of the water, and that the grantee or transferee of the stock becomes simply an appropriator himself, his right to take it dating from a time subsequent to the time such share was transferred to him. Of these associations the Tempe Canal is one. If this be the true construction of the law, then from the evidence it would appear that the rights of most of those who claim the right to the use of water diverted by and conducted through the Tempe Canal, would be subsequent to that of those who obtained the right to use the water diverted by and through canals and ditches constructed long since the Tempe Canal. It is and must continue to be until finally determined, a question of very great interest and importance to the citizens of the Territory, whether a right to divert and use water for the irrigation of land is an appurtenant to that land, or whether the right can be a distinct right to take water, independent of any ownership or occupation of any land whatsoever; and a solution of that question affords us the means of the determination and definition of the rights of such shareholders. If what we have said before relative to the appropriation of water in this Territory be true, it follows, I think, that a man cannot be the owner of a right to appropriate water from a river in this Territory, unless he has for it some beneficial use. It is in evidence in this case that there are owners of the capital stock of some of these associations, who have not any lands and who have never used any water whatsoever for the irrigation of land, or for any other purpose, but have from year to year and from time to time let out, leased, or attempted to lease their right to the use of water to some other persons who were the owners or occupants of land.

It further appears that some of the owners of shares to which by the practice of the company there were incident the right to use water from the canal while they have been the owners of land for ten years or more capable of being irrigated by the water taken from that canal, have not cultivated the same or applied water to it nor permitted any one else to use the same or apply water to it, but have leased their alleged right to use water to others to

take and use the water diverted and conveyed by the canal. There is one specific instance wherein it appeared that a man entered a section of government land under the provisions of the Desert Land Act, reclaimed the same by means of his right to the use of the water, derived from his ownership of certain shares in the capital stock of the canal association, who has never since cultivated that land or any part of it, or permitted any one else to do so, but has allowed or attempted to allow others to use the water to the permanent right to which, in his proof required under the Desert Land Law to entitle him to a conveyance of the land, he adduced evidence.

There is now a scarcity of water; were there not, this suit would not be pending. What can be the right of this man who claims to be the grantee of the government, of land under the provisions of the law which required that he should have the right to the permanent use of the water for its cultivation, as between himself and those whom he has permitted to use that water? There is not enough for both. Either the lesees of this right who have used the water and thereby made productive lands in the valley, or the lessor who has not used the water, is the owner of the right to such use--and this is an important question, which sooner or later must be determined. While some of the owners of lands claiming the right to use the water for the irrigation thereof, are parties to this suit, there are other parties to this suit, viz: the corporations, who have constructed, operated and maintained the canals, who are not the owners of land. Nevertheless, under our view of the law, it is the individual ownership of the land and the right to use water therefor, to which we must look to determine the rights of the parties to this proceeding. If one of these corporations or associations, having constructed, maintained and operated a canal, does not apply the water to some beneficial use and has no customers who do apply the water that they divert, to some beneficial use, it has no right to divert the water at all. Permanence of ownership of land, and, under the conditions in this country, of right to appropriate water necessary to cultivate it, are necessary to the best development and highest degree of production of that land, and a course of dealing between individuals themselves or between individuals and corporations, whereby the right to the use of water is abridged and made less than permanent, is directly injurious to

the general good, and consequently against public policy. While one who has the right to divert and use the water may abandon that right, or may forego the use of the water for a time without abandonment, yet there cannot, it seems to me, be a course of dealing between persons who claim a right to the diversion of water whereby such use of water may be a mere matter of barter and sale.

The greater portion of the cases that have been decided by the various courts of the Pacific Coast states and territories, involve questions concerning the rights to the use of water for mining purposes. The doctrine of the right of appropriation of water and principles governing its use was first announced in cases involving the right to such use of water, and to those cases the courts have latterly looked for the principles that should obtain in the determination of the rights to the use of water for irrigation. This, I think, has led to some confusion, because the analogy between the use of water for mining and its use for irrigation is not complete. In using water for mining, the use is strictly a mechanical one; it is needed for no other purpose than that its mechanical power shall be applied to the separation of gold from the earth that contains it. Hydraulic mining is a California invention and the tremendous mechanical effects produced by the use of water in mining under that system has excited the admiration, and almost the wonder of engineers. But in no sense is its use for that purpose similar to its use for irrigation. The water is not consumed in the process of mining. It is true that the water was often lost because of the fact that it had been used in mining, and that it was often so deteriorated that it was unfitted for any other use, but this was merely incident to its use as a mechanical power; and not necessarily incident. It is a use as distinctly mechanical as if it had been used for the propulsion of machinery. The force of the water by its direct impact of the particles of earth containing the precious metals, separates the earth from the minerals. The fact that there might not have been intervening between the water itself and the object of the mechanical operation any machinery or mechanical appliance, makes no difference. Upon the other hand, water for irrigation is not in any sense a mechanical use. The element of force or power does not concern the irrigator of land, except to the mere extent that it serves to convey the

water to him; that is, by the force of gravity, water will deliver itself from a source higher in elevation than the point at which its use is desired, to that point. No amount of rain would help the miner in his operations except indirectly by storing for his use a source of power. On the other hand, rainfall renders the use of water unnecessary, temporarily, to the irrigator. The requirements of mining, just as of the miller, demand a constant, uniform and definite supply of water. The requirements of the irrigator varies both in time and quantity. If a miner or a miller has acquired the right by grant, license, prescription or otherwise to the use of water for a given mechanical purpose, he has acquired the right to a definite quantity of water that is commensurable. And again the analogy fails when we come to consider whether the use to which water may be put may be changed, or whether the locus of its use shall remain as at first. In mining, the use of water cannot be confined for any considerable length of time to a particular locality, because as the process of mining proceeds, the earth is exhausted of its minerals and the water must be used elsewhere--and hence it was the policy of the government that it should be so used, because mining operations could not be carried on otherwise.

As each cubic yard of gravel containing mineral is subjected to the mechanical process of hydraulic mining, the purpose of that process has been served and the mechanical power of the water is applied to the next cubic yard of earth, and so on until the entire field has been subjected to the process, and the use of water to that particular purpose in that particular locality has ceased to be beneficial; while with irrigation, the application of water to any particular square yard of earth does not render unnecessary the future application of water to it; in fact the application must be continuous. So that in considering the cases, we must not lose sight of this distinction between the use of water for mining, which is a mechanical use of the water or a use of water for its mechanical power, which is accomplished by one application to any locality, and the use for irrigation which is continuous from year to year. It is, no doubt, a failure to note these distinctions that has led to the belief by some that the use of water for irrigation may be changed from place to place at the will of the appropriator.

It has been the policy of the general government during all that period of time covered by the events that we are discussing, to induce the rapid settlement upon and development of public lands, and to that end it has proposed to bona fide settlers, liberal terms, upon compliance with which they can obtain title. The Desert Land Act, for instance, provided prior to its recent amendment (and that is the law under which title to most of the lands in this valley was acquired), that a citizen of the United States might settle upon and acquire the title to 640 acres of land upon the condition that he would reclaim it from its desert character by the application to it of water. The price of the land was fixed at a dollar and a quarter an acre, and express license was given by the act to appropriate any waters of the public streams for the purpose of reclamation and cultivation.

The desire of the general government to have these lands settled upon and thereafter cultivated to the highest degree attainable, is what prompted it to this liberality in its terms. To say that the water so appropriated for the reclamation and cultivation of that land is not appurtenant to it, is to make possible a direct fraud upon the government and the defeat of its evident purpose. To illustrate, we may assume a case. Suppose that in a stream in the Territory there is a volume of water flowing sufficient to irrigate 640 acres of land and no more. A, locates 640 acres of land under the Desert Land Act, and diverts this water and appropriates it for the reclamation of that 640 acres. He then in due course prescribed by the statute, makes proof of his reclamation and appropriation of the water and pays his dollar and a quarter an acre and obtains from the government the title. The government expects of him thereafter, and has the right to expect of him, no less than that he shall diligently and in good husband-like manner cultivate that land. If however, he has the right to segregate from that land his water right, we may further suppose that B settles upon the same stream upon another 640 acres, and purchases of A his right to appropriate water and he, (B) may then in the same manner as did A, acquire a title from the government. And so we may repeat the process until we have an indefinite quantity of land the title to which has been acquired from the government in direct violence of the intention of the government--for upon our hypothesis there is not sufficient water

to irrigate more than 640 acres. It is a direct fraud upon the government and a direct perversion of its bounty which could not have been intended.

So, in my opinion, when one under the Desert Land Act has appropriated water for the relcamation and cultivation of desert land, he cannot segregate it, as it is appurtenant to the land. And what is said here of lands acquired under the Desert Land Act applies equally to land acquired under any of the provisions for the sale of public lands. The United States government did not propose to sell its land to private owners for speculative purposes--on the other hand, stringent regulations have been prescribed to prevent mere speculators from acquiring the title. The whole purpose has been to induce bona fide settlers who will cultivate the lands, to take them up. What a perversion of such intent if he who took up a timber claim, for instance, and should, after fairly starting the growth of timber, the very object the government had in view in giving him the land, be permitted to segregate from that land the right so generously given him to appropriate water, and make of it a subject of barter, sale and speculation--and by such segregation destroy that the existence of which was a condition to his title.

And in strict consonance with the view expressed that our territorial and national legislation contemplates permanency of right to use water upon land reclaimed is- the amendment of March 3, 1891. That act was approved after the trial of this case, but it makes no change in the law as I understand it so far as the right of appropriation and use of water is concerned. It requires that at the time of filing the declaration required by the desert land act of an intention to reclaim desert land the declarant shall also file a map of the land which shall exhibit a plan showing the mode of contemplated irrigation, which plan shall be sufficient to thoroughly irrigate and reclaim said land and prepare it to raise ordinary agricultural crops, and shall also show the source whence the water is to be obtained:

26 U. S. St. 1096. ch 561 Sec. 4.

Can it be imagined that any plan for irrigation contemplating or disclosing a right to the use of water temporarily would be accepted by the government under this provision? Or a right less than a permanent one? It

cannot be conceived that the "reclamation" meant by that act, and by the desert land act of which it is amendatory, is a mere temporary one. And if the right is severable from the land is not the right, at the will of the land owner, merely temporary--if the right is segregated does not the land relapse into its desert character? If by some casualty, as a flood, his lands were destroyed or rendered useless for agriculture it is possible that he might settle upon another piece of land and apply his original appropriation of water to it, but by any voluntary act of his own, we do not think he can effect the segregation.

It is true that one who has acquired land and the right to appropriate water for its cultivation, may abandon that right and by his own neglect, laches, or expressed intention, forfeit it, but in so doing he exhibits a want of good faith toward the government by whose bounty he obtained title, and he should not be permitted to designate the beneficiary, by granting to some particular person not the grantee of the land itself, such right--if he has lost his right to appropriate, the common stock of water for public use is increased to that extent and can only inure to the next comer, who may appropriate anew, dating his appropriation from the date he actually makes it--a pretended grantee cannot "tack," if that term can be so applied to the process, his pretended grantor's right to his own.

I have come to the conclusion, then, that the right of appropriation of water for the cultivation of land becomes permanently appurtenant to that land, for without it the land is worthless; without the land the appropriation could not have been made.

It would follow, then, from what I have said as to appurtenance of the right to appropriate water to the land for which the appropriation was made, that a conveyance of lands under the Tempe Canal operates as a transfer with it of the water-right appurtenant to it, whether there be a transfer of the stock representing that right or not--the transfer of the stock being merely a convenient mode of making known to the Canal Company the fact of the purchase of land and the right to the use of water therefor. I am of the opinion that the transfer of stock cannot operate per se to transfer the water right. And so it must be said of those corporations whose stock is supposed to represent water-rights.

For the purposes of this suit it is not necessary here to decide what is the status of any shareholder who may have neglected to himself use the water the right to which is evidenced by his ownership of shares in the canal. If he shall have leased or attempted to lease his right to another and permit that other to assert by reason of such lease a right to the use of water, the right of that other is subordinate in point of time to that of any appropriator who made his appropriation prior to the time of the attempted lease. In other words such lessee's rights, if he has any at all (as against others than the alleged lessor), are those of an independent appropriator dating from the time of his first actual use of the water. He cannot acquire any priority against others by virtue of any transfer or lease from the owner of the shares, or by his consent. The owner of such shares, unless he himself be the owner or occupant of land upon which he uses the water, or of a mill which is propelled by the water, has not by reason of his ownership of stock, any right of appropriation, and of course he can transfer none. And when an owner of stock who is also the owner of land for the irrigation of which the water, the right to which is evidenced by his certificates of stock, was appropriated, and who has leased the same and failed and neglected to cultivate his own land for a long period time, seeks to obtain water, the question of his abandonment will arise. In the meantime he cannot claim for himself; and the rights of his lessee are subordinate to others in point of time, in the order of first actual use.

And as a necessary conclusion it must be decided that the owners of shares who have not a beneficial use for the water, have no right to divert it.

PRIORITY OF APPROPRIATION AMONG CONSUMERS UNDER THE SAME CANAL.

It has been frequently decided by the courts of last resort in most of the states and territories on the Pacific Slope, that the time to which is to be referred the vesting of a right of appropriation of water is not necessarily that time at which an actual diversion and appropriation of the water to the contemplated use, is made; it may

antedate that time. It is to be referred, in this Territory, to the time when the appropriator begins the construction of the means of diversion of the water and its conveyance to the point of use, if he shall have thereafter prosecuted the work of such construction, with reasonable diligence to completion, and made an actual application of the water to the contemplated use. What constitutes reasonable diligence, has upon particular facts, been the subject of frequent judicial decision. From these decisions it may be deduced that in determining what constitutes reasonable diligence in such cases, there must be taken into consideration the difficulties inherent in the natural conditions attending the enterprise, the magnitude of the work, the difficulty of obtaining labor, and material, etc. Mere want of pecuniary ability will not warrant delay, nor, it has been decided in one case, illness of the projector of the enterprise. So long as we have to determine only the rights of successive appropriators who have each provided his own means of diversion and conveyance of water, the rules are of each application.

The actual application of water to the contemplated purpose and its diversion from the original stream are two element that must concur to constitute a valid appropriation. It is not necessary, however, that each of those concurrent acts should be performed by the same person: One may divert and another may make the application of water so diverted, and their combined acts would constitute a valid appropriation. And so, if a number should combine who are the owners of land, desiring to appropriate water for its irrigation, may agree with another, either an individual or a corporation, that that other shall provide the means of the actual diversion of the water, and thereafter their application of it to the purposes of irrigation would constitute a valid appropriation; but the right of appropriation is vested in those who make the actual application of the water to the useful purpose.

As has been before suggested, most of the consumers of water in the Salt River Valley obtain their water from ditches and canals constructed by others than themselves. The act of diversion, however, as we have said, and the application of it to the purposes of irrigation, constitute a valid appropriation. As, however, between those who take from the same canal or ditch, it has been suggested

that those in whom is vested the right to appropriate water in the aggregate equal to the capacity of the canal, are equal in point of priority, and further than that they are all prior as appropriators to any one who may have appropriated by means of some other ditch and canal, even though such other ditch and canal may have been begun and completed before the completion of the first after, but that actual appropriation may have been made under such other canal before some of the appropriations under the first if the Grand Canal through which the former take, was first commenced, and work thereon prosecuted with reasonable diligence to completion.
It is argued that where, for instance, a corporation undertakes the construction of a canal of a capacity sufficient to carry water for the irrigation of say a hundred thousand acres of land, that a reasonable time shall be allowed from the initiation of the enterprise in which to complete it, and that all who take water by means of that canal may date their appropriations from the time of the commencement of the canal. From what has been said before, this doctrine cannot prevail. The right to appropriate has its origin, as we have before said, in our express statutory provisions upon that subject, and they all contemplate that he who is first in point of time, shall be first in right. It can be readily seen by assuming a case, how unjust any other rule would be. Let it be supposed that a large canal enterprise is undertaken. A canal is surveyed and its construction undertaken of sufficient capacity to irrigate a hundred thousand acres of land, and to divert from a natural water-course for that purpose the entire quantity of water flowing in that course. It can be easily supposed that the projectors of a canal might impose such terms either as to the use of water or the cost of its delivery as to deter the owners or occupants of land from taking water from that source. It is, then, obviously unjust that the public should be delayed by the want of agreement between a canal company and its proposed customers, and as equally unjust to say that the public should wait until such disagreement shall have been adjusted. The true rule, it seems to me, should be, that when a canal enterprise is undertaken, that those who being the occupants or owners of land have, relying upon their agreements then contemplated with the canal company or owner have gone about the relcamation of their lands

and the preparation of them for irrigation by that means, should be deemed to be appropriators of water dating their appropriation from the commencement of such canal provided that it shall have been completed with reasonable diligence. All others should be postponed as between themselves and appropriators by other means of diversion just in the order of the actual time of their application of the water. There can be no doubt, it seems to me, from a consideration of the evidence in this case, that the San Francisco Canal, the Tempe Canal, the Salt River Canal, the Maricopa Canal, the Utah Canal and the Mesa Canal have been enlarged so that their capacity to divert water has been from time to time increased; and I am of the opinion that the order of the priority of the consumers of those several canals, should take precedence in the order in which they actually completed their appropriation by the actual application of the water to the irrigation of the soil. The Tempe Canal did not divert in 1870, 11,000 inches of water, nor did it do so for a very considerable length of time after that date; nor did the Salt River Valley or the Maricopa Canals for a long time after the commencement of their construction, divert such an amount of water. But each and all of them have gradually increased the capacity to meet the increased demand of new irrigators. And it may be said of the Arizona Canal and the Highland Canal, that while they are now of the capacity originally designed, that nevertheless their appropriation cannot be measured by that capacity. Their right of diversion must be measured by the rights of those who have valid rights of appropriation of the water of Salt River, who have also, by agreement or otherwise, a right to divert the water through the Arizona and the Highland Canals.

Reviewing the entire doctrine of the right of appropriation of water, taking into consideration the fact that the water is public property subject to the use of the public, I cannot accede to the proposition that any canal company can by the beginning of the construction of a canal of large capacity, acquire the right to divert a quantity of water equal to the capacity of its canal, independent of the rights of actual appropriators. It must be admitted that if the Arizona Canal or the Highland Land and Water Company have no customers who have need for water and a right of appropriation of water, that neither of those companies

could divert any water at all. And it cannot, it seems to me, be said that either of those canal companies or any canal company or association, has a right to divert water as against one who has actually appropriated water by the concurrence of the acts of diversion and application to the purposes of irrigation, even though such company may not then have customers whose needs require an amount of water equal to the capacity of such canal.

It has been before said that it is my opinion that pro rating agreements are void; and yet, where a number have actually appropriated at one and the same time, their rights are equal. If they should have attempted to appropriate more water than was left for appropriation, they have perpetrated somewhere a fraud upon the government. As between them, however, nothing remains for the Court to do but to compel them to pro rate. As long as there is water enough for all, no difficulty arises.

USE OF WATER FOR MILLING.

Charles T. Hayden is the owner of a flouring mill in Tempe, the water for the propulsion of which has since 1874 been obtained from Salt River by means of the Tempe Canal, being diverted in the first instance by the Tempe Canal, and thence conducted to the mill through what is known as the Kirkland and McKinney Ditch, whence, after propelling the mill, it is discharged into the river. He claims that the defendants have by the diversion of the water above him, deprived him of the water which he had appropriated for the propulsion of his mill, and the use of which he had enjoyed before the construction of the Arizona Canal and the Cross-Cut Canal.

As before stated, Hayden instituted a suit subsequent to the commencement of this, seeking an injunction against certain of the defendants in this case to restrain them from diverting the water from his mill. A plea, in abatement, that this suit was pending was filed, and it was urged that the plea in abatement should be sustained and the Hayden's separate suit be dismissed. Practically it would make no difference whether the plea should be sustained or overruled, for Hayden's right must be determined. If I am right in the statement elsewhere made that the constituent members of the Tempe Irrigating Canal Company, of whom Hayden is one, are here not as individuals

seeking the enforcement of their several rights, but that they are here as co-owners of a canal asserting the right to divert by means of that canal a definite quantity of water from Salt River, then the pendency of this suit will not sustain a plea in abatement to Hayden's individual suit. If the contrary be true, then the plea should be sustained. But in that event Hayden's rights remain a part of the subject matter of this suit. The only question on the plea, of any importance, that could arise, is one of costs--that can be settled on a motion to tax.

Upon the evidence in the case, the court now finds against the defendants in the suit of Hayden vs. the Arizona Canal, et al, on the plea in abatement.

The evidence discloses that until 1888 the water to supply irrigators under the Salt River Valley, the Maricopa and the Grand Canals was diverted from the river at a point below the point whence the Tempe Canal makes its diversion. That since that time the Cross-Cut Canal has been constructed, so that water may be and has been diverted through the Arizona Canal at a point above the head of the Tempe Canal into the Cross-Cut and thence to the Salt River Valley, the Maricopa and the Grand Canals. Prior to the construction of the Cross-Cut Canal, the water necessary for the needs of irrigators under the Salt River Valley and the Maricopa Canals was diverted from the river at a point below that at which the water used in the propulsion of Hayden's mill was returned to the river, and their diversion by the means theretofore used could not in the nature of things interfere with the use of water for the mill.

The point whence the diversion by the Tempe Canal was made is above the point where the Grand Canal, prior to the construction of the Cross-Cut, made its diversion--the head of the Grand Canal, however, is above the point at which the water used by Hayden's mill is returned to the river.

It is urged by counsel for defendants that under our statutes the right to appropriate water for irrigation is preferred to its use for mechanical purposes, and Sec. 3203 R. S. 1887 (a re-enactment of Howell Code p. 501) is cited, wherein it is declared that "the right to irrigate the fields and arable lands shall be preferable to all others," and that therefore the right of an appropriator of water for mechanical purposes must yield to that of an irrigator

even though the appropriation by the irrigator be subsequent in point of time to that of him who uses water for mechanical purposes.

The question is a new one, it seems, as counsel have not cited any decisions involving the exact question.

In California there was a statute (1852) giving the right of action to any one who had settled upon public lands for the purpose of grazing or cultivation against trespassers, but provided that "if the lands so occupied and possessed contain mines of any of the precious metals, the possession or claim of the person occupying the same for the purposes aforesaid shall not preclude the working of such mines by any person or persons desiring to do so, as freely and unreservedly as they might or could do had no possession or claim been made for grazing or agricultural purposes." This act distinctly gave to miners the preference over agriculturalists on the public lands in the state. Disputes between miners and agriculturalists upon public lands frequently arose, and this act became the subject of judicial consideration.

Stokes vs. Barrett & Co., 5 Cal., 37
McClintock vs. Bryden, 5 Calif. 97.
Martin vs. Browner, 11 Calif. 13.
5th Cal., 308.
6th Cal., 45.
15th Cal., 100.
16th Calif., 153.
23rd Calif., 452.

The court in those cases seemed to place the preferred right of the miner as much upon the policy of the national government in reserving mineral lands from occupation and sale as upon their own local statute. The mere possessor of government public lands would individually acquire no right thereto--could not maintain an action for ejectment or for trespass, ordinarily. However, certain rights are given to such possessors in most of the western states and territories, as the right of possession and undisturbed enjoyment as against all but the United States; and it is being the early policy of California to encourage mining, deeming it paramount to every other industry, the legislature withheld these possessory rights in favor of the miner. But it was distinctly held in that state that miners could not invade

the possession of a private owner of land, whether such owner was an agriculturalist or not. It was only where neither the miner nor the agriculturalist had title to the soil that this preference was given to the miner.

The act of Congress of 1866 confirms rights to the use of water for mining, agricultural, manufacturing or other purposes that shall have vested and are recognized by the local customs, laws and decisions of the Courts. This act, as I have aforesaid, vitalized the acts of our legislature, embodied in the Howell Code, the use of water for milling was made distinctly subordinate to its use for agriculture--so that he who made an appropriation of water after 1864, and before the Desert Land Act of 1877, made it subject to the preferred use of irrigators.

But whether the use by Hayden of the water of Salt River in the manner in which it is used does interfere with the use of it for irrigation, need now I think, be decided, for I am of the opinion that the act of 1877, the Desert Land Act, gave the right to appropriate water not theretofore appropriated, for milling purposes as well as for irrigation. The grant is there distinctly given for the appropriation of water for irrigation, mining and manufacturing. I do not think any preference was intended to be implied from the order in which the uses are named--wherever a preference is intended it is expressed.

So from 1877, at least, Charles T. Hayden has been a valid appropriator of water for the propulsion of his mill.

It is urged in the argument that Mr. Hayden has lost his priority by reason of the transfers of his stock at various times.

The history of the ownership of the shares claimed by Mr. Hayden need not be followed--that he has continuously used the water is sufficient evidence that his appropriation has been continuous and uninterrupted, and that there was no actual abandonment--that there may have been an intermediate grantee of the mill and of the appurtenant water-right does not alter the matter. It does appear that the mill and the shares of stock were at one time--and during the pendency of this suit--conveyed and assigned to one J. A. Ford; but it also appears that Ford was really but a trustee, and that conveyance and transfer cannot operate to defeat Mr. Hayden's rights.

REASONABLE USE OF WATER.

Incident to the right of the inhabitants of this Territory to appropriate water for irrigation or other uses, is the restriction that such use, including the means and manner of diversion, distribution and application, shall be reasonable.

That the means of diversion shall be reasonably adapted to the purpose, to the end that the water that is made free to the public shall not be diminished beyond the quantity sufficient to supply the actual needs of the appropriator. That the methods of application of the water to the purposes for which it is appropriated shall be of a character to insure as small a consumption of water as is reasonably consistent with the accomplishment of that purpose.

No man has a right to waste a drop of water--any excess of water that he diverts and wastes by carelessness, negligence or ignorance of economic methods of cultivation or irrigation, or failure to adopt them, he unlawfully diverts.

It appears in the evidence in this case that large quantities of water is allowed to flow in the various canals and ditches to supply stock with water. This necessarily involves a great waste of water--at a small estimate I should think the evidence discloses an amount of water wasted thus sufficient, if properly applied to irrigation, to make productive 10,000 acres of land. The amount of water actually consumed by the stock is insignificant--the loss is that due to evaporation and seepage in its long passage through the various canals and the miles of subsidiary ditches. This, it seems to me, to be an unreasonable use of water. I do not mean to deny the right to the use of water for stock, for it has always been a recognized use, like that for domestic purposes. But it cannot, I think, be diverted from its original course for that purpose. It has always been the law that stock and the public could drink from a water course--but not to impede its flow or materially diminish its quantity for that purpose. Instead, I consider the law to be, of bringing the water diverted from a natural water course a long distance by means necessarily involving an enormous proportionate waste, to water stock, the stock must be taken to the natural water course to drink, or otherwise provided for.

If the water be in the ditches on a man's ranch in the course of application directly to irrigation, it might be permitted to allow stock to drink of it--but it is an unreasonable use of it to permit water to be in the ditches for that purpose alone.

Another matter for our consideration in this connection, is the right of the appropriator of water to the exclusive possession, maintenance, operation and use of the conduit, as he has prepared it, for the diversion of the water; whether or not, having constructed such a conduit, he thereby has the right to have the water flow in the river to that conduit and thence to the point where he desires to use it, or whether his right is limited to the actual delivery of water to his lands, with or without increased expense to himself, whether it be by means therefor provided by himself or by means provided by someone else. To illustrate: If those who operate the Highland Canal should divert from the river the water to which the consumers under the Tempe, the Mesa, the Utah and the San Francisco are entitled, and yet should that company deliver the water so diverted through its own canal to and upon the lands of those under the other canals named, in the quantities to which they are entitled to it, would those who constructed and since have operated and maintained the Tempe Canal, the Utah Canal, the Mesa Canal and the San Francisco Canal, have any just cause of complaint? Or have the owners of those last mentioned canals a vested right not only to the use of the water for the purpose of irrigation, but also to have it conveyed by means of their own conduits?

Following out to their sequence the propositions I have advanced as to the ownership of water and the right of appropriation, I am of the opinion that the entire right of the appropriator for irrigation is limited to the delivery of water, sufficient for the purpose, upon his land at a point whence he can use it for irrigation, and that so long as such water is so delivered he may be indifferent to any acts of diversion or obstruction of the flow of water in the natural water course, and has no just cause of complaint therefor. He might be compelled to adopt a more expensive means of delivery of the water to his lands if the means that he has already adopted are such as would result in a loss of water; for, as we have repeatedly affirmed, the water is public property; it is a common stock to which all may go, and no man has

any right by faulty construction of his conduits, or by their deficient construction, or by a desire to appropriate more than his share of the water, to diminish that common stock of the water to any greater extent than his necessities require.

This brings us to the question whether or not it is the duty of a prior appropriator to make use of such new means as may result in the more economical conveyance of water than those which he had theretofore provided for himself. Whether or not it would be his duty, if, for instance, he was an irrigator under the Tempe Canal, to construct a new conduit from the Highland Canal to his lands and thereby conduct his water at a considerable saving of the common stock of water, assuming, of course, that the Highland Canal is capable of carrying in addition to that which it is already under obligation to carry, the quantity sufficient for his use.

The variety of means adopted for the diversion of water, vary under different conditions. The person who first appropriates usually finds in the natural water course a volume of water in excess of that which he himself needs, and to divert the comparatively small proportion of the whole volume which he may need, would be inexpensive and easy of accomplishment. It is usually unnecessary for the first appropriator to construct a dam, or that he should excavate a ditch to the bottom of the water course whence he diverts his water, because of the superabundance in the natural water course, enough for his purpose may be diverted by less expensive means. As, however, others seek, subsequently, to appropriate a portion of the same stream above the point of diversion by the first, a diminution of the quantity of the water going down to the first appropriator, results in such a reduction of the volume of water that the means adopted by the first appropriator will not enable him to continue his diversion, and he must in order to get the water, either construct a dam so as to divert the water, or, excavate his ditch deeper so as to reach and divert the water from the diminished quantity flowing in the natural water course. This would, of course, entail an additional expense upon the first appropriator. To illustrate the question, let us suppose that upon a water course there is an average flow of water of four feet in depth: That the construction by the first appropriator of a ditch, the bottom of which is two feet below the surface of the

water, enables him thereby to divert all the water that he needs. Suppose that thereafter another appropriator constructs above the point of diversion by the first, a ditch which appropriates two feet in depth of the water, and diminishes it so in volume that instead of flowing by the point of diversion by the first, four feet in depth, it now flows only two feet in depth. Still the quantity there flowing is sufficient to supply the needs of the first appropriator. It will be seen that the first appropriator cannot by the means he then had, divert his amount of water, and there is necessarily entailed upon him an expense of either further excavation of the ditch or the erection of a dam in order to raise the surface of the water to a point at which it can be diverted into his ditch; and this additional expense is entailed by the act of the subsequent appropriator. It is not a question, as I have put it, of a deficiency in the supply of water, but it is merely a question of the right of a subsequent appropriator to diminish the volume of water flowing, to such an extent that it cannot be diverted by a prior appropriator by the means he then had. We think that it certainly cannot be said that the first appropriator has the right to have the water flow in such a way that by his first means of diversion he can still continue his appropriation of the water. The whole policy of the law is, that all of the waters in the streams in this Territory should be used for mining, agriculture, and milling, and that there shall be no appropriation by any one in a manner that shall prohibit subsequent appropriation by others, unless that subsequent appropriation leaves an insufficient quantity of water. The difficulty, however, on this subject, may be illustrated by the case, for instance, of the Tempe Irrigating Canal. It is in evidence in this case that a considerable quantity of the water of the river even at its lowest stages, escapes below the dam of the Tempe Canal. It is contended by appropriators above, that inasmuch as they have permitted a sufficient quantity to go down to the dam, that it is the fault of the Tempe Canal if by means of its dam or by means of a dam not calculated for the purpose, it fails to capture and divert this quantity of water. It is the duty of the Tempe Canal if there is a quantity of water left unappropriated by those who attempted to appropriate above, sufficient for their use, to erect a dam sufficient to stop and divert the water, no matter at what expense. Or

have the owners of that canal the right to have the water of Salt River flow down the river in a volume equal to that necessary for their actual use plus the amount wasted through their dam? The evidence discloses that the construction of a dam sufficient to prevent the escape of any water below it, at any point along the Salt River, involves a vast expenditure of money so great that it might practically be prohibitory.

The late Professor Pomeroy in his work on riparian rights seems to announce the doctrine that an appropriator of water has a right to the natural flow of water at the head of his ditch:

Pomeroy Rip. Rights, Sec. 60.

A careful examination of the authorities he cites in support of his proposition will disclose that they do not warrant his deduction. The statement by Mr. Pomeroy is indefinite. If he means that if an appropriator is entitled to 100 inches of water, that there must be left by subsequent appropriators 100 inches for his use, we accede to his proposition. If, however, he means that if an appropriator is entitled to 100 inches, subsequent appropriators must leave a volume of water in the water-course sufficient under the conditions existing at the time of his appropriation to enable him to take his 100 inches by his then existing means of diversion, even if that volume be 10,000 inches, we cannot accede to it. We cannot consent to a doctrine that involves in its practical application a possible waste of ninety-nine per cent of the water to which the public is entitled.

I have been unable, after diligent search, to find any adjudicated cases, the consideration of which would assist in the solution of this question. The cases cited by Prof. Pomeroy, as I have before said, do not in my opinion sustain the doctrine announced by him. The first case that he cites is the Lower King's River &c. Company vs. the King's River &c. Company, 60th California, 408. The facts in that case disclose that the injury complained of there was an attempted appropriation by one situated along the water course above the complainants, and the Court simply says: "Granting that the plaintiff does not own the corpus of the water until it shall enter its ditch, yet the right to have it flow into the ditch appertains to the ditch." This it was not necessary to

decide in the case, as the suit was an action for the diversion of water, and there was an application for a change of venue by the defendant upon the ground that the suit was one in personam and therefore transitory, and not one relating to real estate. And all necessary to decide was that the right to appropriate water was appurtenant to the land; and that is all it did decide. The next case that he cites is, Parks Canal & M. Co. vs. Hoyt, 57 California, 44. That was an action by one ditch appropriator against another for a diversion of water and the deprivation by him of its use. The suit was in the nature of assumpsit. The Court held that the right that an appropriator may have in water in the natural course above the point where he actually diverts it, is not personal property and is not subject to the particular kind of a suit there brought. It was unnecessary to decide and the Court did not decide, that the appropriator was entitled to have the water flow in its natural and accustomed course to the land of the appropriator's ditch. The next case that he cites is the case of Reynolds against Hosmer, 51 California, 205. In that case that question did not arise, and was not decided. The next case that he cites is in the 29th California, page 200. That was an action restraining defendants from erecting a dam across Bear River whereby as alleged the water of the river would be set back from a wheel of the plaintiffs' flouring mill. This was the question that was involved in that case, and is the one decided, and we think it is not analogous to the announcement in the text. The next case that he cites is in 23 California, 281. That was an action to recover damages and for an injunction to restrain defendants who were the owners of a saw mill upon a stream the waters of which the plaintiffs claimed by a prior appropriation, for mining purposes, from interfering with the regular flow of the water of the plaintiff's ditch, and from throwing saw-dust and other refuse into the water and thereby deteriorating it for the purpose for which the plaintiffs had appropriated it. This is not the question announced in the text in support of which the case is cited. The next case that the author cites is the case of Barnes against Sabron, 10th Nevada, 217. The Court in that case says: "It logically follows from the legal principles we have announced, that the plaintiff, as the first appropriator of the waters of Currant Creek, has the right

to insist that the water flowing therein shall, during the irrigating season, be subject to his reasonable use and enjoyment to the full extent of his original appropriation and beneficial use. To this extent his rights go, but no farther, for in subordination to such rights the defendants, in the order and to the extent of their original appropriation and use had the unquestionable right to appropriate the remainder of the water running in said stream."

I do not think these cases warrant the announcement in as broad terms as those used by that author, that the party who has perfected an appropriation has the right to have the water flow in its natural manner to the head of his ditch; indeed, it seems to me that the last case cited (10th Nev.) expressly limits it.

In a recent case in Colorado---

Mack vs. Jackson, 13 Pac. Rep. 542,

which was an action upon an injunction bond, the Supreme Court approved a charge given by the lower court to the jury which was as follows:

"In passing upon the question of damages * * * you may consider whether or not the plaintiff might have obtained water through another ditch readily and at slight expense, and if he could have obtained sufficient water through some other source to have prevented the injury, he is not, it seems to me, entitled to recover a greater sum than it would have reasonably required for him to have expended in procuring the water from some other source * * *."

Applying this rule, although I have no hesitancy in saying that it is a novel application of it, to the question we are considering it suggests the solution.

If a subsequent appropriator should by his diversion reprive a prior appropriator of his ability to divert the water he needs, yet should he supply or offer to supply such prior appropriator an amount of water at a place and in quantity and time commensurate with the first's right of appropriation at a cost not exceeding that attendant upon the manner of diversion theretofore employed by the first, such prior appropriator has no just cause for complaint.

So if the Arizona Canal Company and the Highland Canal Company (and I name these because they are those diverting water at points above all the irrigators in the valley) should supply or offer to supply in good faith water to irrigators on either side of the river

under canals making their diversion below those points, and at no greater cost than theretofore attending their appropriation, such irrigators should be required to accept it.

This would result directly in a saving of water--a saving under the actual conditions existing in the Salt River Valley as disclosed by the evidence, sufficient to properly irrigate several thousand acres of land. No injury is done to those former irrigators and a public good is accomplished.

I appreciate the difficulties attending a practical application of this rule, but I am confident that its application is just and equitable; that it would result beneficially to every legitimate interest in the valley.

To say that every appropriator of water in the Salt River Valley may be supplied to the full extent of his just right, at no increased cost to him, even though it by means not of his own providing and thereby affecting a great saving of water, compels the conclusion that it ought to be done.

It is possible that the application of this rule might result in the abandonment of some of the earlier canals and ditches--but that this is an evil cannot be conceded.

In the argument of this case both orally and upon brief it is urged that canal companies have a status relative to water that is distinct and that insures to it the right to divert water.

It is unnecessary again to repeat that unless the canal company has customers it cannot divert water--and that a canal company may be deprived of its customers by the construction of new and better conduits for water is not an incident peculiar to canal companies; a railroad may be paralleled and its business by cheaper facilities offered by a newer railroad diminished or destroyed. No one is hardy enough to argue that this could not and ought not to be done; that a railroad company may not be subject to competition.

It further appears that there are other considerable causes of waste in the valley due to improper methods of irrigation as well as cultivation--that the duty of water, that is, its capacity to irrigate properly a given extent of land, can by the adoption of improved methods of cultivation and irrigation in Salt River Valley be very materially increased; and it is the duty of every

irrigator to adopt and practice the best practical system of cultivation and irrigation; if we will not do so voluntarily, then some system of control of the distribution of water should be devised to enforce its adoption.

I am of the opinion that this control can only be properly exercised by some one who himself experienced in the matter of irrigation is appointed to supervise the diversion of water from the river--not to limit any one's rights but to see that each receives that justly due him and no more.

The adoption of these precautions against waste of water will, I think, demonstrate that there is enough water in the valley for all.

The parties to this suit, as is disclosed by their pleadings, proceeded upon the theory that an association of individuals and a corporation, and as well as an individual, might become to divert from a natural water course a definite quantity of water, and that this depended not upon the fact that the constituent members of an association or corporation had for the water a beneficial use and applied it to that use, but that the right to divert depended upon the amount that they had actually been accustomed to divert. The evidence in the case before the Commissioner, and at the trial before the Court, proceeded upon this theory. There is, accordingly, an omission to make that particular proof of the rights of individual appropriators, upon which, as we have before said, the right of diversion necessarily depends. In the consideration of the evidence, the Court in this case, will have to indulge in some presumptions because of the absence of that testimony. I think it is fair to presume, for the purposes of this case, that when there has been proof that any particular piece of land was reclaimed and cultivated, that it was done so by the owner or legal possessor, that that particular piece of land has since then, been in ownership or legal possession, and that the right to appropriate water for its cultivation, being appurtenant to it, has been continuous from the time of its first cultivation.

It appears in the evidence that many of the earlier cultivators of the soil in the valley were, in the language of the witnesses, mere "squatters" upon the public domain. However that may be, for the purposes of this suit they

may be deemed to have had at least a possessory interest in the land and a consequent right to appropriate water. It will be impossible as well as unfair to attempt in this proceeding to define the rights of individual appropriators, because they are not parties, except in the case of M. Wormser and Charles T. Hayden, and their rights can only be defined as against the corporations and associations, the parties hereto. The Tempe Irrigating Canal Company, while its constituent members are parties here, yet they, I conceive, are not appearing here in their individual capacity, but in their joint capacity, representing the association known as the "Tempe Irrigating Canal Company." So that the attempt will not be made to define the right of the individual appropriators under the Tempe Irrigating Canal Company, except so far, as we have before said, it may be necessary to determine the rights of the association itself to divert water. There cannot be an adjudication of their several rights.

As was said in the case of Clough vs. Wing, by the Supreme Court of this Territory, the association itself or corporation, might neglect to either prosecute or defend its rights in which are involved those of its customers or constituent members, because of a disinclination upon their part to engage in expensive litigation, or because of collusion for the accomplishment of purposes adverse to the interests of such customers. Those consumers may have certain rights as against those corporations and as among themselves which we have not here discussed. It is not the purpose in this case to lay down rules that will hereafter govern this Court in the determination of the rights of those consumers as against the corporations and associations from whom they may derive their water supply. It might be that a Court could in a direct proceeding between a consumer and a canal company, hold that the canal company was acting as a quasi public agent, and therefore amenable to the orders and judgements of the courts to secure to the consumers reasonable regulations for the distribution and cost of distribution of water to them, and as well to protect these corporations and associations in their rights, but that is not necessary here to decide.

It would be futile in this case to attempt to define the rights of individual irrigators--it would not operate as an adjudication of their rights.

Accordingly I shall find as matters of fact the quantity of land for which water was from time to time appropriated under the various canals as the only means under the pleadings and evidence in this case to measure the right of the several canal companies to divert water.

This particular litigation should end at some time, and while the Court might retain the case for the purpose of making the individual irrigators parties to it, the same result can be accomplished so readily by the voluntary action of the parties themselves that I shall not do so.

Of course under my views of the law the decree cannot determine the ultimate rights of the parties; conditions may not, and it is hard to conceive that they will, remain as they are now--and any change in the relation of the parties among themselves, or of those who while not parties are directly concerned, must render the decree to that extent at least nugatory.

In the case at bar only the right to divert water in the immediate present can be determined upon the facts disclosed by the evidence--what the future rights of the parties may be, depending as they do upon their conduct and their agreements, upon a vast number of conditions varying constantly, cannot even be surmised, much less adjudicated.

In conclusion I wish here to express my thanks to all of counsel engaged in this case for their uniform courtesy displayed throughout and for their assistance in determining the questions present.

There has been exhibited by all a desire to assist in proper determination of the disputes existing between the parties to this action and a settlement of their respective rights.

FINDING OF FACTS.

The subjoined finding of facts will be confined to a determination from the evidence of the amount of land from time to time brought under cultivation and supplied by the several canals and ditches. The quarter section (160 acres) is for convenience used as the unit of measurement. The right of a canal or ditch company to divert water from a public stream being solely dependent upon the amount actually applied to useful purpose, the finding will be confined to that determination alone.

And it should be here understood that these findings are for the determination of the rights of the several canal companies and not for the determination of the rights of individuals who may be customers of such canal companies. The court cannot undertake in this case to settle the rights of individual consumers.

From the evidence I find the several amounts of water which the parties of this suit were in each year entitled to divert from Salt River by means of their several canals and dams to be the amounts necessary under proper methods of irrigation and cultivation to irrigate the quantity of land shown in the following table:

1889		
Amt.	Inc.	
117		
123½		
139		
31		
48½		
55		
82		
350	16-3/4	
1100		

The figures in the foregoing table in the columns headed "Inc" denote the <u>time</u> and <u>extent</u> of the several appropriations.

There will be a decree declaring the rights of the several parties in their order as shown by this finding as of July 14, 1890, and an injunction against the parties severally restraining their acts in violation of prior rights.

The commissioner heretofore appointed will be continued with powers as now confered upon him until the District Court in and for Maricopa County shall order otherwise.

Counsel will prepare the form of the decretal order.

I find as a matter of law that
C. T. Hayden's appropriation
for his mill dates from 1877.

Joseph H. Kibbey
Judge
March 31, 1892

Filed April 2nd 1892 at
2:30 O'clock P.M.
C. H. Knapp
Clerk

Note: See Arizona Daily Gazette, April 3, 1892, page 5, for chart of allocations of water to the various canals and for specific years. Also comment on Kibbey decision and statement by Judge Kibbey.

(State Archives)

CANALS.

Year	Tempe.........		Salt River....		Maricopa......		Wormser.......		Grand.........		Utah..........		Mesa..........		Arizona.......		Highland......		Hayden Mill...	
	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In	Amt	In
1868			12	12½	1	1														
1869			22	9½	6	5														
1870			31½	9½	14½	8½														
1871	5	5	48	16½	24½	10	8	8												
1872	49	44	8½	33½	28½	4	8													
1873	57	12	90½	9	29	½	12	4												
1874	57		90½		31	2	12												*1100	
1875	57		90½		32	1	12												1100	
1876	57		92½	2	36	4	12												1100	
1877	57		95½	3	41	5	22	10			7	7							1100	1100
1878	67	10	102	6½	53	12	22		2	2	24	14	23	23					1100	
1879	70		104	2	65½	12½	22		15	13	24		30	7					1100	
1880	70		109		84½	19	24	2	17½	2½	24		35	5					1100	
1881	72	2	116½	7½	102	17½	24		18½	1	24		43	8					1100	
1882	90	18	117½	1	117½	15½	27	3	33½	5	26	2	50	7					1100	
1883	90		118½	1	124½	7	28	1	43½	20	38	12	59	9					1100	
1884	95	5	119½	1	128½	4	28		45½	2	38		62	3					1100	
1885	98	3	120½	1	133	4½	28		46½	1	38		73	11	43½	43½			1100	
1886	105	7	121½	1	135	2	29	1	47½	1	38		75	2	105½	61½			1100	
1887	113	8	122½	1	137	2	31	2	47½		40	2	82	7	192½	87½			1100	
1888	8	117	123½	1	139	2	31		48½	1	55	15	82		333½	140½			1100	
1889	4	117	123½		239		31		48½		55		82		350	16½			1100	

*Note the appropriation by C. T. Hayden for the propulsion of his mill is here measured in inches, the inch used as the unit being one fortieth part of a cubic foot flow of water per second.

(This chart was found on page 5 of the April 3, 1892, issue of the Arizona Daily Gazette and appears to belong to the Kibbey Decision. P.G. Weimann)

IN THE DISTRICT COURT OF THE THIRD JUDICIAL DISTRICT
OF THE TERRITORY OF ARIZONA, IN AND
FOR THE COUNTY OF MARICOPA.

PATRICK T. HURLEY, *Plaintiff,* THE UNITED STATES OF AMERICA, *Intervenor,* Against CHARLES F. ABBOTT and Four Thousand Eight Hundred Others, *Defendants.*	**ORIGINAL** **No. 4564** **DECREE**

Before CHIEF JUSTICE KENT,
Sitting as DISTRICT JUDGE.

Decision and Decree

Filed March 10, 1910
at 9:35 A.M.
Elias F. Dunleavy, Clerk
By E. S. Curtis, Deputy Clerk