CHAPTER X.

IRRIGATION LAW.

At the outset the layman, in looking up matters of law relating to the use of water in irrigation, is impressed with the apparent confusion and contradictions he finds between the theory, the practice, and the decisions of courts. There are, however, certain underlying broad principles which can be recognized, and in spite of the superficial confusion and apparent lack of agreement among judges deciding definite cases, these principles are, on the whole, being adhered to and given application in the majority of cases which arise.

Irrigation jurisprudence in our country is a relatively new subject when compared with other branches of the law, the decisions concerning which have come down through centuries of English and American judicature. It is also to a certain extent revolutionary in its tendencies, since many opinions concerning flowing waters which have been sustained by generations of lawyers must be modified to suit the conditions in the arid West. Nevertheless, the principles of equity and the methods of procedure are sufficiently elastic to take cognizance

of the altered conditions, and, following the needs of the people, gradually swing into line with them. This, of course, must be done by degrees, and some criticism is provoked by the slowness with which some judges grasp the basic principles and the imperative requirements of the arid region, resulting from its peculiar physical condition. These men are notably conservative; some of them, coming from humid sections, fail to realize at first the true situation, and occasionally their decisions seem to run counter to the underlying principles. Remedy has been sought in some states by elaborate legislation and codes of water law, but this has often served rather to complicate and delay matters than to expedite the best solution of the difficulties. A legislative act may, in the minds of its framers, fit the peculiar situation, and yet be unsuited to a still wider circle of interests, or to localities where different conditions exist. Many experiments in this line have been made, but none of them are wholly satisfactory.

A great deal is said about the endless litigation pertaining to water rights. It is true that in many communities where irrigation is still in what may be termed its formative or speculative stage, controversies arise; but in settled communities, where the artificial application of water has been carried on for many years, and has been the means of creating homes and large property interests, — as, for example, in Southern California, — these matters

have been settled to a large extent, and litigation concerning water rights cannot be considered as more frequent than that relating to land titles or to any other of the important transactions of daily life.

One of the principles which is being firmly established by court decisions is that pertaining to the original ownership of water by the people, as a common stock to be drawn from by individuals through rights which they acquire or hold by actual beneficial use, subject to public control under the police power or as a public use. All claims to water are, under this principle, limited to actual and beneficial use. The common stock of water is limited in quantity, and until all of it is put to beneficial use, persons desiring to thus employ portions of it are at liberty to do so, provided they do not interfere with the rights of others. Whenever this use is abandoned, the water returns to the common stock, to supply the needs of others. The fundamental principle is that beneficial use is not only the foundation and basis of the right, but likewise the measure and the limit thereof.

One of the most striking differences between the law governing the use of water in the arid region and that governing its use in humid regions grows out of the diametrically opposite way in which the streams, whether above or under the ground, are regarded by the lawmakers of the two sections.

The common law of the United States, brought from England, has for its object the preservation of the natural streams in their channels without diminution or disturbance. Each owner of land bordering upon a stream or through which a brook flows is protected against any change in the course or behavior of the stream, except from natural causes; and he in turn is prohibited from bringing about any modification which may affect other landowners below or above. This requirement, useful where water is not needed for irrigation, is directly contrary to the vital necessities of the arid region. It is impossible for agriculture to exist there unless water is taken from the streams. The first step toward settlement of the dry land, one taken even before houses are built, is the diversion of water from the streams. Not only is water thus carried upon adjacent valley lands, but it may be conveyed across natural divides, and the excess allowed to flow into an entirely different system of drainage.

The law of riparian rights must apparently be set aside at the very outset because of the necessities of occupation and settlement. In reality, however, it may be considered, not as being absolutely repealed, but as modified to suit the difference in climate. In the state of California, where both humid and arid conditions prevail, riparian rights have from the first been recognized, but the decisions of the courts have finally interpreted these

to mean that riparian proprietors are entitled to certain privileges only to the extent to which these have been utilized. That is to say, a landowner cannot enjoin a diversion of the water on the stream above him unless it interferes with some beneficial use by him of the water; if, however, he was using the stream to water a hundred cattle, and for nothing else, he could compel sufficient water for these cattle to be allowed to flow in the stream, but the remaining water, which may be a hundred or a thousand times the needs of his cattle, can be taken out for the irrigation of dry lands, provided no other beneficial use by lower proprietors is interfered with. In other words, riparian rights can be enforced only for the protection of the beneficial use to which the water has been put by the riparian owner. Although, as a naked legal right, the right of the riparian owner to the undiminished flow of the stream may be conceded, yet, when it comes to the remedy for its infringement, he practically has none, unless he can show, as a basis for his application for an injunction, that there is an interference with some beneficial use of the water by him. The basis of a riparian owner's right, like the right of an appropriator, is thus resolved back to the same principle — that of beneficial use.

This view of the right to take or appropriate the unused flowing water involves the consideration of the ownership of streams. There can be no question as to who owns the land through or along

which a stream flows. Individuals or corporations may unquestionably own the lands and the ditches or structures conveying water, but the actual body or corpus of the flowing water itself cannot, from its very nature, be classed as property which is capable of ownership by a person. It is held that in the arid region, where the land originally belonged to the United States, and where portions have been disposed of, the unused waters both above and under the government lands still belong to the government as part and parcel of the land.

Under federal statutes and state laws the use of the water is guaranteed to certain individuals to the extent to which they put it to beneficial use, and usually in the order in which they have thus employed the water. In theory, at least, the man who first irrigated 10 acres should continue indefinitely to have enough water for his 10 acres, while the man who next irrigated 20 acres can have sufficient water for his area only when it is apparent that the first man can also have his share; and so on, each person receiving an amount of water sufficient for the needs of his cultivated tract in the order in which this was put under irrigation (see p. 79).

This is known as the law of priorities. In theory it is extremely simple and just, but in practice it may be very complex, and its operations apparently unfair. For example, after a country has been settled for a generation or more, there does not seem to be any good reason why a

certain individual, who perhaps may be the poorest farmer of the community, should always have ample water simply because the man from whom he purchased or inherited his farm happened to take out and apply water a few days or months before his neighbors did.

A strict determination of priorities also leads to waste of water, as the earliest settlers may have been located at considerable intervals along a stream, 10 or even 50 miles apart, and on the lower, poorer lands, and so situated that water can be taken to them in small quantities only at great expense and loss of volume. As the country develops, and every drop of water is needed, the equities seem to demand that the priorities which at first were fair and just should give way to the largest and best use of the flowing streams. Ten men should not be deprived of the use of the life-giving fluid to satisfy the claims of a single individual. If water were a property in the sense of land, this consideration could not arise; but if it is something which belongs to the public, to be enjoyed by the greatest number, the course of events must bring about a gradual readjustment by a series of compromises or exchanges, such as has eventuated in the Cache la Poudre Valley of Colorado and in other parts of the arid region.

Instead of distributing water strictly according to priority of time, there has arisen in certain localities a system known as prorating water, or

dividing it proportionally to the amount available. This may be considered as the opposite extreme or alternative of the exercise of prior rights. In the simplest form this is practised by farmers living along a ditch which they have built in common and have enlarged from time to time. Each man shares in the water in proportion to the amount of labor he has put upon the construction, this being based presumably upon the area of land which he intends to irrigate. No consideration is given to the fact that one man near the head of the ditch irrigated certain tracts before other farmers, who may be at the lower end or upon an extension, commenced to irrigate theirs. In times of scarcity the first user of the water receives the same proportion of his usual share as his associates, who may be later comers, receive of their shares. Along extensive canal systems the strict application of priorities must occasionally give way in times of scarcity to a proportional division of water.

Even in localities where theoretically water is divided according to priority of appropriation, there is practised a considerable amount of prorating. It is impossible in a community to deprive a third or a quarter of the people of water, and compel their crops to be destroyed, in order to give the full appropriation to a favored few. Priorities are also, for administrative purposes, occasionally lumped, particularly in Utah, where a group of farmers who irrigated before 1870 share equally,

while those who irrigated from 1870 to 1880 are considered as holding secondary claims, and share in common, dividing what is left after the priorities are supplied, and so on, a general priority of right by groups of irrigators being recognized, and within these groups water being distributed proportionally.

There is a tendency, as the country develops, to abandon the strict observance of priorities, and ultimately, when all of the land has been brought under irrigation, to prorate the water. This is essential to the utilization of the available supply by the greatest possible number. Experience has shown that in the economical management of any large irrigation system water must be apportioned to the different laterals with respect to physical conditions and needs rather than to the strict construction of the priorities of the various irrigators. In the same way the apportionment of water from the rivers, to accomplish the most good, must ultimately be along natural lines rather than be based upon arbitrary systems resulting from the accidents of location of the first settlers.

It has been held by able advocates that the right to the use of the water becomes inseparably appurtenant to the land upon which it is used, so that if the land should be washed away by the shifting of a river in flood, the right to the use of the water would be extinguished. On the other hand, it has been held that the right to the use of

the water vests in the person who puts it to beneficial use, and becomes appurtenant, but not inseparably appurtenant, to the land irrigated. In this case, the owner of the land would have the right, if the rights of the other persons were not affected thereby, to change the use from one piece of land to another; but the right itself could only be held as appurtenant to some piece of land — in other words, there would not be a floating water right owned separate and apart from any land. The practice and the current of judicial decision throughout the arid region seem to be more in accordance with the latter view. A man irrigates a certain tract, and acquires the right to the continued use of a definite quantity of water for that purpose; a portion of this land may become swampy by seepage or injured by alkali, or he may purchase additional adjacent land or a farm lying farther down the canal, where the soil is better. Few people would dispute his right to use the water upon this contiguous or neighboring land, and he would continue his farming operations undisturbed, provided that in so doing he did not interfere with the rights of others. He might even arrange to receive his water through another ditch, and a considerable number of his neighbors might join with him. If, however, by so doing, the enjoyment of other persons in their vested rights should be injuriously affected, they would have the right to prevent such changes.

When we consider, however, not the right of the individual irrigator, but that of a canal company, the question becomes more complicated, and it may be necessary to distinguish between rights to divert water, rights to carry it, and rights to furnish water to users and charge therefor; these being distinct from the right to have the use of the water for actual irrigation upon the land. These various rights or privileges which lead up to the controlling factor, that of actually using the water, have not been clearly distinguished, but for convenience of discussion each may be considered as being separate.

These several rights of diverting, carrying, and supplying water to users are usually considered to be enjoyed by a canal company as a public agency in the nature of a carrier. There is no actual ownership of the water in the same sense that the canal and regulating works are owned; but while the water is in the canal, the company may be said to stand in the relation of a trustee, conveying the water to the persons who have the eventual right to put it to beneficial use. The company, if it owns land, may also have the right to the use of the water, but only to the extent to which the water can be put to beneficial use.

The rate charged for carrying the water is in several states fixed by the county commissioners. The manner in which the water is conveyed to the places of use, as well as the point of diversion, may

be changed, when by so doing injury to other interests are not involved.

Canal companies, as appropriators, are allowed to divert water from the streams, and are given reasonable time in which to begin the work, after posting the notice of appropriation; and irrigators who may wish to use the water are also allowed a reasonable time in which to complete the act of appropriation by applying water in the cultivation of the soil. No definite rule has been established as to what constitutes this reasonable time, though the usual legal rules concerning due diligence are generally applied. It has been held that when the water is thus used the right under the appropriation relates back to the time when the notice was posted, or to the time when water was diverted from the stream by the canal. The public records of these matters, which in some states are required to be kept by the county officials, are often extremely defective as regards the various claims and times of appropriation, the facts being usually established, if at all, by testimony taken in disputed cases.

In several of the states rights to use of water cannot be obtained until application has been made and the state engineer has ascertained in a more or less definite way whether there is any unappropriated water. The tendency of recent legislation is in the direction of strengthening this important detail. As leading up to the full knowledge as to

the amount of unappropriated water it is necessary to ascertain first how much water has already been appropriated. Adequate provision for this purpose is gradually being made by the legislatures of some of the states. In Idaho, for example, the state engineer is authorized to ascertain the facts as to amount of water flowing in the streams, the acreage irrigated, and the size and capacity of the canals. Having brought together these and other essential facts, he becomes practically the expert witness of the court, thus doing away to a large extent with the disastrous effects resulting from the testimony of interested witnesses as to the amount of water which they have used.

The Idaho system is generally regarded as an advance upon that of Wyoming, where the state engineer not only ascertains the facts but is in effect a judicial officer rendering decisions as to the amount of water to which the various claimants are entitled. The prime requisite is to have the actual facts ascertained in a clear and impartial manner, so that decision when rendered either by the ordinary courts or by a special tribunal may be in accord with the facts, and the waters may be apportioned in accordance with actual conditions rather than the extravagant claims of interested parties. Until some such method is provided in all of the states it will be impossible for full development to take place, because of the uncertainties surrounding the matter.

CHAPTER XI.

STATES AND TERRITORIES OF THE ARID REGIONS.

EACH portion of the arid region possesses certain peculiarities of topography, climate, water supply, and cultural conditions. In discussing these it is convenient to consider them by political divisions, since the latter are easily recognized by name. Each state and territory is so large that it embraces usually a number of distinct climatic conditions, but in a brief review these may be classed together. For convenience the states and territories are here taken up in alphabetical order; they are: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

The following table gives the extent of irrigation at the beginning and end of the decade 1890–1900, and shows the gradual increase of this method of tilling the soil. The location of the irrigated areas is shown in Fig. 14, p. 54, together with the irrigable lands. The possible water supply is given in the last column of the table on p. 55 in millions of acres. There is water enough for over 60,000,000 acres if fully conserved by reser-