RIPARIAN AND OTHER RIGHTS IN NON-NAVIGABLE WATERS.

The decisions on navigable lakes and rivers, which have been rendered since the last edition of Angell on Watercourses, have been reviewed by the author of the present article, in a former number of this periodical: ante, p. 147.

It is now intended to consider the cases decided during the same period which relate to unnavigable waters flowing naturally, as well as those that pertain to certain artificial streams, as canals and ditches, which may be either of a navigable or unnavigable capacity. In these cases are embraced five kinds of waters, of which four are unnavigable and flow naturally, and one artificial, and either navigable or non-navigable. The law, then, of these cases may be conveniently divided into five parts, viz.: first, Lakes; secondly, Streams; thirdly, Canals, or Artificial Streams; fourthly, Surface Water; and fifthly, Underground Water.

I. Lakes. It is well settled in the United States that a riparian owner of land on a navigable lake does not own any part of the bed. On a non-navigable lake, however, the rule is different; and the owner of such a lake, lying within the United States survey, takes the bed of the lake ad medium filum aquae ex adverso: Ridgway v. Ludlow, 58 Ind. 248.

In Mackenzie v. Bankes, Law Rep. 3 App. Cas. 1324, it appeared that by the Scotch law the proprietors of land bordering on a lake had the right of fishing, fowling and boating on the lake. M. was
a riparian proprietor on Loch F, and B. owned all the land on Loch D. These lakes were about eight miles in length, and were separated from each other by a shallow and narrow channel (not a river) over which, about forty years since, had been erected a causeway of loose stones. The proprietors held *cum lacubus* only. It was contended on the argument that the two lochs constituted but one lake, and, consequently, as M. owned land on Loch F, he had the right to fish, &c., in the entire body of the water of the two lochs. The court held, however (Lord Blackburn doubting), that the lochs were distinct lakes, the grounds of the decision being chiefly the difference of name and existence of the causeway; and that as M. owned no land on Loch D, he had not any rights over that sheet of water.

II. STREAMS. The rights that a man has over water flowing through his land may conveniently be ascertained by seeing (1), how far a man may use the waters of a stream on his ground, and then considering his other rights under the following heads: (2) Diversion of water; (3) Detention of water; (4) Pollution; (5) Right to erect and tear down obstructions in the stream; (6) Servitudes; (7) Overflow; (8) Ice.

Before considering these rights, however, we shall first define the terms "shore," and "watercourse."

A watercourse is, where water flows in a certain direction, through a regular channel, with fixed bed and banks, the flow of which is defined, but not always continuous: *Morrison v. Railroad Co.*, 67 Me. 353.

A river's shore is the land adjacent to the water-line, and not merely that thread of land touched by the water, and the word is used in that general sense in which the same term is popularly applied to the land adjacent to the water of an inland sea, or to one of our great interior lakes; per Woodward, J.: *Lacy v. Green*, 84 Penn. St. 514.

Thus in the preceding case, the court held, that where one had reserved the "right of occupying the pond and shore * * * for the purpose of securing his lumber," he had the right to pile his lumber on the land adjacent to the river.

Every man, through whose land a stream flows, is entitled to that flow without diminution or obstruction: *Shamleffer v. Mill Co.*, 18 Kans. 24; and to such use of the water as shall not injure any proprietor, above or below, on the stream: *Williamson v. Canal Co.*,
This right is property: Myer v. Whitaker, 55 How. Pr. Rep. 376; and passes by conveyance with the land: Shamleffer v. Mill Co., supra.

Since water is property, it may not only be used and consumed, in reasonable quantities, but it may also be conveyed: Myer v. Whitaker, supra. It is to be noted, however, that the conveyance of water falling over a dam is construed strictly, with regard to the amount of water: as where the terms of the conveyance were, that no dam "shall be built so high as to overflow the springs," &c., it was held that, though the water was to be used for manufacturing purposes, the grantee could not overflow the springs, although without such overflow the conveyance would be of no use: Salado College v. Davis, 47 Texas 131: but the construction is liberal with regard to the kind of use contemplated.

Thus in Hathaway v. Mitchell, 34 Mich. 164, there was a conveyance of a right to maintain a dam at a specific height, with no restrictions on the kind of use, and it was held that the use ought not to be confined to that then presently contemplated, and that it made no difference what kind of mill the water was used for.

So in Atlanta Mills v. Mason, 120 Mass. 244, a deed reserved for a mill estate, all the water that could be drawn through the waste-gate, when the water ran over a rolling dam, and it was held that the reservation was general, and that it was of no consequence for what purpose the water was used, or whether it was used at all.

And so in Merrill v. Calkins, 74 N. Y. 1, the grant of such a quantity of water as should be necessary for a tannery, was considered not to be a limitation of the use, but merely a criterion of the quantity; and finally in Doan v. Metcalf, 46 Iowa 120, the "right to use the water to the amount of the wheel, now in use," was considered to mean one wheel, or if the aggregate amount were the same, any number of wheels.

Water being actual property, it follows also that no one can be deprived of the rightful enjoyment of it without compensation. But he must prove an actual injury to himself, in præsenti, or in reversion.

Thus in Dwight v. City of Boston, 122 Mass. 583, the court held that the taking of the water (by statute) "of all the water" of a river, "for the purpose of furnishing a supply of pure water to the city" above a dam, was not such taking as would allow an
action for damages to lie at the instance of any one whose land lay above the dam, in the absence of actual injury. But in *Lund v. New Bedford*, 121 Mass. 286, where a city was withdrawing large quantities of water, in the possession of tenants, under a claim of right, it was held that the owner could maintain an action for the injury to his reversion without alleging present actual damage.

2. A man has further the right to divert the water of a stream without asking the permission of the proprietors above or below, provided he returns the water to its natural channel before leaving his land, and does not obstruct its course (*Ewing v. Colquhoun*, Law Rep. 2 App. Cas. 839), or at least does not obstruct its course materially: *Pettibone v. Smith*, 37 Mich. 579. He cannot, however, divert the stream to another's injury (*Porter v. Durham*, 74 N. C. 769); but he may force the water back in an upper owner's race-way, provided he does not obstruct such owner's wheel: *Brown v. Dean*, 123 Mass. 254.

It is of no consequence how the waters of a watercourse may have originated, for if they come within the definition above given, an action for diversion will lie. Thus in *Eulrich v. Richter*, 41 Wis. 318, it was held that an action lay for the diversion of water, which had not originated in a spring, but had flowed long enough in a certain direction to have acquired a defined bed and banks, though it was at times dry; and so in *Williamson v. Canal Co.*, *supra*, it was held that the owner of a mill, who drew his water supply from a stream originating in a swamp, might maintain an action against a company for draining the swamp and stopping his supply of water. But, *quere*, in this case, whether the character of the place where the stream originated was not notice, that some day the swamp might be drained, and whether the mill-owner did not take only till that day.

Lord Penzance thought that where one diverts for his own convenience the course of a stream, and constructs an artificial water-course, he is bound to "construct it in such a manner that it will be capable of conveying off the water that might possibly flow into it from all such floods and rain falls as might happen in the locality: *Fletcher v. Smith*, Law Rep. 2 App. Cas. 781.

How far an action for diversion will lie at the hands of the parties who acquire the land after the diversion has taken place, may be seen from the following cases:

In *Shamleffer v. Mill Co.*, *supra*, defendants dug a channel from
a river over the land of an upper riparian proprietor, and returned it again into the stream below the land of a lower owner, thus cutting off somewhat the supply of the intermediate owner, who was a minor. A. afterwards purchased the intermediate tract, and brought an action for diversion. Held, defendants had no right to divert the water in the first place. Held further, that the fact of the defendants doing this openly, and expending large sums of money upon the work, would not estop the plaintiff, because defendants knew the grantor was a minor, and his guardian could not dispose of his land without an order of court, and consequently A. had a right of action.

In Chapman v. Copeland, 55 Miss. 476, B.'s grantee brought an action for the diversion of a stream by a ditch, which A. had dug on B.'s land. Held, B.'s grantee having suffered damage after purchase, was entitled to recover, whether A. had done anything to the ditch after purchase or not.

In Atlanta Mills v. Mason, supra, the owner of an upper and lower mill privilege appropriated to the latter all the water that could be conducted thither by the tail-race of the former. The purchasers of the upper estate opened a trench through the lower estate, the owner objecting, and diverted the water from the tail-race. Held, the grantee of the purchasers of the lower estate could object to this diversion, whether they knew of the existence of the trench when they bought the estate or not.

3. The owner of a dam on a non-navigable stream has the right to detain so much water as is necessary to propel his machinery, though he inconvenience a lower owner, provided he does not thereby deprive him of his just quantity of water. Thus in Bullard v. Manuf. Co., 20 N. Y. Sup. Ct. 43, the water falling over a dam was only sufficient to propel the machinery of the upper owner at full seasons, who thereupon closed the gates of the dam and suffered the water to accumulate during the night, and stopped thereby the works of a lower owner, who ran his works day and night, and it was held, that the lower owner, not having shown that he was deprived of his rightful quota of water, an action by him would not lie for detention.

4. No one has the right to pollute the waters of a stream in the absence of grant or prescription: Dwight v. City of Boston, 122 Mass. 588.

S. purchased land in the coal regions and built thereon a hand-
some residence. One of the inducements to his building was a pure spring of water running through his land. Two miles above his property, a mine was opened and so operated as to pollute the waters of the spring by the mineral flow from the mine: Held, S. had a right of action; Sanderson v. Railroad Co., 86 Penn. St. 401.

5. A man may build on the bed of an unnavigable river on his own land, nor will he be prevented from so doing unless at the instance of some one whose property is injured thereby: 'per Lord Blackburn, Ewing v. Colquhoun, supra. Thus the mere erection of a dam, where there is no overflow, is not a ground of action: Schoff v. Imp. Co., 57 N. H. 113; nor will the mere speculation, that a man's land when covered by water may some day be used as a water-way, be sufficient to prevent him from building upon it: per Lord Blackburn, Ewing v. Colquhoun, supra. But no one else besides the riparian owner can obstruct the stream. Thus in Bottoms v. Brewer, 54 Alabama 288, it was held that a statute conferring the right to divert water, or obstruct a stream by a dam, was authorizing the taking away of private property as much as if lands were taken away, and was in consequence not constitutional.

One, however, who illegally obstructs a stream leaves himself open to an action. Thus the obstruction of a race-way is a wrong in se, and the obstructor is not entitled to notice before suit is brought: Lawson v. Price, 45 Md. 123; and so in Bloomer v. Morss, 68 N. Y. 623, where the defendant filled up a race-way, which was part of the natural channel of the stream, which plaintiff had deepened, the court held that defendant's act was illegal; that if the channel was wrongfully deepened, defendant had always a remedy, but that now plaintiff had an action against him for filling up the channel.

Where, however, a man causes an illegal obstruction, he has still a right of action against another for a similar wrong. This principle was laid down practically in the preceding case. Also in Clarke v. French, 122 Mass. 419, the court held that a mill-owner partially obstructing the stream was not precluded from recovering from another mill-owner who also obstructs the stream.

So in Brown v. Dean, supra, the court asserted the same principle and said the principle of contributory negligence did not apply.
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One may also tear down any natural obstruction in a stream running through his land. As where a company had dug a channel into a river, and diverted the water for the purposes of their mill, and there was a natural obstruction in the stream below the channel-head, on the land of another, which backed the water of the river and flooded the channel, the court held that, in the absence of any servitude being shown, the owner of the land could tear down the obstruction in the stream: Shamleffer v. Mill Co., supra.

6. Where a servitude is acquired on land it may be exercised up to its full capacity or not, at the pleasure of the owner, and he cannot be deprived of it, but by his own act, or omission to act.

Thus in Maguire v. Baker, 57 Ga. 109, land was sold in separate tracts, upon one of which was a mill and dam, in a leaky and dilapidated state, and the court held, that the servitude still continued up to the capacity of the dam, when new, and the owner might either repair the old dam or erect a new one, and run it up to its full capacity.

A servitude may be acquired in different ways, and among others by prescription or adverse use, and by estoppel. Talcott, J., said: Where it is gained by prescription, the right must be commensurate with the extent of the previous enjoyment, for the manner of using the water of a stream cannot be materially varied to the injury of others on the stream, unless the manner of the changed use has been the same continually for a long period of years: Prentice v. Geiger, 16 N. Y. Sup. Ct. 350.

The right to overflow land like easements in general may be acquired by an uninterrupted and adverse enjoyment for twenty years; i. e. the statutory period: Vail v. Mix, 74 Ill. 127.

Thus where one had backed, by a dam, the water of a stream, flowing through the land of both, on to his neighbor's land for fifty years, it was held that he had a vested right to do so, and to rebuild the dam: Ogle v. Dill, 55 Ind. 130.

In Matteson v. Wilbur, 11 R. I. 545, complainant took a mill estate "together with a privilege to build and repair a trench * * * with six-tenths of the water appertaining to said premises," i. e., of the premises of complainant and respondent. Complainant's land was bounded by a stream, and on the stream, wholly on defendant's land, was a dam. The trench was built and kept in repair by both. Complainant drew a water supply from the dam-pond, for forty
years, and on the defendant's attempting to tear down the dam and build one higher up the stream, the effect of which would be to stop complainant's mill, complainant filed a bill for an injunction. Defendant contended that the dam was wholly within his premises, and that he had the right to use it or tear it down; that six-tenths of water meant merely so much water from the river. The court, held, however, that as complainant had used the water of the dam for forty years, and as he had openly done so, and had paid for the trench, &c., with the defendant, he had acquired a servitude. Further, that six-tenths of the water, meant so much water-power of the dam, as otherwise the deed would be useless, for complainant had always, as a riparian owner, the right to use the river; and, this was further evident from the fact, that unless this power were given, the works of the complainant must stand still.

In Barber v. Nye, 65 N. Y. 211, A. conveyed land to B., with the privilege, if it should be necessary for his mill, to erect a dam on other land of A. to enable the grantee to get the "best possible use of the water." A dam was built on A.'s land, which becoming dilapidated, was pulled down and a new one erected on B.'s land, which raised the water no higher than before. Held, no action lay against B., for though the height of the old dam might determine the flowage, its destruction did not terminate that right, and the court said, it was proper to exhaust all means to raise water on B.'s land before going on to land of A.

Where one stands quietly by and acquiesces in the laying out of expenditures and erection of a dam, he will not be allowed to enjoin the rebuilding of the dam: Vail v. Mix, supra. But where one possesses a mill-dam for seven years under color of right without its having been overflowed, owing to the defective condition of the dam, he will not have his land relieved of such servitude in the absence of the owner's intention to abandon his right to use the dam to its full extent: Maguire v. Baker, supra.

7. A spring boiling up from the bottom of a creek is overflowed though it issue with sufficient force to rise above the level of the creek, and so when the spring is covered by the backed waters of a dam: Salado College v. Davis, supra.

In Marcy v. Fries, 18 Kans. 353, it was held that where an action was brought for the overflow of a dam, the general benefits resulting to the vicinity from the presence of the mill, could not be used as a set-off to reduce the damages caused by the overflow,
where the mill was of no particular advantage to the proprietor, whose land was overflowed.

8. To the owner of the bed of a stream belongs also the water, as ice. This is, however, an absolute property, and may be disposed of as the timber on one's land: *Myer v. Whitaker, supra.*

In the preceding case, A. owned all the land under a pond except a small portion belonging to B. A. acquired from B. the right to overflow this portion, and conveyed to C. its ice, which should be found on this pond. A freshet occurred, which loosened the ice, and would have swept it away but for C.'s effort in mooring it. D. entered with B.'s permission over land belonging to B., and cut the ice. *Held,* the title to the ice was in the grantee of A. *Held,* further, that as C.'s efforts alone saved the ice, he had sufficient title from that alone to recover from D.

In *Hickey v. Hazard,* 3 Mo. App. 480, it was held that, where one had marked off and staked ice, unappropriated by any one, on a navigable river, and had expended money to preserve it, he had a sufficient title to support an action for trespass.

III. CANALS or ARTIFICIAL STREAMS. Where one constructs an artificial watercourse, it is incumbent on him to make it sufficiently strong to carry off the freshets to which the vicinity is subject.

Thus in *Burbank v. Ditch Co.,* 13 Nevada 431, defendants constructed a canal, which thus received the waters of a stream, that otherwise would have emptied into the river. The waters of the stream were raised by a freshet, and there being no waste-gate to the canal, its walls were burst, and the country flooded. *Held,* it was negligence in defendants not to have a waste-gate, when the canal was not sufficiently strong to carry off the waters raised by an ordinary freshet. The court, however, did not say what the law would have been, if the freshet had been of an extraordinary character. *See Fletcher v. Smith, supra.*

Where one stores water on his own land, and uses reasonable care, he will not be held liable for an escape of water caused by the act of God, *vis major,* &c., though if it had been anticipated it might have been prevented: *Nichols v. Marstand,* 2 Law Rep. Ex. Div. 1.

*Reynolds v. Hosmer,* 51 Cal. 205, presents such an interesting case on canals and liens that it has been thought worth insertion. The history of the case is as follows:

By a statute of California it is provided that all contractors, &c., *Vol. XXVIII.—44*
“furnishing materials for * * * the construction of any * * * flume or aqueduct shall have a lien upon the structure, * * * to the extent of the labor done or materials furnished, or both.” A canal was built, and several years afterwards extended several miles by a different contractor. The Supreme Court of the United States, in *Canal Co. v. Gordon*, 6 Wall. 561, held that the lien did not extend to the whole structure, but held the sections to be two structures, and that the lien extended only to the (lower) section built by the contractor. *Field, Grier and Miller*, JJ., dissented. This lien was sold, and A. obtained possession of the lower section of the canal. The owner of the upper section cut off all the supply of water from the lower section. The court in California (*Hosmer v. Reynolds*, supra), held that as the Supreme Court had decided as they had, that court was bound to follow them and say that no action lay for this diversion of the water, for the two sections being held to be two structures, and there being no servitude upon the upper by the lower, the upper owner could do what he pleased with the water in his section. In this case *Wallace*, C. J., said he simply followed the United States Court, and his associates gave no opinion. The fact of the above-named justices dissenting, and the California court and the Circuit Court of the United States entertaining a different opinion from that expressed in the decision of the Supreme Court of the United States, would raise great doubt as to the soundness of the decision, did not the facts of the case itself show pretty conclusively its unsoundness. Perhaps also the decision of the lower court might be questioned upon other grounds, but we have too small space to note the case further.

One who constructs a ditch or small canal, under the Act of Congress of 26th July 1866, across the public lands of the United States, will not be held responsible therefor by any subsequent purchaser of the lands: *Shoemaker v. Hatch*, 18 Nev. 261.

The long enjoyment of one ditch raises no presumption of a grant to use another ditch differing appreciably in locality or dimensions: *Porter v. Durham*, supra.

IV. The law relating to surface water is not always uniform in the United States. In some of the states it has been held that water coming naturally from a higher estate must be received on the lower, while in others the courts have said that the owner of the lower estate cannot be obliged to receive it on his land, but may back it on to the land of the upper owner.
In *Morrison v. Railroad Co.*, supra, a railway company built over B.'s land, obstructed by its bed a flow of surface water and backed it, causing thereby damage to B.'s house. *Held*, B. could not recover for such obstruction.

In *Murphy v. Kelley*, 68 Maine 521, plaintiff's drain carried the water on to defendant's land, on which plaintiff had no easement. *Held*, plaintiff had no action against defendant for stopping the drain on his own land and backing the water on plaintiff's land.

In *Limerick's Appeal*, 80 Penn. St. 427, two of three drains, which carried the water off a turnpike, were stopped up, and an excessive flow in consequence took place over the land, adjacent to the road: *Held*, the owner of the land overflowed had a right to dam the water off his land, no matter how the water got on the road.

But in *Porter v. Durham*, supra, the court said that an owner of land is obliged to receive surface water on his land; but the upper owner can not artificially increase the natural quantity of the water, nor discharge it on a lower owner in a manner different from its natural discharge.

In *Williamson v. Canal Co.*, supra, it was held that where a canal company drains a swamp, from which issues a stream of water, that supplies a mill, it must show that the company's charter was obtained prior to the building of the mill.

V. A man has the right to use subterranean water percolating through the soil, as he pleases, in his own land, even though he disturbs another's enjoyment of the same on his land.

Thus in *Wilson v. Waddell*, Law Rep. 2 App. Cas. 95, it was held that where mineral workings have caused a subsidence of the surface, and a consequent flow of rainfall into adjacent lower coal-fields, the injuries, being from gravitation and percolation, are not a ground of action.

So in *Phelps v. Nowlen*, 72 N. Y. 39, it was held, one may lower the sides of a well on his own premises, though merely to injure another's supply of water.

One can, however, recover for injury occasioned by *backed water* percolating through the soil and rendering his ground swampy: *Marsh v. Trullinger*, 6 Oregon 356.

In *Johnstown Manf. Co. v. Veghte*, 69 N. Y. 16, land was conveyed to plaintiffs' with right to use springs on said land, and in case such supply was insufficient to take water from springs on