

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

A REVIEW
OF THE
LAWS FORBIDDING
POLLUTION OF INLAND WATERS
IN THE UNITED STATES

SECOND EDITION

By EDWIN B. GOODELL



PROPERTY OF U. S. GEOLOGICAL SURVEY.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1905



CONTENTS.

	Page.
Letter of transmittal	5
Water pollution under the common law	7
Principles and decisions	7
Classification	7
A. Rights of riparian owners to pure water as against one another	8
Case in exception	10
Opinion of Vice-Chancellor Pitney, of New Jersey	11
Missouri v. Illinois et al	20
Riparian rights in arid and mining States	21
B. Rights of the public (as distinguished from individual owners) to have inland waters kept free from pollution	23
C. Conditions under which, and extent to which, public municipalities may use inland waters in disposing of sewage from public sewers	24
Citations of cases	25
Excerpts from important decisions	26
Statutory restrictions of water pollution	32
Classification	32
Class I: States with partial restrictions	33
Alabama	33
Arkansas	34
Delaware	35
Florida	35
Georgia	35
Idaho	35
Iowa	36
Kansas	36
Kentucky	36
Louisiana	36
Michigan	36
Mississippi	38
Nebraska	38
North Dakota	39
Oklahoma	39
Rhode Island	40
Wisconsin	43
Class II: States with general restrictions	45
California	46
Colorado	48
Illinois	48
Indiana	49

	Page.
Statutory restrictions of water pollution—Continued.	
Class II: States with general restrictions—Continued.	
Maine	51
Maryland	52
Missouri	53
Nevada	54
New Mexico	56
North Carolina	58
Ohio	60
Oregon	62
South Dakota	63
Tennessee	64
Texas	64
Utah	65
Virginia	65
Washington	67
West Virginia	69
Wyoming	70
Class III: States with severe restrictions	73
Connecticut	74
Massachusetts	77
Minnesota	81
New Hampshire	82
New Jersey	86
New York	121
Pennsylvania	132
Vermont	137
General rules	141
Rights and duties of riparian owners	141
Rights and duties of municipal corporations	142
Rights and duties of the public	143
Public rights and duties enforced by statute	143
Progress of legislation	143
Index	145

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
HYDROGRAPHIC BRANCH,
Washington, D. C., August 17, 1905.

SIR: I transmit herewith a manuscript entitled "A Review of the Laws Forbidding Pollution of Inland Waters of the United States," prepared by Edwin B. Goodell, and request that it be published as a water-supply and irrigation paper. This paper is a second edition of Water-Supply Paper No. 103, published last year. The subject-matter has been brought to date by the incorporation of the statutes passed since the first edition was prepared, and the section on pollution under the common law has been amplified to include the arid States and Territories.

One of the important features involved in the determination of the water supplies of the United States and the preparation of reports upon the best methods of utilizing water resources is the character of those supplies. In the more populous sections of the country the quality of water is dependent to a large degree upon the amount and character of the pollution which is allowed to discharge into the streams. Therefore it has been found desirable to study different State laws regulating and controlling this matter and to determine the scope of the work to a large degree according to them.

Mr. Goodell has presented the subject of antipollution laws in a manner which will be of assistance to public officials, water companies, manufacturers, farmers, and legislators, rather than to members of the bench and bar. The broad legal principles under which antipollution statutes become operative are explained, and important court decisions are quoted to show authority for various deductions. The statutes enacted in the different States are classified according to the general scope, and an opportunity is thereby afforded to compare their effectiveness and desirability. In short, the paper provides specific information necessary to a popular knowledge of the conditions in each State with respect to one feature of the conservation of natural water resources. Its distribution should be of material assistance in bringing about a general apprehension of correct principles upon the subject.

Very respectfully,

F. H. NEWELL,
Chief Engineer.

HON. CHARLES D. WALCOTT,
Director United States Geological Survey.

A REVIEW OF THE LAWS FORBIDDING POLLUTION OF INLAND WATERS IN THE UNITED STATES.

By EDWIN B. GOODELL.

This subject naturally divides into two parts: (1) A summary of the common law upon the subject of water pollution—i. e., the law as pronounced and determined by the courts independently of legislative action, and (2) a summary or abstract of the statutes enacted by the various legislatures for the correction of the evil.

WATER POLLUTION UNDER THE COMMON LAW.

The full treatment of this branch of the subject involves the examination of the very numerous decisions which have been rendered by the courts in England and the United States in the determination of litigation arising from alleged violations of the right to have inland waters preserved in their natural state. It necessarily follows that a full treatment of this branch of the subject would be beyond the scope of this paper. It is not the purpose of the present publication to furnish a complete work upon water pollution for the use of members of the bench and bar, but rather to put into the hands of public officials and others who may be interested in the subject a guide for their action and references to the sources from which a more exhaustive knowledge of the subject may be obtained if required.

No attempt, accordingly, will be here made to present a detailed statement of the entire law against water pollution as it exists independently of statutes, but this branch of the subject will be confined to a statement of the general principles which are to be deduced from the decisions, with references to some of the leading cases.

PRINCIPLES AND DECISIONS.

CLASSIFICATION.

These principles and decisions have been classified and are presented in the following groups:

A. The rights of riparian owners to pure water as against one another.

B. The rights of the public (as distinguished from individual owners) to have inland waters kept free from pollution by riparian owners or others.

C. The conditions under which, and the extent to which, public municipalities may use inland waters in disposing of sewage matter from public sewers.

A. RIGHTS OF RIPARIAN OWNERS TO PURE WATER AS AGAINST ONE ANOTHER.

In contemplation of law the water flowing over the land is part of the realty and belongs to the owner of the soil. But the latter's ownership thereof is a qualified one. He may use it in certain ways as it passes, may take from it for his own use to a certain extent, and may thus, incidentally, somewhat diminish its volume and slightly alter its character. But its nature is to pass on to the owners of the adjoining soil, and the next owner has precisely the same rights therein as every other owner. It follows, therefore, that as no riparian owner of a stream may appropriate all the water which comes to him, neither may he so corrupt or pollute it as to injure the other owners by diminishing the value of their property in the natural stream. This prohibition is independent of any statute; it is a part of the law of the land, except in certain of the arid and mining States of the West; its application in these is discussed on pages 21-23.

The conflict of rights between the several owners has given rise to litigation in many hundreds of instances, and it is impossible to give a rule, limiting the owner's right to use the water of a stream as it passes, more exact than this: Every owner may make such use of the water for farming and domestic purposes as is reasonable, and in the States in which the doctrine of prior appropriation obtains may use the water which he has acquired by appropriation, and the lower owners must accept the diminution and perturbation of the water which necessarily follows from this reasonable use.

If the use for farming or domestic purposes is challenged by another owner, the question of its reasonableness, in that case, is to be determined by court or jury as a question of fact.

If the water is used for any other than farming or domestic purposes, it must be such a use as will not change the character of the water from its natural state or make it less useful to other owners.

If the riparian owner cast sewage, filth, or waste material therein, he does it at his peril.

Independent of statutory provisions there is a remedy for these wrongs in the following ways:

By private suit against the wrongdoer for damages.

By injunction when the wrong is a continuing one.

By indictment when the injury affects the rights of the public.

Where the acts causing the pollution are done in one jurisdiction and the injuries suffered are in another, the injured party has his remedy in a civil action to the same extent as if the injurious act and the resulting injury were in the same jurisdiction.

These general principles will be found to be fully sustained by the cases. The following are given, not as an exhaustive list, but to enable the reader to find authorities if his needs require:

Alabama :

Drake *v.* Iron Co., 14 So. Rep., 749; 102 Ala., 501; 24 L. R. A., 64; 48 Am. St. Rep., 77.

Tenn. Coal Co. *v.* Hamilton, 14 So. Rep., 167.

Lewis *v.* Stein, 16 Ala., 214.

Arkansas :

State *v.* Chapin, 17 Ark., 561.

California :

Potter *v.* Froment et al., 47 Cal., 165.

People *v.* Elk River Mill and Lumber Co., 107 Cal., 214; S. C. 40 Pac. Rep., 486.

Mining Co. *v.* Mining Co., 48 Pac. Rep., 828.

People *v.* Gold Run Ditch Co., 66 Cal., 138; 56 Am. Rep., 80; 4 Pac. Rep., 1152.^a

Colorado :

City of Durango *v.* Chapman, 60 Pac. Rep., 635.

Connecticut :

Morgan *v.* Danbury, 67 Conn., 484.

Nolan *v.* New Britain, 69 Conn., 668.

Georgia :

Satterfield *v.* Rowan, 83 Ga., 187; S. C. 9 S. E. Rep., 677.

Indiana :

Muncie Pulp Co. *v.* Martin, 55 N. E. Rep., 796.

State *v.* Herring (Ind., 1897), 48 N. E. Rep., 598.

State *v.* Wabash Paper Co., 48 N. E. Rep., 653.

Weston Paper Co. *v.* Pope, 155 Ind., 394.

Indianapolis Water Co. *v.* Am. Straw Board Co., 57 Fed. Rep., 1000.

Iowa :

Ferguson *v.* Mfg. Co., 77 Ia., 576; S. C. 42 N. W. Rep., 448.

Kinnaird *v.* Oil Co. (Ky.), 12 S. W. Rep., 937.

Maine :

Gerrish *v.* Brown, 51 Me., 256, 81 Am. Dec., 569.

Maryland :

Baltimore *v.* Warren Mfg. Co., 59 Md., 96.

Price *v.* Lawson, 74 Md., 499.

Massachusetts :

Ball *v.* Nye, 99 Mass., 582.

Martin *v.* Gleason, 139 Mass., 183.

Merrifield *v.* Lombard, 13 Allen, 16.

Woodward *v.* Worcester, 121 Mass., 245.

Dwight Printing Co. *v.* Boston, 122 Mass., 583.

McGenness *v.* Adriatic Mills, 116 Mass., 177.

^a This case was one brought in behalf of the people to restrain a public nuisance, caused by discharging the refuse from mining operations into an unnavigable stream. The injunction was granted and it was held that the right to pollute the stream in this manner could not be gained by prescription.

Minnesota :

Roller Mills *v.* Wright, 30 Minn., 254.

Mississippi :

Mississippi Mills *v.* Smith, 69 Miss., 299 ; S. C. 11 So. Rep., 26.

Missouri :

Smith *v.* Conathy, 11 Mo., 517.

New Hampshire :

Hayes *v.* Waldron, 44 N. H., 580.

New Jersey :

Holsman *v.* Boiling Springs Co., 1 McCart., 335.

Acquackanonk Water Co. *v.* Watson, 2 Stew. Eq., 366.

Beach *v.* Sterling Iron and Zinc Co., 9 Dick., 65.

Same case affirmed on appeal, 10 Dick., 824.

(See the opinion of Pitney, V. C., in the last-cited case, given in full on pp. 11-20.)

O'Riley *v.* McChesney, 3 Lans., 278.

Covert *v.* Cranford, 141 N. Y., 521.

Townsend *v.* Bell, 24 N. Y. S. (70 Hun, 557), 193.

Smith *v.* Cranford, 32 N. Y. S., 375.

Ohio :

The Columbus, etc., Co. *v.* Tucker, 48 Ohio St., 41 ; S. C. 26 N. E. Rep., 630.

Thayer *v.* Brooks, 17 Ohio, 489.

Pennsylvania :

Elder *v.* Lykens Valley Coal Co., 157 Pa. St., 490.

Hindson *v.* Markle, 171 Pa. St., 138.

Stevenson *v.* Ebervale Coal Co., 201 Pa. St., 112.

Rhode Island :

Stillman *v.* Mfg. Co., 3 W. & M. (R. I.), 546.

Richmond Mfg. Co. *v.* Atlantic De Laine Co., 10 R. I., 106.

South Carolina :

Threatt *v.* Mining Co. (S. C., 1897), 26 S. E. Rep., 970.

Vermont :

Snow *v.* Parsons, 28 Vt., 459.

Canfield *v.* Andrew, 54 Vt., 1.

Wisconsin :

Middlestadt *v.* Starch Co. (Wis.), 66 N. W. Rep., 713.

Hazeltine *v.* Case, 46 Wis., 391.

Greene *v.* Nunnemacher, 36 Wis., 50.

Wyoming :

Howell *v.* Johnson, 89 Fed. Rep., 556.^a

English :

Mason *v.* Hill, 5 B. & Ad., 1.

Embry *v.* Owen, 6 Exch., 353.

Wood *v.* Waud, 3 Exch., 748.

Bealey *v.* Shaw, 6 East, 208.

CASE IN EXCEPTION.

A single case in Pennsylvania seems to create an exception to the operation of the principles above stated, viz, Sanderson *v.* Pennsylvania Coal Company, 113 Pa. St., 126.

^a In this case the injury arose from an act done in Montana, but the injurious result occurred in the State of Wyoming.

This was a case brought by a riparian owner who had established a home on the banks of a stream, after ascertaining, by a careful investigation, that its waters were uncontaminated by any influx of deleterious matter, and who used the waters of the stream for domestic purposes. Subsequently a coal mine was opened higher up the stream, and the mining company, in the course of its mining operations, pumped the water from the mine to the surface, where it ran into this stream and rendered the water unfit for domestic use. The case was bitterly contested, and came before the court several times. (See 86 Pa. St., 401; 94 Pa. St., 303, and 102 Pa. St., 370.)

In the final decision the court refused damages to the riparian owner. The reasoning of the court indicates that this result was due to its unwillingness to impose upon the immense coal-mining interests of the State the burden of paying for the damage to property in the water of streams caused by their operations; but the reason given for the decision, in the court's attempt to harmonize it with the principles firmly established by precedent in Pennsylvania, was that the water which the defendant conducted into the stream was contaminated only by the coal, which was a natural product, and hence was said to be conducted into the stream in its "natural state." This reasoning is specious, since the presence of coal in the brook was due wholly to the operations of the defendant company, the stream in its natural state showing no trace of coal, and the doctrine thus established for Pennsylvania has not found favor in any other jurisdiction.

But in subsequent decisions the courts of Pennsylvania have been careful not to extend the force of *Sanderson v. Pennsylvania Coal Company* beyond the single act of turning the natural drainage from a mine into a stream. (See *Elder v. Lykens Valley Coal Co.*, 157 Pa. St., 490; *Hindson v. Markle*, 171 Pa. St., 138, and *Stevenson v. Ebervale Coal Co.*, 201 Pa. St., 112.)

OPINION OF VICE-CHANCELLOR PITNEY, OF NEW JERSEY.

The whole subject was thoroughly treated in *Beach v. Sterling Iron and Zinc Company* (9 Dick. (N. J.), 65).

This was an action for an injunction, brought by the manufacturers of a white tissue paper against a mining company, the water from whose mines was pumped into the stream above the paper works and befouled the water, making it unfit for the purposes of the complainant. The opinion gives a careful and most lucid and interesting review of the course of decisions sustaining and enforcing the rights of riparian owners upon streams above tide water to have the water in the stream maintained in its natural condition. The decision of the court in this case was affirmed by the court of errors and appeals

(10 Dick., 824) upon the opinion of the court below, which is given here in full:

The material facts of the case are undisputed. The only dispute is as to the degree of discoloration caused by the defendant's operations and the length of time over which such discoloration extended.

The facts clearly established are as follows:

The Walkkill River rises in the southern part of Sussex County and flows upon a course nearly north, passing through the villages of Franklin and Hamburg. At the latter place is situated an artificial pond, called the Furnace Pond, caused by an old dam, upon which, for several years, has been a paper mill driven by the waters of the river from that pond. The complainant, Beach, purchased this water power and lands connected with it in the summer of 1891, for the purpose of erecting a plant for the manufacture of what is known as white tissue paper. Associated with him were two gentlemen by the name of Sparks, who had previously been engaged in the business of waxing white tissue paper according to a process which they controlled, and the project was to both manufacture and wax, for market, white tissue paper. For that purpose the corporation was formed, of which Mr. Beach and the Messrs. Sparks were stockholders, and the latter were the active managers. A large amount of money was spent in erecting a plant between the date of the purchase and the 1st of February, 1892, when they commenced the manufacture of white tissue paper and carried it on with success for about a year.

The manufacture of such paper requires a perfectly clear, pure water, and before purchasing the Hamburg water power the complainants inspected the stream and inquired as to its character for clearness, and satisfied themselves that they would be able to use it for making white tissue paper without incurring the expense of filtration, and their experience for a year proved that their expectations were just.

In the month of February, 1893, complaints began to come in from the purchasers of their paper that it was deteriorating in the matter of whiteness, and they investigated the cause. The pond was frozen over, but they knew by reputation that mining operations were being carried on at Greenspot by the defendant, and they went there March 1 and found a stream of highly colored water flowing from the defendant's mine shaft into the river, traced its effect in discoloration to their pond, and by subsequent observations by themselves and others in the neighborhood traced its effect not only in and through the Furnace Pond, but for miles down the river to the north of Hamburg. In fact, several respectable and credible witnesses, called by the complainants, testified to the discoloration of the water in the Furnace Pond and beyond, and the complainants were stopped by the court from producing further evidence on that subject in the opening of their case. Several witnesses called by the defendant, among them its superintendent, corroborated this evidence, and there is no attempt to meet it.

The color was a peculiar reddish-yellow tint, which was in marked contrast with the discoloration due to the ordinary road and field wash after a heavy storm or spring thaw.

This peculiar discoloration continued throughout the month of March and, with some intermissions and variations in degree of discoloration, through the month of April. Complainants early in March were obliged to stop the making of white tissue paper. Negotiations between the parties for some arrangement of the matter failing, the bill was filed on the 21st of April, 1893.

The immediate origin of the discoloration was as follows: The defendant corporation was organized by two gentlemen by the name of Heckscher and two by

the name of Wetherill for the purpose of reaching and working a bed of franklinite ore which had been located by boring exploration at a depth of about a thousand feet below the surface near this point called Greenspot. It was the continuation of a seam of ore for many years worked to the southwest of Greenspot by two companies, one of which—viz, the Lehigh Zinc and Iron Company—was owned and controlled by the Heckschers and Wetherills. In the spring or early summer of 1891 the defendant commenced to sink a perpendicular shaft, known as the "Parker shaft," 10 by 20 feet in diameter, and after passing through a small amount of superincumbent earth struck solid limestone rock. It continued the working without cessation until August 11, 1892, when, having attained a depth of 560 feet (many feet lower than the bed of the Walkkill), the workmen struck a water-bearing fissure or rent in the rock, which instantly flooded the mine and drove them out. Previous to that time they had encountered small seams or fissures from time to time, producing a little water and sometimes a little mud, which they pumped up, of course, carried through a trough or trunk several hundred feet westerly toward the Walkkill till it reached a small spring run, where it was discharged, and from thence it ran into the Walkkill. The amount of water up to August was small, and its discoloration was slight, so that it was not felt or observed by complainants. The influx in August, 1892, was discolored by a fine clay, amounting almost to a pigment, having a high reddish-yellow tint and intermixed with a small quantity of very fine sand. This water rose to within 40 feet of the surface, and resisted all attempts to lower it by the pumps then in use and until very large and heavy pumps were introduced. This was done in September. After the shaft filled with water there was no further movement; it became perfectly quiet, and the clay and sand began to settle, so that the water in the upper reach of the shaft became comparatively clear. The first water that was discharged after heavy pumping commenced came from near the top and was but slightly discolored, such discoloration being due to the disturbance of the clay and sand which had settled on the timbering of the shaft. The quantity of water struck in the fissure was so great that with these powerful pumps very slow advance was made, the pumps being lowered from time to time, and the greater the depth attained the less rapid the advance and the greater the discoloration.

On about the 1st of January, 1893, the water was reduced to a depth of 420 feet from the surface, and a delay there occurred of about three weeks, caused by the necessity of establishing a pumping station at that point. When the rapid pumping commenced again, at or near the 1st of February, the discharge was much discolored, and continued growing worse and worse until the bottom was reached, and there, without detailing the circumstances, the greatest discoloration was reached, and continued during the month of March. The discoloring clay is so very fine in its texture that a very slight movement of particles of water with which it comes in contact will thoroughly mix it, and it will only subside in perfectly still water. This accounts for the fact that it did not fully subside in passing through complainants' pond, which is quite narrow, so that it is probable that the volume of the water of the Walkkill causes continued motion throughout its length.

After the shaft had been entirely pumped out and the volume of water stored in the fissure had been entirely exhausted and the flow reduced to the natural supply of the fissure, and the various water channels which had been created throughout it by the sudden drawing off of the water had arrived at what the experts call an "angle of repose," so that no further scouring resulted from the flow of the ordinary quantity of water, there was no discoloration and the water ran clear. This condition was, as claimed by the defendant, reached some time in the summer of 1893, and the case shows that from about the middle of April

or the 1st of May till about the middle of July the discolorations were temporary and increasingly infrequent, and usually the result of clearing out the different settling basins, called "sinks," which had been established in the rock at different points in the shaft. Since that time the shaft has been sunk over 200 feet without finding any more water or fissures.

The proof is clear that the result of the contribution of this discolored water to the waters of the river was to render the mixture when it reached complainants' mill unfit, without filtration, for use in making white paper".

An ingenious experiment was made by an expert, as follows: He ascertained, by a rough measurement, that the flow of the river was about forty times that of the output from the mine, and he took a jar of perfectly clear water and mixed with it one-fortieth of its quantity of the dirty water that came from the mine, and exhibited the sample to show to what a slight extent it was discolored.

The dirty water which he used had been confined in a jar for several months, with the result that the fine particles of clay had partially coagulated and gathered into little flakes, and when shaken up did not produce the same degree of discoloration as exhibited when freshly taken from the running stream. But even that experiment showed that the result of so slight a mixture made the whole mass palpably roily. In point of fact, as shown by the evidence of the expert paper makers, a very small admixture of mud or clay will render the water improper, without filtration, for making white tissue paper; and the effect of that evidence is that the river in its ordinary clear state is no clearer than is necessary for that purpose. A very small admixture of coloring or dirty matter renders it unfit for use.

Several matters are urged in defense to this case. First, but faintly, that the doctrine finally established by a bare majority of a divided court in Pennsylvania, in *Sanderson v. The Coal Company* (86 Pa. St., 401; 94 Pa. St., 303; 102 Pa. St., 370, and 113 Pa. St., 126), should be adopted here. The history of that case, in its various phases, is given by a writer in the *American Law Register* (n. s.), vol. 1, p. 1 (1894). It was an action, as here, by a riparian proprietor against a mining company for polluting a natural stream with water pumped from its mine. After three decisions by the supreme court of Pennsylvania in favor of the plaintiff's right, that court finally held the contrary and affirmed the right of the coal company to discharge its acid mine water into the creek, without regard to its effect upon lands below, upon the broad ground that the necessities of the mining interests of the Commonwealth required it. This result was attributed by the author of the article in the *American Law Register* (pp. 5, 18), in part, to a lack of care on the part of the learned judge who prepared the first prevailing opinion (86 Pa. St., 406). The doctrine of that case is shown by that writer to be inharmonious with a long line of previous decisions in Pennsylvania, and has not been, so far as I can learn, followed in any other State—certainly not in this State. It was repudiated in Ohio, whose mining interests are quite large, in the recent and well-considered case of *The Columbus, etc., Co. v. Tucker* (48 Ohio St., 41). I refer particularly to the lucid expressions of the learned judge found on pages 58 and 62.

It was not suggested on the argument that the doctrine ever had the least foothold in this State. No case of a stream fouled by mining operations has indeed ever, so far as I know, been presented to our courts, but the right of a riparian proprietor to have the waters of the stream come to him unchanged in quality, as well as undiminished in quantity, has been determined in the clearest and most positive manner. In fact, the doctrine stated so tersely by Chancellor Kent in *Gardner v. Newburgh* (2 Johns. Ch. 162, at p. 166)—"A right to a stream of water is as sacred as a right to the soil over which it flows. It

is a part of the freehold"—has always been adhered to by our courts. I need refer only to *Holsman v. Boiling Spring Co.* (1 McCart., 335), and *Acquackanonk Water Co. v. Watson* (2 Stew. Eq., 366). In the last case the right was stated by the learned master in an extremely clear and comprehensive manner, and the decree advised by him was unanimously affirmed on appeal, for the reasons by him given.

The facts of that case are, in a manner, analogous to those here under consideration. *Watson* owned and operated a bleachery which required for use clear and pure water, which he obtained from a small stream running through his land. The water company, desiring to supply the city of Passaic with potable water, proposed to take this small stream above the bleachery and substitute for it an equal or greater quantity of Passaic River water, drawn from the Dundee Canal and used to drive its pumps. This the court restrained, on the ground that the substituted water was not of equal purity with that abstracted.

There is a line of cases of pollution by mine water in England which sustains the general doctrine. *Hodgkinson v. Ennor* (4 Best and S., 229) was the case, as here, of a paper maker against a miner who had permitted dirty washings of lead ores to run through rents, called "swallets," in limestone rock into a subterranean stream, rendering the water, which in its course came to plaintiff's paper mill, unfit for use in the manufacture of paper, and the action was sustained by Chief Justice Cockburn and Justices Blackburn and Mellor.

Magor v. Chadwick (11 Ad. and E., 571) was a suit by a brewer against a miner.

Pennington v. The Brinsop Coal Co. (L. R., 5 Ch. Div. 769) (1877) was a suit by a manufacturer against a coal miner, where the only allegation of injury was that the acid contributed to the water from the mine rendered it less fit for use in the engine boilers driving the machinery of the plaintiff's mill. An injunction was allowed. Defendant relied, without success, upon the ground taken in *Sanderson v. The Coal Co.*, supra, that the acid could not be removed from the water; that there was no means of remedying the evil, and an injunction would absolutely stop its work. The learned judge (Fry) refused even to exercise the right given by the English statute to give damages instead of an injunction, relying on *Clowes v. Staffordshire Waterworks* (L. R., 8 Ch. App., 127) (1873), and he declared that he would have granted the injunction, although the present damage was only nominal, because of the injury to the riparian rights of the plaintiff, and such is the doctrine of the case relied on, which was a suit by a silk dyeing and washing establishment against a waterworks company for rendering the water coming to their works less clear and pure.

The English cases dealing with pollution by mine water culminated in the case of *Young v. Bankier* (L. R., App. Cas., 691) (1893), in the House of Lords, on appeal from Scotland. The case was argued, elaborately, of course, before six law lords, whose unanimous judgments were delivered after consideration. The riparian proprietor (Bankier), the plaintiff there, was a distiller, and used the water of the stream in his distilling process, presumably for making mash, for which it was peculiarly fit by reason of its softness. The added mine water did not render it unfit for ordinary purposes—there called primary purposes—but by reason of its hardness rendered it less fit for distilling purposes. *Sanderson v. The Coal Co.* was cited, but the court repudiated its doctrine and was unanimous in judgment in favor of the respondent, who was the plaintiff and had judgment below. Lord Macnaghten, at page 699, says: "Then the appellant urged (precisely as does the defendant here) that working coal was the natural and proper use of their mineral property. They said they could not continue to work unless they were permitted to discharge the water which

accumulates in their mine, and they added that this water course is the natural and proper channel to carry off the surplus water of the district. All that may be very true, but in this country, at any rate, it is not permissible in such a case for a man to use his own property so as to injure the property of his neighbor."

There are numerous English cases upon the general right of a riparian proprietor to have the waters of his stream come to him in its natural condition, of which I cite *Crossley v. Lightowler* (L. R., 3 Eq. Cas., 279; 2 Chan. App., 478) (1867); *Attorney-General v. Lunatic Asylum* (L. R., 4 Ch. App., 145) (1868). Numerous other cases will be found cited in Gould, *Waters*, section 219, and in *Higg. Pol. Waterc.*, 132 et seq.

The argument was advanced by the defendant that the use of the defendant's property for mining purposes is what was termed, unfortunately, I think, by Lord Cairns, in *Fletcher v. Rylands* (L. R., 3 H. L., 330, at pp. 338, 339) (1868), a natural user, and similar in that respect to plowing a field, and that if it be unlawful for defendant here to cast into the stream the muddy waters from its mine it is also unlawful for the farmer to plow his land and allow the muddy water which runs from it after a heavy rain to reach the river. But the very statement of the two cases shows the absence of analogy between them. In the first place, the water from the plowed field comes thereon by natural causes beyond the farmer's control and runs by gravity to the stream, while in the case of the mine the water is, as here, found and raised by artificial means from a level far below that of the river and would never reach it but for the act of the miner, and in the second place, by the common law of the land every owner may cultivate his land without regard to its effects upon his neighbor, while such is not the law as to mining. The supreme court of Ohio, in *Columbus Company v. Taylor* (48 Ohio, 41, at p. 58), repudiates the notion that mining was a natural use of the land in the sense that farming is.

The ground of a reasonable natural user seems to be at the bottom of what was said in *Merrifield v. Worcester* (110 Mass., 216) upon this topic. So far as the expressions there used favor the notion that a city or town may collect and discharge sewage matter into a fresh-water stream to the injury of a riparian owner without liability to action they are contrary to the law as held in England for centuries. See *Higg. Pol. Waterc.*, 127 et seq., where several cases besides these above cited are collected.

Equally untenable is another position advanced by the defendant, viz, that the river was always more or less polluted by contributions from other mines and from the washing of plowed fields, public roads, and railroad embankments. Such insistments have been frequently made and always overruled. The question in such cases seems to be whether the stream has already become so far polluted by contributors who have acquired a right so to do by adverse use or otherwise as that the pollution presently opposed will not sensibly alter its condition. And even in such a case the courts have held that the party has the right to deal with each contributor in detail and to buy off such contributors as have acquired a right, and is not obliged to submit to fresh contributors. I cite the following authorities: *Ross v. Butler* (4 C. E. Gr., 294, at p. 306); *Attorney-General v. Steward* (5 C. E. Gr., 415, at p. 419), where the learned chancellor says: "The defendants have no right to pollute or corrupt the waters of the creek, or if they are already partially polluted to render them more so;" to *Cleveland v. The Gas Co.* (5 C. E. Gr., 201, at p. 208); and to *Meigs v. Lister* (8 C. E. Gr., 199, at p. 205), where the learned chancellor says: "The position taken by counsel that the complainants were entitled to no relief from this nuisance because the locality was surrounded by other nuisances and dedicated

to such purposes has no foundation in law or in fact. If there were several nuisances of the like nature surrounding them, they must seek relief from each separately. They can not be joined in one suit nor need the suits proceed *pari passu*."

In *Crossley v. Lightowler* (L. R., 2 Ch. App., 478, p. 481, 1867) Lord Chelmsford says: "But the defendants contend that the plaintiffs have no right to complain of any pollution of the Hebble occasioned by them, because there are many other manufacturers who pour polluting matter into the stream above the plaintiffs' works, so that they never could have the water in a fit state for use even if the defendants altogether ceased to foul it. The case of *St. Helen's Smelting Co. v. Tipping* (11 H. L. Ch., 642; 11 Jur. N. S., 785), is, however, an answer to this defense. Where there are many existing nuisances, either to the air or to water, it may be very difficult to trace to its source the injury occasioned by any one of them; but if the defendants add to the former foul state of the water and yet are not to be responsible on account of its previous condition, this consequence would follow that if the plaintiffs were to make terms with the other polluters of the stream so as to have water free from impurities produced by their works, the defendants might say, 'We began to foul the stream at a time when, as against you, it was lawful for us to do so, inasmuch as it was unfit for your use, and you can not now, by getting rid of the existing pollutions from other sources, prevent our continuing to do what, at the time when we began, you had no right to object to.'" (*Attorney-General v. Lunatic Asylum*, 4 Ch. App., 145, p. 150, report of the expert, and p. 155.)

In *Attorney-General v. Leeds* (L. R., 5 Ch. App., 583, p. 595, 1870) the lord chancellor says: "I think the argument deduced from the foul state of the water before it gets to Leeds is not deserving of any weight for two reasons: First—and it is hardly disputed—the evil did become seriously aggravated when the new sewer was opened—that is to say, sixteen or seventeen years ago; and, secondly, the nuisance might terminate; and no one can say it was right that when one nuisance terminates there should be another brought into existence."

The sensible and material increase in the discoloration of the water, in this case resulting from the contribution of the defendant's mine, is clearly proved. The complainant was able to make white paper successfully and satisfactorily from February 1, 1892, for nearly a year, and until the serious discharge of discolored water from the defendant's shaft, in January, 1893; and they were also able to make such paper after the discolored water ceased to run, in June or July, 1893. During the intermediate period, while the discoloration of the water being discharged from the defendant's mine was the greatest, complainant could not make white paper satisfactorily.

In whatever point of view the complainant's case is considered it seems entirely clear and free from doubt. I can not think the least doubt is cast upon the law by the last decision in the *Sanderson* case, in Pennsylvania, and the facts of the case are substantially undisputed. The complainants' title and possession of the ripa, though put in issue by the answer, is established by the proofs and was finally admitted at the hearing. Their right to have the water come to them in its natural condition follows inevitably. (*Holsman v. Boiling Spring Co.*, 1 McCart., 335, at p. 343, bottom, and cases there cited.) The learned chancellor there says: "Where the complainant seeks protection in the enjoyment of a natural water course upon his land, the right will ordinarily be regarded as clear. And the mere fact that the defendant denies the right by his answer or sets up title in himself by adverse user will not entitle him to an issue before the allowance of an injunction."

There can be no doubt that, upon the facts presented, it would be the duty of a judge to direct a verdict, and the rule adopted by the court of errors and appeals in *Higgins v. The Water Co.* (9 Stew. Eq., 538) applies. I refer to the language of the chief justice on page 544 et seq.

The jurisdiction of this court to adopt, on final hearing, the extreme remedy of an injunction in this class of cases, when the right is clear, is well established, not only by the case just cited, but by *Acquackanonk Water Co. v. Watson*, supra, which was decided by the court of errors and appeals, and by *Holsman v. Bolling Spring Co.*, supra, decided by Chancellor Green, and by *Shields v. Arndt* (3 Gr. Ch., 234), and by *Carlisle v. Cooper* (6 C. E. Gr., 576).

It was suggested that in this case no injunction should be ordered, but that the complainants should be left to their action at law for damages. I am unable to adopt that view. It must now be considered as settled law in this State that the maintenance of a nuisance of the kind here in question is, in effect, a taking of property. *Pennsylvania Railroad Co. v. Angel* (14 Stew. Eq., 316, p. 329), where Judge Dixon, speaking for the court of errors and appeals, says: "This principle rests upon the express terms of the Constitution. In declaring that private property shall not be taken without recompense, that instrument secures to owners not only the possession of property, but also those rights which render possession valuable. Whether you flood the farmer's fields so that they can not be cultivated, or pollute the bleacher's stream so that his fabrics are stained, or fill one's dwelling with smells and noise so that it can not be occupied in comfort, you equally take away the owner's property. In neither instance has the owner any less of material things than he had before, but in each case the utility of his property has been impaired by a direct invasion of the bounds of his private dominion. This is the taking of his property in a constitutional sense. Of course, mere statutory authority will not avail for such an interference with private property. This doctrine has been frequently enforced in our courts," and he proceeds to cite previous authorities in the same court. If this be so, then the legislature has no power to authorize the maintenance of a nuisance for the promotion of private objects, even upon terms of making compensation; for no authority is necessary for the position that the legislature is powerless to enact a law declaring that defendant may have complainants' mill and water power upon terms of paying them what a court may ascertain it is worth. And I am unable to distinguish such action and that of leaving complainants to the remedy of repeated actions at law to recover damages as often as they are suffered. In this respect our system of laws varies from that of England, where Parliament is omnipotent and is not confined to the mere making of laws—the true function of a legislature—but may take private property for private purposes, with or without making compensation, the only restraint upon its power being its own innate sense of justice. Hence the English courts are authorized, in cases of certain nuisances, to give damages once for all instead of an injunction.

The result of my consideration of the subject is that there is no principle which will sustain a court of equity in refusing an injunction against the maintenance of an established continuing nuisance and leaving the injured party to his remedy at law. To do so is, in effect, to permit a party to take his neighbor's land for his own use upon terms of making such compensation as a jury shall assess. This is inadmissible.

The object and office of a verdict and judgment at law is to establish the right and give compensation for past injuries. The right being once made clear, whether by judgment at law or upon incontrovertible rules of law and well-established facts, the remedy in equity by injunction to prevent future injury is a matter of right, and the relief can not be refused.

The ground, however, mainly relied upon by defendant is that the proofs show that the nuisance has entirely abated and that there is no danger of its recurrence, and hence an injunction is unnecessary and improper.

At about the time the injunction was issued—July 17, 1893—defendant purchased a small tract of land skirting the railroad, between the shaft and the river, and established on it a settling basin, into which the mine water was turned and given opportunity for subsidence before reaching the river. The result was that it was substantially clear, and no further injury has been since felt at the paper mill. It is also in proof that from that time up to July, 1894, the water was usually clear when it came from the mine. At the sessions of December 27 and December 28, 1893, Professor Nason, a competent geologist and mining expert, testified that, in his opinion, no further clay and water-bearing seams or rents would be met in the course of defendant's mining operations, and that the rent which had given so much trouble had, by natural causes, become harmless. It was not suggested that all or any large proportion of the discolored clay deposit had been removed, but the theory was that the descending water had worn channels in the clay, resulting in little rivulets centering at the section by the shaft, and that the scouring power of the water—that is, its power to bring down clay—had ceased by reason of the clay banks and beds of the little rivulets having arrived at an "angle of repose." The stability of this state of affairs depends, of course, upon the uniformity of the flow of water, both as to quantity and source of inflow, and Professor Nason, on cross-examination, admitted some uncertainty in this respect. After his examination and the close of the evidence on both sides, and before the argument, viz, about July 16, 1894, an unexpected influx of muddy water occurred, due to an overflow from a flume carrying water from the neighboring mine of the Lehigh Zinc and Iron Company, which found its way into the seam or rent at a point where it came to the surface, about 1,800 feet from the Parker (defendant's) shaft. This opening was a surface fissure or swallet in the rock—quite common where limestone rocks come to the surface. In this case, as I understand Professor Nason, he did not suppose or infer, from the trend of the fissure, that it reached the surface in that neighborhood, but such was the fact. It was promptly stopped by defendant and filled up, so as to prevent any more water getting in at that point.

Now, it seems to me that this occurrence shows the impossibility of affirming that there will be no further incursions of muddy water. It is true that with the continued use of the settling ground no injury will probably result to complainants from such an irruption. I say "probably," because, in case of a sudden irruption of discolored water, the quantity might be so great as to overwork the present settling basin. But without a decree and injunction the defendant will be at liberty to discontinue its use and permit any muddy water that may appear to flow into the Furnace Pond as of old.

At the time the complainants filed their bill the injury was serious and continuous. The defendant positively declined to stop it, but claimed the right to continue it. To complainants' bill was interposed a general denial, and setting up a right to persist in the injury as long as its necessities required. On all these issues the defendant is beaten. The complainants have established their case, and it would seem to be a most lame and impotent conclusion to refuse to give them the very relief prayed for, viz, a perpetual injunction. I am unable to imagine any other decree in their favor which would adequately meet the case and give them the just fruits of their suit; and, surely, if there is no danger of further discoloration the injunction will do the defendant no harm, but will be of value as a muniment of title to the complainants' property. The language of Lord Justice Turner, in *Goldsmid v. Tunbridge Wells Commissioners* (L. R., 1 Ch., App., 349, p. 355), applies: "In this particular case I think that regard

must be had not merely to the comfort or convenience of the occupier of the estate, which may only be interfered with temporarily and in a partial degree, but that regard must also be had to the effect of the nuisance upon the value of the estate and upon the prospect of dealing with it to advantage; and I can not but think that the value of this estate, and the prospect of advantageously dealing with it, is and will be affected by the continuance of this nuisance."

But the defendant further urges that the complainants have manifested a disposition to make an unreasonably harsh and oppressive use of their rights in the premises, and have thereby weakened their standing in equity and disentitled them to the extreme decree asked for.

In the month of March, 1893, while the outflow from the mine was at its worst, negotiations took place between the parties for some sort of settlement, and a filter was mentioned. The complainants offered to be satisfied if defendant would furnish them with a filter of proper size, which they said, and about which there is no dispute, would cost \$5,000. The defendant offered to pay one-half of the expense of the filter, the same to be in full compensation for all damages up to the time it was furnished, which offer the complainants refused to accept. I can see nothing harsh or oppressive in that refusal.

Next, and after bill filed, as I now recollect, defendant made an arrangement with the tenant of a gristmill, located upon a little stream which empties into the Furnace Pond, for a right to divert water from the mill and carry it by a flume several hundred feet down to the complainants' works and furnish them with clear water from that stream. Complainants employed an expert to examine the stream and see whether it would supply sufficient water for their paper engines, with the result that they were informed and believed that it was not sufficient, and declined to accept it as a substitute for the river water. The defendant, nevertheless, in the face of complainants' refusal, built the flume—a mere wooden trough, set upon benches and trestles—along the surface of the ground down to the mill yard of the complainants. The complainants refused to allow it to be put across their mill yard, because it would prevent them from having access to their works and from free passage with carts and wagons from one part to the other, and said that anything of that kind must be put underground in iron pipes. But the radical difficulty with that movement on the part of the defendant was that the right to the use of the water was merely obtained temporarily from a mere tenant of the mill property, and did not give the complainants any permanent right to the flow of the stream, even if it had been large enough for their purposes. I can see nothing harsh or oppressive in complainants' action in refusing this offer of substitution. They not only had the strict right in law to refuse to accept them, but their conduct in so doing, in my judgment, was not inequitable.

I shall advise a decree establishing the complainants' right to the flow of the stream in its natural condition and an injunction with costs.

MISSOURI V. ILLINOIS ET AL.

Where an injurious act in one State is so far-reaching in its injurious consequences as to threaten the rights of property and the health of a large number of citizens in another State, the latter State may become a party complainant in the Supreme Court of the United States to enforce the legal remedies of its citizens for such injuries. (*Missouri v. Illinois et al.* (U. S. Supreme Court, October term, 1900), 180 U. S., 208.)

This was a case in which the State of Missouri sued to restrain the State of Illinois and the Sanitary District of Chicago from carrying the sewage of Chicago through an artificial channel to the Mississippi River. The right of the State of Missouri to protect its citizens by this action and to implead the State of Illinois as a party defendant and to have an injunction against the defendants in case the facts alleged in its bill should be established was upheld by a divided court in overruling a demurrer to the bill. The defendants have answered, but at the time of the present writing the final hearing has not been reached.

RIGHTS OF RIPARIAN OWNERS IN ARID AND MINING STATES.

In certain of the arid and mining States of the West the doctrine of riparian rights has been in whole or in part abrogated by what is known as the doctrine of prior appropriation. Where the latter doctrine prevails the rights of riparian owners as given above do not exist, and where the doctrine of prior appropriation has been adopted in part the rights of appropriators to some extent supersede the rights of riparian owners.

“Appropriation” is an actual use of the water for a beneficial purpose by a person having the right to make such use, i. e., by any person having lawful access to the water. The appropriator, by the fact of appropriation, acquires the right, as against riparian owners, to use the water in the state and condition and to the extent necessary for the purpose for which he has appropriated it. Subsequent appropriators also acquire rights, but such are subordinate to the rights of the prior appropriator.

The doctrine of prior appropriation has been adopted to the extent indicated in the States mentioned below :

Arizona :

Clough v. Wing, 17 Pac. Rep., 453.

Colorado :

“The right to divert unappropriated waters of any natural stream shall never be denied.” Const., Art. XVI, sec. 6.

Wheeler v. Northern Colorado I. Co., 10 Col., 582.

3 Am. St. Rep., 603; 17 Pac. Rep., 487.

Idaho :

Constitution of 1889, Art. XV, sec. 3.

Wilterding v. Green, 45 Pac. Rep., 134; 4 Idaho, 773.

Montana :

Constitution, Art. III, sec. 15.

Smith v. Denniff, 24 Mont., 20.

81 Am. St. Rep., 408; 60 Pac. Rep., 398; 50 L. R. A., 741.

Nevada :

Reno Smelting, etc., Works v. Stevenson, 20 Nev., 269.

New Mexico :

Compiled Laws of New Mexico, sec. 23.

Albuquerque Land and Irr. Co. *v.* Gutierrez, 61 Pac. Rep., 357.

North Dakota :

Springville *v.* Fullmer, 7 Utah, 450.

Stowell *v.* Johnson, 7 Utah, 215.

Wyoming :

• Farm Investment Co. *v.* Carpenter, 9 Wyo., 110; 50 L. R. A., 747; 61 Pac. Rep., 288.

In California the common law as to riparian rights seems to prevail, except as to rights acquired by appropriation upon public lands made before any riparian owner has acquired title to lands below. (*Lux v. Haggin*, 69 Cal., 254.)

In Oregon the right of appropriation is confined to such rights as were acquired before Washington became a State, under an act of Congress passed in 1866. (*Simmons v. Winters*, 21 Oreg., 35; 28 Am. St. Rep., 727; 27 Pac. Rep., 7.)

In Washington the right of appropriation seems to be recognized, at least as to the portion east of the Cascade Mountains in that State, but not as against settlers who have obtained riparian rights before the appropriation.

Isaacs v. Barber, 30 L. R. A., 665.

10 Wash., 124; 45 Am. St. Rep., 772.

38 Pac. Rep., 871.

Benton v. Johncox, 39 L. R. A., 107; 17 Wash., 277.

61 Am. St. Rep., 912; 49 Pac., 495.

In several of the arid or partly arid States not included in the above list the riparian owner holds subject to the right of those owning above him to a *reasonable* use of the water for irrigation purposes.

Rhodes v. Whitehead, 27 Tex., 309; 84 Am. Dec., 631.

Tolle v. Carreth, 31 Tex., 362; 98 Am. Dec., 540.

Fleming v. Davis, 37 Tex., 173.

Baker v. Brown, 55 Tex., 377.

Mud Creek Irr., etc., Co. v. Vivian, 74 Tex., 170; 11 S. W. Rep., 1078.

Barrett v. Metcalf, 12 Tex. Civ. App., 247; 33 S. W. Rep., 758

So far as the doctrine of prior appropriation is recognized, the rights of riparian owners are pro tanto extinguished. In such States, therefore, the general statements already given require modification.

In States where the doctrine of prior appropriation is established it may be safely asserted :

1. That the riparian owners can not complain of pollution so far as such pollution necessarily results from the use for which the appropriator has appropriated the water.

2. That no person, except a prior appropriator, may pollute the stream so as to render the water less fit for use by one who has law-

fully appropriated it, and such prior appropriator can not so pollute the water by a subsequent appropriation to a new use.

Fairplay Hydraulic Mining Co. v. Weston, 29 Colo., 125.

3. No appropriator or other person may pollute waters to the extent of creating a public nuisance.

Woodruff v. North Bloomfield Gravel Mining Co., 8 Lawy., 628; 16 Fed. Rep., 25; 9 Lawy., 441; 18 Fed. Rep., 753.

People v. Gold Run Ditch, etc., Co., 66 Cal., 138; 56 Am. Rep., 80; 4 Pac. Rep., 1152.

Carson v. Hayes, 39 Oreg., 97; 65 Pac. Rep., 814.

Suffolk Gold Min. and Milling Co. v. San Miguel Consd. Mining and Milling Co., 9 Colo. App., 407; 48 Pac. Rep., 828.

Nixon v. Bear River and A. Water Co., 24 Cal., 367; 85 Am. Dec., 69.

Levaroni v. Miller, 34 Cal., 231; 91 Am. Dec., 692.

Yuba Lake, etc., Co. v. Yuba Co., Super. Ct., 66 Cal., 311; 5 Pac. Rep., 490.

McLaughlin v. Del Re, 71 Cal., 230; 16 Pac. Rep., 881.

B. RIGHTS OF THE PUBLIC (AS DISTINGUISHED FROM INDIVIDUAL OWNERS) TO HAVE INLAND WATERS KEPT FREE FROM POLLUTION BY RIPARIAN OWNERS OR OTHERS.

Whenever the pollution of a stream or other body of water injuriously affects the health or materially interferes with the peace and comfort of a large and indefinite number of people in the neighborhood, such pollution becomes what is known as a public nuisance. But, except under such circumstances, the public, as such, has no standing to prevent the pollution of waters. When, however, there is a public or quasi-public ownership of the banks of a stream, as in the case of a source of water supply owned by a municipality or owned by a company which supplies the inhabitants of a municipality with water, the public is interested in the enforcement of the rights of riparian proprietors, as stated under heading "A."

Where there is a public nuisance caused by the pollution of water, it is the duty of public authorities to cause its abatement, and their right to do so has been sustained in numerous cases. Where the public is injured in its capacity of riparian owner the remedy is either by injunction or by criminal proceedings, according to the nature of the wrong and the laws and practice of the jurisdiction in which the offense occurs.

The following are cases in which the pollution of water has been held to be a public nuisance:

Board of Health v. Casey, 3 N. Y. S., 399.

People v. Elk River Mill and Lumber Company, 107 Cal., 214.

State v. Taylor, 29 Ind., 517.

Greene v. Nunnemacher, 36 Wis., 50.

C. CONDITIONS UNDER WHICH, AND EXTENT TO WHICH, PUBLIC MUNICIPALITIES MAY USE INLAND WATERS IN DISPOSING OF SEWAGE FROM PUBLIC SEWERS.

This subject has but recently been receiving attention from the courts. It seems to have been the custom of municipalities to discharge their sewers freely into the larger streams, and until within the last few years but little, if any, objection to the practice has found its way into the courts. Latterly the increase of population, with the consequent increase of the amount of sewage matter so discharged, has brought about a condition of affairs that has produced opposition and in many cases litigation. The principles established by the decisions thus made necessary are briefly summarized as follows:

Municipalities, if riparian owners, have the same rights and are subject to the same restrictions in the use and treatment of the water flowing over their lands as private owners are—i. e., they may deposit sewage and other filth in such waters, provided always that by so doing they cause no injury to property below them. They may drain the surface water from their streets into water courses, with the impurities which it naturally carries, provided they do not thereby increase the flow of water into the stream so as to exceed the capacity of the channel to the injury of property below.

Brainerd v. Newton, 154 Mass., 255; 27 N. E., 995.

Cone v. Hartford, 28 Conn., 363.

Where municipalities are expressly authorized by statute to construct a system of sewerage, and to cause the sewage matter to be discharged into any particular waters, the statutory authority is to be exercised subject to the implied condition that such discharge will not constitute a nuisance. Legislative authority can go no further than to authorize municipalities to acquire the rights of lower owners by purchase or condemnation, because of the constitutional restriction against taking private property for public use without just compensation.

It will thus be seen that the increase of population under the present conditions and with the now prevalent methods of sewage disposal in cities is rapidly leading to a condition of affairs which will call for radical changes. Many cities will find themselves unable to dispose of their sewage matter by means of rivers without enormous expense, and probably not without additional legislation. As will be seen hereafter, the subject is already receiving serious attention from legislators.

CITATION OF CASES.

The following cases will be found to sustain the general principles above stated:

English:

- Goldsmid *v.* Tunbridge Wells Imp. Com., L. R., 1 Chan. App., 349.
 Holt *v.* Rochdale, L. R., 10 Eq. Cases, 354.
 Attorney-General *v.* Leeds, L. R., 5 Chan. App., 583.
 Attorney-General *v.* Richmond, L. R., 2 Eq. Cases, 306.
 Attorney-General *v.* Hackney Local Board, L. R., 20 Eq. Cases, 626
 Attorney-General *v.* Cockermonth Local Board, L. R., 18 Eq. Cases, 172.
 Attorney-General *v.* Luton Local Board, 2 Jurist, 180.
 Attorney-General *v.* Halifax, 39 L. J. (N. S.), 129.
 North Staffordshire R. R. Co. *v.* Tunstall Local Board, 39 L. J., Chrn., 131.
 Attorney-General *v.* Kingston on Thames, 34 L. J., 481.
 Attorney-General *v.* Basingstoke, 45 L. J. (N. S.), 726.
 Attorney-General *v.* Colney Hatch Lunatic Asylum, L. R., 4th Ch. Div., 146.
 Attorney-General *v.* Birmingham, 4 Kay & Johns., 528.
 Attorney-General *v.* Metropolitan Board of Works, 1 H. & M., 298.
 Bidder *v.* Croyden Local Board, 6 L. T., 778.
 Manchester, etc., Railway Co. *v.* Worksop Board of Health, 23 Beav., 198.
 Oldaker *v.* Hunt, 6 De Gex, McN. & G., 376.

Alabama:

- Birmingham *v.* Land, 374 So. Rep., 613.

California:

- People *v.* City of San Luis Obispo, 116 Cal., 617.
 Peterson *v.* City of Santa Rosa, 51 Pac. (Cal.), 557.

Connecticut:

- Morgan *v.* Danbury, 67 Conn., 484.
 Nolan *v.* New Britain, 69 Conn., 668.

(See extracts from opinions in the Conn. cases given below.)

Georgia:

- Columbia Av. Savings Fund, etc., Co. *v.* Prison Commission of Georgia, 92.
 Fed. Rep., 801 (Cir. Ct. West Div. Ga., 1899).

Illinois:

- Village of Dwight *v.* Hayes, 150 Ill., 273.
 Robb *v.* Village of La Grange (1895), 158 Ill., 21.
 Barrett *v.* Cemetery Assn., 159 Ill., 385.

Indiana:

- Valparaiso *v.* Hagen, 153 Ind., 337; 48 L. R. A., 707; 74 Am. St. Rep., 305;
 54 N. E., 1062. ^a

Iowa:

- Randolf *v.* Town of Bloomfield, 77 Ia., 50.
 Loughran *v.* City of Des Moines, 72 Ia., 382; S. C. 34 N. W. Rep., 172.

^a In this case it was held that where a municipality acts in conformity to the statute, skillfully and without negligence, it may discharge its sewage into a stream and the lower proprietors may not have an injunction, and are entitled to no compensation for the damages suffered by them.

This seems to settle the law in that State; but the reasoning is not convincing, and it is believed no other State has, so far, adopted that rule, which might, perhaps, be held violative of that clause of the Constitution of the United States which forbids the taking of private property for public use without compensation.

Kansas:

Topeka Water Supply Co. v. City of Potwin, 43 Kan., 404.

Massachusetts:

Brainard v. Newton (Mass. Sup.), 27 N. E. Rep., 995, and 154 Mass., 255.

Morse v. Worcester, 139 Mass., 389.

Boston Rolling Mills v. Cambridge, 117 Mass., 396.

Haskell v. New Bedford, 108 Mass., 208.

Woodward v. Worcester, 121 Mass., 245.

Middlesex Co. v. Lowell, 149 Mass., 509.

Merrifield v. Worcester, 110 Mass., 216.^a

Missouri:

The Joplin Consolidated Mining Co. v. City of Joplin, 124 Mo., 129.

New Hampshire:

Vale Mills v. Nashua, 63 N. H., 136.

New Jersey:

Doremus v. Paterson, 65 N. J. Eq., 711.

State v. Freeholders of Bergen, 1 Dick., 173

Atty. Gen. v. City of Paterson, 45 Atl. (N. J., 1900), 995; 60 N. J. Eq., 385.

New York:

Butler v. Village of Edgewater, 6 N. Y. S., 174.

Chapman v. City of Rochester, 110 N. Y., 273.

Pennsylvania:

Good v. Altoona City, 162 Pa. St., 493.

EXCERPTS FROM IMPORTANT DECISIONS.

In *Owens v. Lancaster City* (182 Pa. St., 257, and 193 Pa. St., 436) the right of a city to use a stream passing through it as an open sewer, subject only to liability for any injury done to adjoining property through its negligence, seems to be conceded.

As to the limits of this right, and the consequences for which the municipality would be liable in the State of Pennsylvania, see the following cases:

The city was held liable for injury done to plaintiff's wharf by deposits from a sewer, in *Butcher's Ice and Coal Company v. Philadelphia*. (156 Pa. St., 54.)

It was held liable to a lot owner for maintaining a sewer mouth upon his lot, in *Harris v. City*. (155 Pa. St., 76.)

It was held liable for destroying the value of wells, caused by the flowing of polluted river water into them by underground passages, in *Good v. Altoona*. (162 Pa. St., 493.)

It was held liable for damages caused by accumulations of filth, ashes, or other material, that obstruct the flow of the water and throw

^a In *Merrifield v. Worcester* damages were refused to a riparian owner who sued in tort for the pollution of his stream. The decision turned upon the nonliability of municipal corporations for the consequences of the judicial acts of their governing bodies. It holds that the plaintiff might recover for injury caused by pollution due to the improper construction or unreasonable use of the sewers, or to the negligence or other fault of the defendant in the care and management of them. It is no authority for the principle established in *Indiana in Valparaiso v. Hagen*.

it out upon the lands of adjoining owners, in *Blizzard v. The Borough of Danville*. (175 Pa., 479.)

In *Owens v. Lancaster City* (182 Pa. St., 257), at page 262, Mr. Justice Green remarks, obiter: "We apprehend the same principle would apply to the injury inflicted by allowing offensive and injurious odors and smells to issue from the polluting substances discharged into the stream from the city sewers."

Nolan v. New Britain (69 Conn., 668) was an action for damages caused by the defendant's discharge of its public sewers into a stream called Pipers Brook, which ran through plaintiff's land.

The city had, in 1872, under alleged legislative authority, condemned and taken, and condemned the right to take, occupy, and appropriate Pipers Brook for sewer purposes, but plaintiff did not appear in the proceedings, nor was any award made to him.

Significant excerpts from the supreme court's opinion, by Andrews, C. J., are here given:

The use of Pipers Brook which the complainant charges that the defendant has made, unless there is a lawful warrant therefor, causes a public nuisance. * * * That it would be a public nuisance to render the water of a stream so impure that it could not be used for domestic purposes or for watering cattle, and so that it gave off noxious and unhealthy odors is hardly open to question (*Chapman v. Rochester*, 110 N. Y., 273), for the reason that these causes would injuriously affect every riparian owner along the whole length of the stream and every person who lived near it. If a municipal corporation, in the absence of a legal right to do so, causes sewage to pollute a water course, to the use of which a lower owner through whose premises the water course flows is entitled, it is guilty of a nuisance for which damages may be recovered. [Many authorities cited.]

On page 681, after an examination of the alleged statutory authority, the opinion continues:

If it had been the intent of the legislature by the act of 1872 to authorize the common council of the city of New Britain to take or to affect any lands outside of the city limits, it is certain there would have been in the act some provision for the ascertainment of damages to be paid to the landowner. The right of the plaintiff to have the water of Pipers Brook flow through his land as it had been accustomed to flow (i. e., pure and uncontaminated) is not an easement, but is inseparably annexed to the soil. (*Wadsworth v. Tillotson*, 15 Conn., 366, 373.) To deprive the plaintiff of that part of his soil for the purposes named in that act would be the taking of private property for public use, and the plaintiff would be entitled to have just compensation.

As the complainant lived outside the city limits, it was held that he was in no way affected by the assessment proceedings.

The other defenses amounted to a claim of right to such use of the stream by prescription. As to this defense the court says, at page 683:

The sixth defense presents the question of prescription. We have already indicated our opinion that the use of Pipers Brook of which the plaintiff com-

plains is a public nuisance. We suppose the law to be so that a public nuisance can not be prescribed for. No length of time can legitimate, or enable a party to prescribe for, a public nuisance. (*People v. Cunningham*, 1 Denio., 524; *Mills v. Hall*, 9 Wend., 315; *Veazie v. Dwinel*, 50 Me., 479, 490; *Commonwealth v. Upton*, 6 Gray, 471, 476; *Wood on Nuisances*, 722; 19 Am. and Eng. Encyc. of Law, 30.) When an action is brought by a party who has suffered a special injury in consequence of a public nuisance, a prescriptive right to do the acts complained of can not be maintained against him. (*Bowen v. Wendt*, 103 Cal., 236; *People v. Gold Run, etc., Mining Co.*, 66 Cal., 138; *Boston Rolling Mills v. Cambridge*, 117 Mass., 396; *O'Brien v. St. Paul*, 18 Minn., 176; *Cooley on Torts*, 614.) There is no occasion to discuss this defense further, because the defendant's counsel in their brief expressly disclaim that any right can be obtained by prescription to commit such a nuisance.

In *Morgan v. City of Danbury* (67 Conn., 484) the question of restraining a city from polluting the water of a stream by sewage, at the suit of a mill owner below the city, was thoroughly discussed, and the injunction sustained. The opinion is written by Baldwin, J., and the important portions of it are as follows (p. 493):

The nuisance thus complained of consisted, then, of discharging into a river, above the plaintiff's premises, certain substances of a kind and in such a manner that the water came to him polluted, and a deposit was made upon his land and in his mill pond whereby noxious odors were created, dangerous to his health and that of others, his dam partly filled up by filth, and the use and value of his property largely taken away—injuries which the defendant intended to increase by enlarging its sewer system, and adding to the amount of the deposits made from the sewers in the river, the result of which would be to fill up his mill pond with filth and sewage, and make his property valueless.

These allegations were denied, but they have been found true, and there is nothing inconsistent with their truth in the special finding of facts. They stated that the deposits from the sewers both filled up the plaintiff's mill pond, and polluted the air he breathed and the waters that flowed over his property. These, though proceeding from the same act, produced separate injuries. A nuisance was created with a double aspect. That to the waters of the stream and the air above it it was found constituted a public nuisance, though it was one which also wrought a special and peculiar injury to the plaintiff. That from filling up the mill pond constituted simply a private nuisance. (*Haskell v. New Bedford*, 108 Mass., 208, 216; *Brayton v. Fall River*, 113 Mass., 218, 229.) It was proper that the injunction should be so framed as to protect the plaintiff against every serious and irreparable injury which he might suffer by the continuance of the nuisance, and its terms are fully conformable to the claims stated in his complaint.

The defendant contends that the decree is too broad, in that it restrains the discharge into the river of any sewage, even if not of a noxious or polluting character, or though entirely and permanently disinfected and purified.

The primary meaning of "sewage" is that which passes through a sewer (*Century Dictionary*; *Webster's International Dictionary*). A secondary meaning is derived from the usual character of the contents of a sewer, and as used in that sense the word signifies the refuse and foul matter, solid or liquid, which it so carries off.

In the plaintiff's complaint the connection in which the term is employed is such as to indicate that it was intended to carry the secondary meaning.

And further, at page 496:

The defendant urges that it should not be made responsible for the acts of others, and that if its sewage is thoroughly disinfected, sterilized, and purified before its discharge into the river nothing further should be required, even though as it flows down the stream it may be brought into contact with other substances in such a way as to work a nuisance. But the right to deposit a thing in any place must always be dependent not only on its own nature but on the nature of the place in question and the uses to which that has already been put. A lighted match may be safely thrown into a brook under ordinary circumstances, but not should it happen to be covered with oil from a leaky tank.

If different parties by several acts foul the same stream, each may be enjoined against the commission of the wrong with which he is individually chargeable.

And see, also, *Watson v. Town of New Milford* (72 Conn., 561); *Platt Bros. & Co. v. Waterbury* (72 Conn., 531); and note on "Rights of municipal corporations to drain sewage into waters," appended to a report of the last-named case in 48 *Lawyers' Rep. Annotated*, page 691.

In *Mayor, etc., of Birmingham, v. Land* (34 So. Rep., 613), decided by the supreme court of Alabama in June, 1903, the Connecticut cases above cited were followed. Among other things, the court, per McClellan, C. J., say:

The fact that the city of Birmingham had statutory authorization to construct a sewer emptying into Valley Creek, upon the condemnation of lands taken or injured in its construction and use, is not of importance, since the lands here injured have not been condemned. The nuisance is none the less a nuisance because of the statutory power referred to, the right to exercise the power in respect of this land not having been acquired. *City of Mansfield v. Balliett* (65 Ohio St., 451; 58 L. R. A., 628, and note).

See, to the same effect, *Sammons v. City of Gloversville* (67 N. E. Rep., 622), decided by the court of appeals of New York, June 9, 1903. In this case an injunction was granted, its operation being suspended to enable the defendant to obtain legislative relief, or to abate the nuisance.

In *Middlesex Company v. Lowell* (149 Mass., 509), decided in 1889, it was held that an injunction should be granted to restrain defendant from discharging sewage into plaintiff's mill pond, and that no right to do so could be acquired by prescription.

This places Massachusetts in line with the other States, notwithstanding the decision in *Merrifield v. Worcester* that a city is not liable for damages caused by lawfully laying out and constructing and reasonably using a system of sewers in accordance with plans adopted by the proper corporate body, upon the principle that such body acts quasi judicially in so adopting plans.

In *Butler v. Village of White Plains* (69 N. Y. Supp., 193; N. Y. Sup. Court App. Div., 2d Dept., March, 1901), an injunction was

granted against a nuisance caused by the deposit of the effluent of defendant's sewage in the Bronx River. The fact that others were polluting the stream was no defense.

Grey, Attorney-General, *v. Paterson* (13 Dick., 1; on appeal, 15 Dick., 385), was an action brought by riparian owners below Paterson for an injunction restraining the city of Paterson from depositing or discharging its sewage through its drains or sewers into the Passaic River, and from constructing new sewers to discharge into said river, and from enlarging or increasing its present sewerage system with outlets into said river.

By an act passed in 1867 (P. L. of 1867, p. 653, sec. 17) Paterson had been authorized by the legislature as follows:

That the mayor and aldermen of the city of Paterson are hereby authorized to cause such surveys, maps, and returns to be made as may be necessary to enable them to prescribe and adopt, either for the whole or any part of said city, the location of streets and sewers, or either, and the width thereof, hereafter to be opened or constructed therein, and when such location, width, and grade shall be adopted, the surveys, maps, and returns prescribing and defining the same shall be recorded in the clerk's office of the county of Passaic, and thereupon no street or sewer shall thereafter within the district comprised in any such survey, map, or return be opened or constructed, except in conformity therewith as to location, width, and grade, and fully to accomplish the purposes contemplated by this section the said mayor and aldermen may employ such engineers, surveyors, and other persons, and provide for their compensation and pass such ordinances as they may deem to be proper, and may enter upon any land for making surveys and examinations.

On the 26th of February, 1868, Paterson was further authorized to construct sewers and drains (P. L., 1868, p. 126). The second section provides:

That all such sewers and drains shall be constructed in conformity with the plans thereof adopted or which shall be adopted by said mayor and aldermen pursuant to the seventeenth section of the act approved April 4, 1867, entitled "A further supplement to the act entitled 'An act amending and revising the act to incorporate the city of Paterson.'"

It was found by the court that, so far as the authority of the State can avail for that purpose, the legislative consent, in this case, furnishes ample protection to the city for the appropriate exercise of the power granted.

It was further said that riparian owners below the point where the tide ebbs and flows were not entitled to an injunction, because the title to their lands did not extend below high-water mark.

The title of owners above the ebb and flow of the tide extends to the middle of the stream, subject only to the rights of the public for purposes of navigation; and it is held that, notwithstanding the legislative grant of authority, such owners can not be deprived of their

right of property in the river without just compensation. Following the case of *Beach v. Sterling Iron and Zinc Company* (9 Dick., 65), as affirmed in 10 Dick., 824, it was decided that the owners above tide water were entitled to compensation, but in view of the great detriment to the city if an injunction should be granted and the comparatively small injury done to the owners the injunction was refused, except in the alternative that the city should refuse to make such compensation for the diminished value of their lands as shall be ascertained to be just.

In this case there is no recognition of the damage done to the lands adjoining or near the stream. The complainant's right to redress arises wholly from the injury done to the water, in which they have a proprietary right.

In *Winchell v. Waukesha* (110 Wis., 101), Dodge, J., gave the opinion, which in part is as follows:

The findings and evidence disclose a very obvious nuisance, which, if created and maintained by an individual, would entitle the plaintiff to the aid of a court of equity to effect its abatement, and to damages if pecuniary injury be established, with the decisions of this court. * * * It has been declared by this court in *Harper v. Milwaukee* (30 Wis., 365, 372), that "the general rule of law is that a municipal corporation has no more right to erect and maintain a nuisance than a private individual possesses, and an action may be maintained against such corporation for injuries occasioned by a nuisance for which it is responsible in any case in which, under like circumstances, an action could be maintained by an individual." Again, in *Hughes v. Fond du Lac* (73 Wis., 380, 383) it is said: "A municipal corporation is no more exempt from liability in case it creates a nuisance, either public or private, than an individual." These statements are very broad, and, appellant insists, must yield to various exceptions and limitations (pp. 105 and 106).

When, if ever, the legislature shall enact that streams generally or any stream shall be used as sewers without liability to the owners of the soil through which they run, the question of constitutional protection to private rights may be forced upon the courts for decision. Until such enactment is made, however, in clear and unambiguous terms, we shall be slow to hold by inference or implication that it has been made at all. The right of the riparian owner to the natural flow of waters, substantially unimpaired in volume and purity, is one of great value, which the law nowhere has more persistently recognized than in Wisconsin. Not alone the strictly private right, but important public interests, would be seriously jeopardized by promiscuous pollution of our streams and lakes. Considerations of aesthetic attractiveness, industrial utility, and public health and comfort are involved. Amid this conflict of important rights, we can not believe that the legislature concealed, in words merely authorizing municipalities to raise and expend money for the construction of sewers, a declaration of policy that each municipality might, in its discretion, without liability to individuals, take practical possession of the nearest stream as a vehicle for the transportation of its sewage in a crude and deleterious condition. At that stage in its logic we can not agree with the Indiana court in *Valparaiso v. Hagen* (153 Ind., 337).

STATUTORY RESTRICTIONS OF WATER POLLUTION.**CLASSIFICATION.**

Speaking generally, jurisdiction over the pollution of waters in the United States is confined to the several States. There is no provision in the Constitution which gives to Congress authority in the premises, partly, no doubt, because at the time of its adoption the great importance of the subject from an interstate point of view was not thought of. Hence, by the familiar principle that the several States retain full sovereign powers except so far as such powers are restricted by the National Constitution or expressly delegated thereby to the National Government, the States have full control of this subject. In reviewing these laws, accordingly, we must examine the statutes of all the States and Territories.

Uniformity of legislation is not to be expected. The natural conditions existing in different portions of the vast territory are so various, the density of population differs so widely in the different sections involved, and public enlightenment as to the deleterious effects of water pollution and the necessity to restrain it is, in sparsely settled districts, so far behind that which has been developed in congested areas by the terrible consequences, that statutory regulations must necessarily differ. In some States there is found nothing more than a simple provision making it a crime to poison wells and springs, while others have made elaborate provisions designed to check and, so far as possible, absolutely to prevent all pollution of waters by mingling with them the refuse products of animal life or the wastes of human industry. If, therefore, we are to avoid making this review a mere catalogue of statutes, it will be necessary to adopt some system of classification and grouping. Doubtless a mere citation of the statutes of all the States, taken in their alphabetical order, would serve a useful purpose in enabling the reader to turn to the particular section in which his interest lies and to find the legislation which affects this section. But if, by a logical grouping of States according to their progress in this particular, we can give a clearer idea of the status of such legislation as a whole, without seriously interfering with the usefulness of the book as a compendium of State laws upon this subject, much will be gained.

Accordingly, I have arranged the States and Territories in three groups or classes, placing those in each group in alphabetical order for convenience of reference.

CLASS I. STATES WITH PARTIAL RESTRICTIONS.

This group comprises those States and Territories in which the legislature has confined itself to forbidding the poisoning or pollution of drinking water in certain ways or in certain localities. They belong in the same category because they are all at the same stage of growth in sanitary education—i. e., there is manifest in their legislation no sense of the general desirability of pure natural waters, but only a desire to prevent certain acts recognized as criminal in intent or as likely to injure special groups of persons (public or private corporations) whom the legislature desires to protect.

An alphabetical list of the States and Territories in Class I, with the statutes in force in each at the close of 1905, either given in full or abstracted so as to show their nature and force, is here presented.

ALABAMA.

[Acts of Alabama, 1896-97, p. 1281.]

AN ACT to punish any person who pollutes or contaminates water supplied to cities and towns of the State.

SECTION 1. *Be it enacted by the general assembly of Alabama,* That it shall be unlawful for any person to knowingly deposit any dead animal or nauseous substance in any source, standpipe, or reservoir from which water is supplied to any city or town of said State. Any person violating the provisions of this act shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding \$500 and may be sentenced to hard labor for the county not exceeding one year.

Approved, February 17, 1897.

[General Acts, Alabama, 1903, Act No. 542, p. 499.]

AN ACT to amend, reconstruct, and provide for the enforcement of the laws relating to the public health.

SEC. 15 (p. 508). Whenever complaint shall be made in writing to a health officer of a county, city, or town that there is in any pond, lake, or stream owned or maintained by a private individual or corporation any source of infection, or unsanitary condition, which is prejudicial to the public health, or likely to become so, or any material or thing that is grossly offensive or indecent, it shall be the duty of such health officer to thoroughly investigate such complaint. If upon investigation said health officer shall be of the opinion that said complaint is well founded, he shall at once notify the person responsible therefor that he must remove or abate, at his own expense, said source of infection, unsanitary condition, or grossly offensive or indecent

material or thing. Should such person responsible for said nuisance refuse or neglect to obey such order, said officer shall refer the matter to the county board of health for investigation, and either party to the contest may request the State health officer to be present and participate in the investigation. Should said county board of health agree with the opinion of said health officer, and should the person responsible for said nuisance or for said indecent material or thing still refuse or neglect to comply with the decision reached by said county board of health, the health officer to whom said complaint was first made shall proceed with as little delay as possible to cause said source of infection, unsanitary condition, or grossly offensive material or thing to be removed or abated at the expense of the person responsible therefor.

ARKANSAS.

[Sandel and Hill's Digest, 1894.]

SEC. 1903. The throwing or dragging of dead animals, or animals in a dying condition, into any running stream or other body of water in this State is a misdemeanor.

Anyone violating the provisions of this chapter, on conviction thereof, shall be fined in any sum not less than ten nor more than fifty dollars. (Act March 27, 1891.)

[Laws of 1895, Act CXXVI, p. 183.]

AN ACT authorizing municipal corporations and other corporations to exercise certain privileges, and for other purposes.

SEC. 7. If any person shall * * * commit such a nuisance in or near the impounding dams or reservoirs of any water plant, or shall pollute the water or effect [affect] its wholesome qualities, he shall be deemed guilty of a misdemeanor and be fined for each and every offense in any sum not exceeding \$200.

[Sandel and Hill's Digest, sec. 5134.]

They [municipal corporations] shall have the power to provide a supply of water by constructing or acquiring, by purchase or otherwise, wells, pumps, cisterns, reservoirs, or waterworks; to regulate the same; to prevent the unnecessary waste of water; to prevent the pollution of the water and injury to the waterworks; and for the purpose of establishing or supplying waterworks any municipal corporation may go beyond its territorial limits; and its jurisdiction to prevent or punish any pollution or injury to the stream or source of water, or to the waterworks, shall extend five miles beyond its corporate limits. [As amended by laws of 1903, act 88, p. 152.]

DELAWARE.

[Laws of 1893, p. 1024.]

AN ACT to amend chapter 242, volume 19, of the Laws of Delaware, entitled "An act to provide for the lighting of Middletown."

SEC. 10 (p. 1029). That if any person or persons shall designedly or maliciously injure the said light and water works, or obstruct the water to and from the same, or in any manner pollute the water supply * * * they shall forfeit and pay to the commissioner of the town of Middletown a fine not exceeding one hundred (100) dollars, to be recovered, etc.

FLORIDA.

[Revised Statutes of Florida, approved January 8, 1891.]

SEC. 2658. *Poisoning food or water.*—Whoever mingles any poison with food, drink, or medicine, with intent to kill or injure another person, or wilfully poisons any spring, well, or reservoir of water with such intent, shall be punished by imprisonment in the State prison for life or any term of years.

SEC. 2665. *Corrupting or interfering with water supply.*—Whoever wilfully or maliciously defiles, corrupts, or makes impure any spring or other source of water or reservoir, or destroys or injures any pipe, conductor of water, or other property pertaining to an aqueduct, or aids or abets in any such trespass, shall be punished by imprisonment not exceeding one year or by fine not exceeding one thousand dollars.

GEORGIA.

[Laws of 1896, p. 84.]

No. 57. AN ACT to prohibit the poisoning of any spring, well, or reservoir of water, to provide a penalty for the violation of the same, and for other purposes.

SEC. 1. *Be it enacted by the general assembly of the State of Georgia, and it is hereby enacted by authority of the same,* That from and after the passage of this act any person who wilfully and wantonly poisons or procures another to poison any spring, fountain, well, or reservoir of water shall be deemed guilty of a felony, and on conviction therefor shall be imprisoned in the penitentiary for a term of not less than two nor more than twenty years.

SEC. 2. Repeals inconsistent laws.

Approved, December 19, 1896.

IDAHO.

[Penal Code, passed 1901.]

SEC. 4916. Every person * * * who wilfully poisons any spring, well, or reservoir of water is punishable by imprisonment in the State prison for a term not less than one nor more than ten years.

IOWA.

[Code of Iowa, annotated, 1897.]

SEC. 4979. *Throwing dead animals in stream, spring, etc.*—If any person throw, or cause to be thrown, any dead animal into any river, well, spring, cistern, reservoir, stream, or pond, he shall be imprisoned in the county jail not less than ten nor more than thirty days or be fined not less than five nor more than one hundred dollars.

KANSAS.

[Laws of 1905, chap. 267, fish and game law.]

SEC. 6. It shall be unlawful for any person to empty or throw into or place in any lake, pond, river, creek, or stream, or other water within or bordering on this State, any acid, drug, lime, or other deleterious substance, or fishberries, or dynamite, giant powder, or other explosive matter of whatever kind, or any material or liquid which may kill, stun, poison, or craze fish; provided, that nothing in this section shall be construed to prevent the proper use of explosives for the exclusive purpose of improving navigation, or for blasting rock on [in] preparing foundations, or other improvements on or along the streams or waters of the State.

KENTUCKY.

[Compilation by John D. Carroll, 2d ed., 1899.]

SEC. 1278. If any person shall cast or place the carcass of any cattle or that of any other dead beast in any water course or within twenty-five yards thereof, or shall cast the same into any spring, or into any pond, such person, for every such offence, shall be fined for the first offense not less than five nor more than twenty dollars, and every subsequent offense not less than twenty nor more than one hundred dollars. (Under head of "Offences against public health.")

LOUISIANA.

[Revised Laws (Wolff).]

SEC. 924. Amending law of 1882, page 109.

Makes it an offense to "throw or cause to be thrown or conveyed into any navigable stream, bay, or lake within this State, bagasse from sugar mills, ballast from vessels, sinking timber of any kind, or any other matter of a nature to form an obstruction to its free navigation."

MICHIGAN.

[Compiled Laws of the State of Michigan (Lewis M. Miller).]

SEC. 11496. Willfully poisoning spring, well, or reservoir made a crime.

SEC. 2806. The council (of any village located upon or adjacent to any of the navigable waters of this State) shall have authority to "provide by ordinance for the preservation of the purity of the waters of any harbor, river, or other waters within the village," and other powers.

SEC. 3146. The council (of any city located upon or adjacent to any of the navigable waters of the State) "shall have authority to provide by ordinance for the preservation of the purity of the waters of any harbor, river, or other waters within the city, and within one-half of a mile from the corporate boundaries thereof; to prohibit and punish the casting or depositing therein of any filth, logs, floating matter, or any injurious thing," and other powers.

[Public Acts, 1899, No. 80, p. 115.]

AN ACT to prevent and punish the pollution and contamination of the waters of the stream known as Wolf Creek, in Lenawee County, Michigan, and the tributaries thereof.

The people of the State of Michigan enact:

SECTION 1. It shall be unlawful for any person or persons to wilfully or in any other manner knowingly to befoul, pollute, contaminate in any manner, so as to render said water offensive for drinking purposes, the waters of that stream situated in the townships of Adrian, Rome, and Cambridge, Lenawee County, Michigan, and known commonly as Wolf Creek, or any tributary thereof situated in said county, at any place in said stream above the dam from which the water supply of the city of Adrian is taken.

SEC. 2. Whoever mischievously, maliciously, or wilfully puts any dead animal, carcass or part thereof, or any other putrid, noxious, noisome, or offensive substance in said stream or its tributaries, or in any other manner befouls the waters of said stream or its tributaries in an unwholesome or offensive manner, or shall drain the contents of any barnyard, waste factory products, or other unwholesome substance, into the water of said stream or its tributaries, shall be deemed guilty of a violation of this act.

SEC. 3. Any person convicted of a violation of this act shall be punished by a fine not exceeding one hundred dollars and not less than five dollars and costs of prosecution, and in default of the payment of said fine and costs he shall be imprisoned in the jail of Lenawee County not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

This act is ordered to take immediate effect.

Approved, May 17, 1899.

[House Enrolled Act No. 404.]

AN ACT in relation to the pollution of the waters of Pine River in the counties of Midland and Gratiot, and Cass River in the county of Tuscola.

SEC. 1. It shall be unlawful for any person, firm, or corporation, except municipal corporations, or any agent or employe of such firm or corporation to pollute the waters of Pine River in the counties of Midland and Gratiot, and Cass River in the county of Tuscola, by depositing or attempting to deposit therein any beet pulp or other waste matter of any kind or character liable to decomposition.

SEC. 2. Any person, firm, or corporation, or any agent or employe of such firm or corporation, found guilty of a violation of this act shall be punished by a fine of not less than one hundred fifty dollars, or more than three hundred dollars, or by imprisonment in the county jail for not less than three months nor more than six months, or by both such fine and imprisonment in the discretion of the court.

MISSISSIPPI.

[Annotated Code of the General Statute Laws (Thompson, Dillard & Campbell).]

SEC. 1326 (under "Crimes and misdemeanors"). If any person shall in any manner permanently obstruct any of the navigable waters, or shall place any obstruction therein and not remove the same within a reasonable time, or if any person shall pollute any such waters by putting therein the carcass of any dead animal, or any refuse or foul matter, or any matter or thing calculated to render the water thereof less fit for drink or the sustenance of fish, the person so offending, in either case, shall be guilty of a misdemeanor, and, on conviction, shall be punished by a fine of not more than fifty dollars, or by imprisonment in the county jail not more than thirty days, or both; but this shall not apply to the Mississippi or Yazoo rivers.

[Amended; Laws of 1898, chap. 89, p. 101.]

Exception of Mississippi and Yazoo rivers dropped out, and the following clause added: "But this act shall not be so construed as to prevent any city or town in this State from constructing sewers so as to empty into any navigable streams of water in this State." (Approved February 10, 1898.)

NEBRASKA.

[Compiled Statutes of Nebraska, 1897.]

SEC. 6892 (Criminal Code, sec. 229). *Putting offensive matter into well or spring.*—If any person or persons shall put any dead animal, carcass, or part thereof, or other filthy substance, into any well, or into any spring, brook, or branch of running water, of which use is

made for domestic purposes, every person so offending shall be fined in any sum not less than two nor more than forty dollars.

SEC. 6893 (230). If any person or persons shall put the carcass of any dead animal, or the offals from any slaughterhouse or butcher's establishment, packing house, or fish house, or any spoiled meats or spoiled fish, or any putrid animal substance, or the contents of any privy vault, upon or into any river, bay, creek, pond, canal, road, street, alley, lot, field, meadow, public ground, market space, or common * * * he shall be fined in any sum not less than one nor more than fifty dollars.

NORTH DAKOTA.

[Revised Codes of North Dakota, 1899.]

SEC. 7291 (Penal Code, sec. 435). *Fouling water with gas tar.*—Every person who throws or deposits any gas tar or refuse of any gas house or factory into any public waters, river, or stream, or into any sewer or stream emptying-into any such public waters, river, or stream, is guilty of a misdemeanor.

[Chap. 69. Fouling the public waters of this State.]

SEC. 7653. *Fouling public waters.*—Every person who deposits or places or causes to be deposited or placed any dead animal, offal, or other refuse matter offensive to the sight or smell or deleterious to health upon the banks or in the waters of any lake or stream, so far as the same is within the jurisdiction of the State is guilty of a misdemeanor, and upon conviction thereof is punishable by a fine of not less than twenty and not exceeding one hundred dollars.

SEC. 7654. *Extent of last section.*—The provisions of the last section shall be construed to include privies and privy vaults and any stable, shed, pen, yard, or corral wherein is kept any horse, cattle, sheep, or swine and located nearer than sixty feet from the top of the bank of such lake or stream, and also any slaughter house, grave, graveyard, or cemetery located nearer than eighty feet therefrom. But the provisions of said section shall not be construed to prevent any incorporated city within this State from running its sewers into any river: *Provided*, That where there is a dam across said river within the corporate limits of any such city, any such sewer shall connect with such river below such dam.

OKLAHOMA.

[Wilson's Revised and Annotated Statutes of Oklahoma, vol. 1, p. 894.]

SEC. 3732. From "An act to prevent public nuisances and fixing penalties for maintaining the same."

SEC. 16. It shall be unlawful for any person or persons or corporations to put any dead animal, carcass, or part thereof into any well, spring, brook, or branch of running water of which use is made for domestic purposes. Every person or persons so offending shall, on conviction thereof, be fined in any sum not less than five nor more than one hundred dollars.

SEC. 3733. Any person or persons or corporations who shall put any dead animal or any part of the carcass of a dead animal into any river, creek, or pond shall, upon conviction thereof, be fined in any sum not less than two nor more than twenty-five dollars.

SEC. 2344. Every person who throws or deposits any gas tar or refuse of any gas house or factory into any public waters, river, or stream, or into any sewer or stream emptying into any such public waters, river, or stream is guilty of a misdemeanor.

RHODE ISLAND.

[Revision of 1896, sec. 10; p. 977.]

OFFENCES AGAINST THE PERSON.

SEC. 16. Every person who shall mingle any poison with any food, drink, or medicine, with intent to kill or injure any person, and every person who shall wilfully poison any spring, well, or reservoir of water with such intent shall be imprisoned for life or for any term of years.

[Laws of Rhode Island, 1904, chap. 1222, p. 33.]

AN ACT for the better protection of the shell fisheries in the public waters of this State.

SEC. 1. No person shall deposit in, or allow to escape into, or shall cause or permit to be deposited in, or allowed to escape into any of the public waters of this State any substance which shall in any manner injuriously affect the growth of the shellfish in or under said waters, or which shall in any manner affect the flavor or odor of such shellfish so as to injuriously affect the sale thereof, or which shall cause any injury to the public and private fisheries of this State.

SEC. 2. Any person violating any of the provisions of this act shall, upon conviction thereof, be fined not less than five hundred dollars or more than two thousand dollars; one-half thereof to the use of the complainant and one-half thereof to the use of the State: *Provided*, That in case of conviction upon prosecution by the commissioners of shell fisheries the whole of any fine imposed shall go to the use of the State.

SEC. 3. Every person violating any of the provisions of this act shall be liable to pay to the party injured by such violation double

the amount of damages caused thereby, to be recovered in an action of the case in any court of competent jurisdiction. It shall not be necessary, before bringing suit for the recovery of such damages, for a criminal prosecution to have been first instituted for the violation of the provisions of this act, nor shall the recovery of damages under this section be a bar to such criminal prosecution.

SEC. 4. It shall be the duty of the commissioners of shell fisheries to investigate all complaints made to them of the violation of any of the provisions of this act. For the purpose of such investigation said commissioners may make examination of the premises, hold public hearings, summon witnesses, and take testimony under oath, and they shall have power to punish, by fine or imprisonment or both, all contempt of their authority in any hearing before them. They may employ professional or expert services as they may deem desirable.

SEC. 5. It shall be the duty of the shell fish commissioners to prosecute any person in their opinion guilty of the violation of any of the provisions of this act, and in all such prosecutions said commissioners shall not be required to enter into any recognizance or to give surety for costs. It shall be the duty of the attorney-general to conduct the prosecution of all cases brought by said commissioners under the provisions of this act. Complaints may also be brought and prosecuted by any citizen for any violation of its provisions.

SEC. 6. The expenses incurred by the commissioners of shell fisheries in the performance of the duties imposed upon them by this act shall be paid by the general treasurer out of any funds in the treasury not otherwise appropriated, upon the presentation of vouchers therefor duly certified by their chairman.

SEC. 7. All provisions of the General Laws, of the Public Laws, and of any special law inconsistent herewith are hereby repealed, and this act shall take effect upon its passage.

[Laws of Rhode Island, 1904, chap. 1178, p. 58.]

AN ACT to prevent pollution of the sources of the water supply of the cities of Pawtucket and Woonsocket and the towns of Bristol and East Providence.

SEC. 1. Section 1 of chapter 491 of the Public Laws is hereby amended so as to read as follows:

“SEC. 1. No person shall throw or discharge, or suffer to be discharged from land owned, occupied, or controlled by him, into any stream, pond, or reservoir used as a source of water supply by the city of Woonsocket, the city of Pawtucket, the city of Newport, the town of Bristol, the town of Warren, the town of East Providence, the town of Narragansett, the town of Jamestown, the East Greenwich fire district, or by any water company supplying water for domestic use in any of said cities or towns, or into any tributary or

feeder of any such stream, pond, or reservoir, any sewerage, drainage, refuse, or noxious or polluting matter of such nature as will corrupt or impair the quality of the waters of said stream, pond, or reservoir, or render the same injurious to health, which water shall be of the recognized standard of purity to be determined by the State board of health or other recognized authority. But the provisions of this section shall not interfere with or prevent the enriching of land for agricultural purposes by the owner or occupant thereof if no human excrement is used thereon. Any person violating the provisions of this section shall be punished for each offence by a fine of fifty dollars or by imprisonment for not to exceed thirty days or by both such fine and imprisonment.

SEC. 2. Section 2 of chapter 491 is hereby amended so as to read as follows:

“SEC. 2. The State board of health or the secretary of said board, when satisfied that any sewerage, drainage, or refuse or polluting matter exists in a locality such that there is danger that said sewerage, drainage, or refuse or polluting matter may corrupt or impair the quality of said waters or render them injurious to health, may order the owner or occupant of the premises where said sewerage, drainage, or refuse or polluting matter exists to remove the same from said premises within such time after the serving of the notice prescribed in the next succeeding section as said board or secretary may designate; and if the owner or occupant neglects or refuses so to do he shall be fined twenty dollars for each day during which he permits said sewerage, drainage, or refuse or polluting matter to remain upon said premises after the time prescribed for the removal thereof.”

SEC. 3. Section 3 of chapter 491 is hereby amended so as to read as follows:

“SEC. 3. Such notice shall be in writing, signed by the secretary of the State board of health or the person performing the duties of that official, and shall be served by any sheriff, deputy sheriff, or constable by reading the same in the presence or hearing of the owner, occupant, or his authorized agent, or by leaving a copy of the same in the hands or possession of, or at the last and usual place of abode of, said owner, occupant, or agent if within this State: *Provided, however,* That if said owner, occupant, or agent be a corporation incorporated in this State, said notice shall be served by leaving a copy thereof at the last and usual place of abode of the president or person performing the duties of president of said corporation. But if said premises are unoccupied, or the residence of the owner is unknown or without this State, or if the said owner is a corporation incorporated without this State, the notice may be served by posting a copy of the same on the premises and by advertising the same in some newspaper published in Providence County in such manner and for such length

of time as the State board of health or the Secretary thereof may determine."

SEC. 4. Section 4 of chapter 491 is hereby amended so as to read as follows:

"SEC. 4. The secretary of the State board of health, when so directed by said board, shall prosecute for all violations of this chapter and shall not be required to give surety for costs upon complaints made by him; but the cities of Woonsocket and Pawtucket and the towns of Bristol and East Providence shall be directly liable to the State for the costs incurred in the prosecution for violation of this chapter in their respective cases."

SEC. 5. Section 5 of chapter 491 is hereby amended so as to read as follows:

"SEC. 5. The appellate division of the supreme court, upon the application of the mayors of said cities or the presidents of the town councils of said towns, or upon the application of the secretary of the State board of health, may issue an injunction to enforce the orders of the State board of health, or the secretary thereof, provided for in this chapter."

SEC. 6. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall take effect upon its passage.

Passed April 12, 1904.

WISCONSIN.

[Wisconsin Statutes, 1898, p. 651.]

POWERS OF COUNCIL IN CITIES UNDER GENERAL LAW.

57. To provide for the preservation of any harbor within or of the city; prevent any use of the same or of such part of any lake, river, stream, spring, or pond as is within the city, or any action in relation thereto inconsistent with or detrimental to the public health or calculated to render the water of the same or any part thereof impure or offensive; or tending in any degree to fill up and obstruct the same; prohibit and punish the casting or depositing therein of any earth, dead animals, ashes, or other substance, or filth, logs, or floating matter. * * *

PRESERVATION OF PUBLIC HEALTH.

[Idem, p. 1065.]

SLAUGHTERHOUSES. SEC. 1418. No person shall erect, maintain, or keep any slaughterhouse upon the bank of any river, running stream, or creek, or throw or deposit therein any dead animal or any part thereof or any of the carcass or offal therefrom, nor throw or deposit the same into or upon the banks of any river, stream, or creek which

shall flow through any city, village, or organized town containing two hundred or more inhabitants, or erect, maintain, or use any building for a slaughterhouse within the limits of any village, incorporated or unincorporated, or at any place within one-eighth of a mile of any dwelling house or a building occupied as a place of business; and every person who shall violate any of the provisions of this section shall forfeit for each such violation not less than ten dollars nor more than one hundred dollars; and the mayor of the city, president of the village, and the chairman of the town in which any such slaughterhouse is located shall have the power to and shall cause the same to be immediately removed; and every such officer who shall knowingly permit any such slaughterhouse to be used or maintained contrary to the provisions of this section shall forfeit not less than fifteen dollars nor more than fifty dollars. In any county containing a population of one hundred thousand or over all the provisions of this section relating to slaughterhouses shall apply to all establishments and manufactories in which dead animals or any part thereof or any of the carcasses or offal therefrom are collected and converted into marketable products.

OFFENSES AGAINST LIVES AND PERSONS.

[Idem, p. 2669.]

SEC. 4384. *Poisoning food, drink, etc.*—Any person who shall mingle any poison with any food, drink, or medicine, with intent to kill or injure any other person, or who shall wilfully poison any spring, well, or reservoir of water with such intent, shall be punished by imprisonment in the State prison not more than ten years nor less than one year.

[Laws of Wisconsin, 1905, chap. 402.]

AN ACT to amend section 4567 of the statutes of 1898, as amended by chapter 325, laws of 1903, prohibiting depositing of deleterious substances in waters and providing a penalty.

SEC. 1. Section 4567 of the statutes of 1898, as amended by chapter 325, laws of 1903, is hereby amended by adding after the words, "decayed wood," where they occur in line 14 of chapter 325, laws of 1903, the words: "Sawdust, sawmill offal, and planing mill shavings;" also by adding after the word "paper" where it occurs in line 16 of chapter 325, laws of 1903, the words "beet sugar;" further amend by striking out the word "or" in line 20, all of lines 21, 22, 23, 24, and 25, and the words "mill shavings" in line 26 of chapter 325, laws of 1903; also further amend by adding after the word "mouth," where it occurs in line 30 of chapter 325, laws of 1903, the words "nothing in this section shall apply to the following streams: The Kickapoo River, the Pine River in Richland County, Balsam branch

in Polk County, the Chippewa River from mouth of Thornapple River to its mouth, Flambeau River from dam at Ladysmith to its mouth, Black River from Falls Dam down, in Jackson County, and the Wisconsin River from the north boundary line of the city of Rhinelander down to its mouth," so that said section 4567 when so amended shall read as follows:

"SECTION 4567. Any person who shall cast, deposit, or throw overboard from any row, sail, or steam boat or other craft into any of the inland waters of this State or into Green Bay, Sturgeon Bay, and Chequamegon Bay, or deposit or leave upon the ice thereof until it melts, any fish offal, which shall be construed to mean and include the head, intestines, blood, and cleanings of fish and dead fish, or throw or deposit or permit to be thrown or deposited any lime, tanbark, ship ballast, stone, sand, slabs, decayed wood, sawdust, saw-mill offal, and planing-mill shavings, or any acids or chemicals or waste or refuse arising from the manufacture of pulp, paper, or beet sugar, or other substances deleterious to fish life (authorized drainage and sewage from municipalities excepted), into any of the rivers, lakes, or streams of this State, including Green Bay, Chequamegon Bay, Sturgeon Bay, or into any streams wherein there have been planted trout fry, or in which trout naturally abound, shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than four months. (Nothing in this section shall apply to the following streams: The Kickapoo River, the Pine River in Richland County, Balsam branch in Polk County, the Chippewa River from the mouth of Thornapple River to its mouth, Flambeau River from dam at Ladysmith to its mouth, the Black River from the Falls Dam down in Jackson County, and the Wisconsin River from the north boundary line of the city of Rhinelander down to its mouth.) The fact of any fisherman coming to the shore with dressed fish in his boat and without the offal produced by such dressing shall be prima facie evidence of the violation of the first clause of this section."

SEC. 2. All acts or parts of acts inconsistent with or in conflict with the provisions of this act are hereby repealed.

SEC. 3. This act shall take effect and be in force from and after its passage and publication.

Approved, June 17, 1905.

CLASS II. STATES WITH GENERAL RESTRICTIONS.

This group consists of those States and Territories in which the importance of pure water for every inhabitant of the State or Territory for drinking and domestic purposes has received legislative

recognition. It will be noted that the laws are general in their application, varying much in the elaborateness of the wording and in the emphasis laid upon the remedies and penalties provided for infractions of the law.

This class logically includes all States not included in Class I, but inasmuch as certain States have recently adopted stringent and elaborate methods, novel and extraordinary in their character, to restore and protect the purity of their navigable and potable waters, these States have been omitted from Class II and are treated in a class by themselves, forming Class III (see p. 57).

CALIFORNIA.

[Penal code as in force at the close of the session of 1901.]

SEC. 374. *Putting dead animals in streets, rivers, etc.*—Every person who puts the carcass of any dead animal, or the offal from any slaughter pen, corral, or butcher shop into any river, creek, pond, reservoir, stream, street, alley, public highway, or road in common use, or who attempts to destroy the same by fire within one-fourth of a mile of any city, town, or village, except it be in a crematory, the construction and operation of which is satisfactory to the board of health of such city, town, or village; and every person who puts any water-closet or privy, or the carcass of any dead animal, or any offal of any kind in or upon the borders of any stream, pond, lake, or reservoir from which water is drawn for the supply of the inhabitants of any city, city and county, or any town in this State, so that the drainage for such water-closet, privy, or carcass, or offal may be taken up by or in such stream, pond, lake, or reservoir; or who allows any water-closet or privy, or carcass of any dead animal, or any offal of any kind to remain in or upon the borders of any such stream, pond, lake, or reservoir within the boundaries of any land owned or occupied by him, so that the drainage from such water-closet, privy, carcass, or offal may be taken up by or in such stream, pond, lake, or reservoir, or who keeps any horses, mules, cattle, swine, sheep, or live stock of any kind penned, corralled, or housed on, over, or on the borders of any such stream, pond, lake, or reservoir, so that the waters thereof become polluted by reason thereof, or who bathes in any such stream, pond, lake, or reservoir, or who by any other means fouls or pollutes the waters of any such stream, pond, lake, or reservoir is guilty of a misdemeanor, and upon conviction thereof shall be punished as described in section 377. (Commissioners' amendments, approved March 16, 1901; took effect July 1, 1901.)

SEC. 374½. *Discharging coal tar, etc., into waters.*—Every person, firm, association, or corporation which shall discharge or deposit, or

shall cause or suffer to be discharged or deposited, or to pass in or into the waters of any navigable bay or river in this State any coal tar or refuse or residuary product of coal, petroleum, asphalt, bitumen, or other carbonaceous material or substance is guilty of a misdemeanor, and for each offense is punishable by imprisonment in the county jail for not exceeding one year or by fine not exceeding \$1,000 or by both such fine and imprisonment. (New section, approved March 25, 1901; took effect immediately. Statutes, 1901, p. 813.)

[Statutes of California, 1905, chap. CXXXV, p. 138.]

AN ACT to amend the penal code of the State of California by adding a new section thereto, to be numbered section 377b, making it a misdemeanor to refuse or neglect to conform to the rules, orders, and regulations of the State board of health, concerning the pollution of water, used or intended to be used for human or animal consumption:

SEC. 1. A new section to be numbered section 377b is hereby added to the penal code of the State of California, to read as follows:

377b. Any person who shall violate or refuse or neglect to conform to any sanitary rule, order, or regulation prescribed by the State board of health for the prevention of the pollution of springs, streams, rivers, lakes, wells, or other waters used or intended to be used for human or animal consumption shall be guilty of a misdemeanor.

SEC. 2. All acts and parts of acts inconsistent or in conflict with this act are hereby repealed.

SEC. 3. This act shall take effect immediately. (Act of March 18, 1905.)

[Statutes of California, 1905, Chap. CXXXVI, p. 138.]

AN ACT To amend the penal code of the State of California by adding a new section thereto, to be numbered section 377c, making it a misdemeanor to refuse or neglect to conform to the rules, orders, and regulations of the State board of health, concerning the pollution of ice used or intended for public consumption.

SEC. 1. A new section, to be numbered 377c, is hereby added to the penal code of the State of California, to read as follows:

377c. Any person who shall violate, or refuse or neglect to conform to any sanitary rule, order, or regulation prescribed by the State board of health for the prevention of the pollution of ice or the sale or disposition of polluted ice offered, kept, or intended for public use or consumption, shall be guilty of a misdemeanor.

SEC. 2. All acts and parts of acts inconsistent or in conflict with this act are hereby repealed.

SEC. 3. This act shall take effect immediately. (Act of March 18, 1905.)

COLORADO.

[Mills' Annotated Statutes, 1891, p. 949.]

SEC. 1376. *Polluting streams—penalty.*—If any person or persons shall hereafter throw or discharge into any stream of running water or into any ditch or flume in this State any obnoxious substance, such as refuse matter from slaughterhouse or privy, or slops from eating houses or saloons, or any other fleshy or vegetable matter which is subject to decay in the water, such person or persons shall, upon conviction thereof, be punished by a fine not less than one hundred dollars nor more than five hundred dollars for each and every offense so committed.

SEC. 1357 provides a penalty not exceeding five hundred dollars for anyone “who shall in anywise pollute or obstruct any water course, lake, pond, marsh, or common sewer, or continue such obstruction or pollution so as to render the same offensive or unwholesome,” &c.

SEC. 3330 (p. 1861). *Emptying oil into the waters of the State a misdemeanor—penalty.*

AN ACT To prohibit the emptying or running of oil or petroleum, or other oleaginous substance into any waters of this State, and to impose a penalty for the violation of this act.

[Laws, 1889, p. 287, approved March 7, 1889, in force June 7, 1889.]

If any person or persons, corporation or corporations shall hereafter empty or cause to be emptied, or allow the emptying or flowing of oil, petroleum, or other oleaginous substance into any of the waters of this State, or deposit or cause the same to be deposited at such distance that the same may be carried into such waters by natural causes, such person or persons, corporation or corporations so offending shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding one thousand dollars, or imprisonment in the county jail not exceeding six months, or both such fine and imprisonment, for each such offense.

ILLINOIS.

[Hurd's Revised Statutes, 1901, sec. 202, p. 627.]

Whoever willfully and maliciously defiles, corrupts, or makes impure any spring or other source of water or reservoir * * * shall be fined not exceeding one thousand dollars or confined in a county jail not exceeding one year.

Page 631, section 221, makes it a public nuisance—

1. To cause or suffer the carcass of any animal or any offal, filth, or noisome substance to be collected or deposited or to remain in any place to the prejudice of others.

2. To throw or deposit any offal or other offensive matter, or any carcass of any dead animal, in any water course, lake, pond, spring, well, or common sewer, street, or public highway.

3. To corrupt or render unwholesome or impure the water of any spring, river, stream, pond, or lake to the injury or prejudice of others.

INDIANA.

[Burns's Annotated Statutes, 1904.]

SEC. 2156. *Nuisance by dead animals.*—Whoever puts the carcass of any dead animal or the offal from any slaughterhouse or butcher's establishment, packing house, or fish house, or any spoiled meats or spoiled fish, or any putrid animal substance, or the contents of any privy vault upon or into any river, pond, canal, lake, public ground, market place, common, field, meadow, lot, road, street, or alley, and whoever, being the owner or occupant of any such place, knowingly permits any such thing to remain therein to the annoyance and injury of any of the citizens of the State, or neglects or refuses to remove or abate the nuisance occasioned thereby within twenty-four hours after knowledge of the existence of such nuisance upon any of the above described premises owned or occupied by him, or after notice thereof, in writing, from any health officer of the city or the trustee of the township in which such nuisance exists, shall be fined not more than one hundred dollars nor less than one dollar.

SEC. 2169. Whoever maliciously or mischievously puts any dead animal carcass or part thereof on, or any other putrid, nauseous, noisome, or offensive substance into, * * * or in any manner befouls any well, cistern, spring, brook, canal, or stream of running water, or any reservoir of waterworks of which any use is made or may be made for domestic purposes shall be fined not more than one hundred dollars nor less than five dollars, to which may be added imprisonment in the county jail not more than sixty days nor less than ten days.

(The foregoing section is repealed by the act of 1905 hereafter quoted.)

SEC. 3538. *Streams and ferries.*—The common council shall have exclusive power to keep open streams, and preserve, and, if necessary and expedient, change the course of rivers passing through or bordering upon the corporate limits of such city; to prevent encroachment or injury to the banks thereof, or the casting into the same of offal, dead animals, logs, or rubbish. * * *

[Acts of 1901, Chap. LXI, p. 96.]

AN ACT prohibiting the discharge of waste water and refuse of manufacturing establishments into streams of water, conferring certain powers upon the State board of health in such cases, providing penalties for the violation thereof, and declaring an emergency.

SECTION 1. *Be it enacted by the general assembly of the State of Indiana,* That it shall be unlawful for any person, firm, or corporation owning or operating any manufacturing establishment to discharge or permit to be discharged into any stream of water any waste water or refuse from said factory of such character as to pollute said stream, except by and in pursuance to a written permission so to do, first obtained from the State board of health as hereinafter provided.

SEC. 2. Whenever any person, firm, or corporation owning or operating a manufacturing establishment shall file with the secretary of the State board of health a verified application in writing, asking permission to be allowed to discharge into any stream any waste water or refuse from such establishment, and showing therein that the water of said stream is at such stage as that such refuse or waste water may be safely discharged into such stream without injury to the public, it shall be the duty of such board to inspect the said stream at and below the point of such proposed discharge, and if it is found that such refuse and waste water may be safely discharged therein without injury as aforesaid, the said board may, in its discretion, grant and issue a written permit allowing such discharge into said stream for a time to be limited therein, which permit shall be void and of no effect after the time so fixed, and may be revoked by said board at any time. The holder of any such permit regularly issued by such board shall be authorized to discharge any such refuse or waste water into such stream during the time fixed and limited in such permit, and shall not be liable therefor in any suit at law or in equity: *Provided,* That nothing herein contained shall prevent any person specially damaged by any such discharge from recovering the amount of such special damages so sustained in an action at law brought for such purpose.

SEC. 3. Any person, firm, or corporation violating any of the provisions of this act shall be fined in any sum not less than twenty-five dollars nor more than five hundred dollars.

SEC. 4. Whereas an emergency exists for the immediate taking effect of this act, the same shall be in force on and after its passage.

[Laws of 1905, chap. 169, p. 584.]

SEC. 553. *Befouling water.*—Whoever maliciously or mischievously puts any dead animal, carcass, or part thereof, or any other putrid, nauseous, noisome, or offensive substance into, or in any manner be-

fouls any well, cistern, spring, brook, canal, or stream of running water, or any reservoir of waterworks, of which any use is or may be made for domestic purposes, shall, on conviction, be fined not less than five dollars nor more than one hundred dollars, to which may be added imprisonment in the county jail not less than ten days nor more than sixty days.

SEC. 689. *Repeal.*—All laws within the purview of this act are hereby repealed; but this repeal shall not affect any prosecutions pending or offenses heretofore committed under existing laws, and such prosecutions and offenses shall be continued and prosecuted to a final determination, as if this act had not passed; nor shall this repeal affect the enforcement of any fine or penalty or other punishment provided as a punishment for the violation of any civil statute; nor shall this act be construed to repeal any act passed at this session of the general assembly.

(Approved March 9, 1905.)

MAINE.

[Laws of 1891, chap. 82, p. 67.]

AN ACT to protect waters used for domestic purposes.

SEC. 1.^a Whoever knowingly and willfully poisons, defiles, or in any way corrupts the waters of any well, spring, brook, lake, pond, river, or reservoir used for domestic purposes for man or beast, or knowingly corrupts the sources of the water supply of any water company or of any city, town, or municipal corporation supplying its inhabitants with water, or the tributaries of said sources of supply, in such manner as to affect the purity of the water so supplied, or knowingly defiles such water in any manner, whether the same be frozen or not, or puts the carcass of any dead animal or other offensive material into said waters or upon the ice thereof, shall be punished by a fine not exceeding one thousand dollars or by imprisonment not exceeding one year.

SEC. 2. Whoever shall willfully injure any of the property of any water company or of any city, town, or municipal corporation used by it in supplying water to its inhabitants shall be punished by a fine not exceeding one thousand dollars or by imprisonment not exceeding one year, and such person shall also forfeit and pay to such water company, city, or town three times the amount of actual damages sustained, to be recovered in an action of the case. (As amended by the laws of 1905, Chap. 93, p. 97.)

SEC. 3. Inconsistent acts repealed.

^a As amended by laws of 1905, chap. 97, p. 100.

[Laws of 1903, Special Laws, chap. 94, p. 156.]

AN ACT to prevent the pollution of the waters of Sebago Lake.

SEC. 1. No person or corporation shall use or occupy any structure hereafter built upon or near the shores of Sebago Lake, in the county of Cumberland, or upon any of the islands of said lake for such purposes or in such manner that the sewage or drainage therefrom shall enter the waters of said lake or pollute the same.

SEC. 2. No sewage, drainage, refuse, or polluting matter of such kind and amount as either by itself or in connection with other matter will corrupt or impair the quality of the water of said Sebago Lake or render it injurious to health shall be discharged into said lake, but nothing herein shall prohibit the cultivation and use of the soil in the ordinary methods of agriculture if no human excrement is used thereon within three hundred feet of the shores of said lake.

SEC. 3. The supreme judicial court shall have jurisdiction in equity to enjoin, prevent, or restrain any violation of the provisions of this act.

SEC. 4. This act shall take effect when approved.

Approved February 26, 1903.

MARYLAND.

[Poe's Maryland Code, adopted March 14, 1888.]

RIVERS.

SEC. 240. If any ballast, ashes, filth, earth, soil, oysters, or oyster shells be taken, unladen, or cast out of any ship, steamboat, scow, punga, or other vessel, on any pretense whatever, in the Chesapeake Bay above "Sandy Point," or in the waters of Herring Bay, or in any river, creek, or harbor within this State, below high-water mark, the master or other person having charge of such vessel shall, upon conviction thereof, be fined.

Waters of Potomac River above the canal dam near the mouth of Wills Creek are protected by section 242 against pollution calculated to render the waters of said river "impure or unfit for use."

WATER SUPPLY—POLLUTION OF SOURCES OF.

[Passed in 1886, chap. 6.]

SEC. 277. If any person shall put, or cause to be placed, any dead animal or part of the carcass of any dead animal, or any decayed or filthy animal or vegetable matter, into any stream, or the tributary of any stream, well, spring, reservoir, pond, or other source from which water or ice is drawn, taken, or used for drinking or domestic purposes, or shall knowingly suffer any sewage, washings, or other

offensive matters from any privy, cesspool, factory, trades establishment, slaughterhouse, tannery, or other place over which he shall have control, to flow therein, or into any drain or pipe communicating therewith, whereby the water supply of any city, town, village, community, or household is fouled or rendered unfit for drinking and domestic purposes, he shall be guilty of a misdemeanor and shall, upon conviction thereof in a court of competent jurisdiction, be fined not more than two hundred dollars for every such offence; and after reasonable notice, not exceeding fifteen days, from the State board of health, or any local sanitary authority, to discontinue the act whereby such water supply is fouled, a further sum of not more than fifty dollars for every day during which the offence is continued.

MISSOURI.

[Revised Statutes, 1899.]

CRIMES AND PUNISHMENTS.

SEC. 2234. *Putting dead animals in well, &c.*—If any person or persons shall put any dead animal, carcass, or part thereof, the offal, or any other filth into any well, spring, brook, branch, creek, pond, or lake, every person so offending shall, on conviction thereof, be fined in any sum not less than ten nor more than one hundred dollars. If any person shall remove, or cause to be removed and placed * * * in any of the streams and water courses other than the Missouri or Mississippi River, any dead animal, carcass, or part thereof, or other nuisance, to the annoyance of the citizens of this State, or any of them, every person so offending shall, upon conviction thereof, be fined for every such offence any sum not less than ten dollars nor more than fifty dollars, and if such nuisance be not removed within three days thereafter, it shall be deemed a second offence against the provisions of this section.

SEC. 2235. *Corrupting or diverting water supply.*—Whoever willfully or maliciously poisons, defiles, or in any way corrupts the water of a well, spring, brook, or reservoir used for domestic or municipal purposes, or whoever willfully or maliciously diverts, dams up, and holds back from its natural course and flow any spring, brook, or other water supply for domestic or municipal purposes, after said water supply shall have once been taken for use by any person or persons, corporations, town, or city for their use, shall be adjudged guilty of a misdemeanor and punished by a fine not less than fifty nor more than five hundred dollars, or by imprisonment in the county jail not exceeding one year, or by both such fine and imprisonment, and shall be liable to the party injured for three times the actual damage sustained, to be recovered by suit at law.

SEC. 1974. *Injury to schoolhouses and church buildings.*—Every person * * * who shall in any manner pollute the water contained in any well, cistern, or reservoir (in which water is gathered or kept for the supply of a schoolhouse or those attending the same) shall be guilty of a misdemeanor.

[Section 28 of House bill No. 15, laws of 1905, p. 163.]

AN ACT relating to the preservation, propagation, and protection of game animals, birds, and fish; creating the office of game and fish warden; creating a game protection fund, and appropriating money therefrom.

SEC. 28. It shall be unlawful for any person or persons, firm, or corporation to suffer or permit any dyestuff, coal tar, oil, sawdust, poison or deleterious substances to be thrown, run, or drained into any of the waters of this State in quantities sufficient to injure, stupefy, or kill fish which may inhabit the same at or below the point where any such substances are discharged or permitted to flow or thrown into such waters. Any person or persons, firm, or corporation offending against any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than \$200.00 nor more than \$500.00 for each offense.

Approved March 10, 1905.

NEVADA.

[General Statutes of Nevada.]

SEC. 4617. (Crimes and punishments, sec. 54.) * * * Every person who shall willfully poison any spring, well, or reservoir of water shall, upon conviction thereof, be punished by imprisonment in the State prison for a term not less than one nor more than ten years.

Sawdust in rivers.—It is made a misdemeanor to deposit sawdust in or on the waters of any lake, river, or running stream by laws of 1889, page 24, Chapter XV.

[Laws of Nevada, 1903, Chap. CXXII, p. 214.]

AN ACT to prevent the pollution or contamination of the waters of the lakes, rivers, streams, and ditches in the State of Nevada, prescribing penalties, and making an appropriation to carry out the provisions of this act. (Approved March 20, 1903.)

The people of the State of Nevada, represented in senate and assembly, do enact as follows:

SECTION 1. *Unlawful to pollute any body of water.*—Any person or persons, firm, company, corporation, or association in this State, or

the managing agent of any person or persons, firm, company, corporation, or association in this State, or any duly elected, appointed, or lawfully created State officer of this State, or any duly elected, appointed, or lawfully created officer of any county, city, town, municipality, or municipal government in this State, who shall deposit, or who shall permit or allow any person or persons in their employ or under their control, management, or direction to deposit in any of the waters of the lakes, rivers, streams, and ditches in this State any sawdust, rubbish, filth, or poisonous or deleterious substance or substances liable to affect the health of persons, fish, or live stock, or place or deposit any such deleterious substance or substances in any place where the same may be washed or infiltrated into any of the waters herein named, shall be deemed guilty of a misdemeanor, and upon conviction thereof in any court of competent jurisdiction shall be fined in any sum not less than fifty dollars nor more than five hundred dollars, exclusive of court costs: *Provided*, That in cases of State institutions, municipalities, towns, incorporated towns or cities, when, owing to the magnitude of the work, immediate correction of the evil is impracticable, then in such cases the authorities shall adopt all new work, and as rapidly as possible reconstruct the old systems of drainage, sewerage, and so as to conform with the provisions of this act: *And provided further*, That all such new and reconstructed systems shall be completed within four years from the date of passage hereof: *Provided*, That nothing in this act shall be so construed as to permit mining or milling companies to dump tailings directly into any stream in this State so as to prevent or impede the natural flow of such stream. Nothing in this act shall be so construed as to apply to any quartz mill or ore reduction works in this State.

SEC. 2. For the purposes of this act the word "ditch" shall be construed to mean any ditch, canal, channel, or artificial waterway used for carrying or conducting water into any reservoir from which it may be used or distributed for domestic purposes to any person in this State, or to any person in any county, city, town, or municipality in this State.

SEC. 3. The sum of three thousand dollars is hereby appropriated out of any money in the State treasury, not otherwise appropriated, subject to the disposal of the governor of this State, for the purpose of enforcing the provisions of this act, either in the courts of this State or in the courts of the United States, such expenditure to be allowed and paid as other claims against the State are allowed and paid.

SEC. 4. This act shall take effect and be in force from and after the first day of July, A. D. nineteen hundred and four.

NEW MEXICO.

[Compiled laws, act of March 16, 1897.]

STREAMS AND LAKES.

SEC. 54. It shall not be lawful for any person or persons to throw or cast the dead body or carcass of any animal or fowl, or to run or empty any sewers or other polluted or befouled substances into any river, stream, lake, pond, reservoir, ditch, or any water course, or to in any manner or by any means pollute or befoul the waters thereof, within this Territory, so as to render the same unwholesome or offensive or dangerous to the health of the inhabitants of any community or of any person having the right to use and who uses the same, for drinking or domestic purposes, or that may render such waters unfit or dangerous for watering stock, or for agricultural or horticultural purposes.

SEC. 55. That the polluting of waters in any of the manners above specified is hereby declared to be a public nuisance, which shall be immediately removed by the person or persons creating the same, upon the demand of any public officer or of any person or persons, who may have a right to the use of said waters.

SEC. 56. That any person or persons violating any of the provisions of sec. 54 may be tried therefor before any justice of the peace of the county where the offence is committed, and upon conviction thereof shall be punished by a fine in any sum not less than ten dollars nor more than one hundred dollars, or by imprisonment in the county jail for any period of time not less than ten days nor more than sixty days, or by both fine and imprisonment. And in addition thereto the justice of the peace shall direct the sheriff of the county or the constable of the precinct to relieve such nuisance, at the expense of the person or persons creating the same, which said expenses shall be taxed as other costs against the person or persons so offending, and shall be collected in the manner provided by law for the collection of costs in criminal cases.

[Laws of 1899, chap. 79, p. 175.]

AN ACT to amend section 54 of the compiled laws of 1897. (Approved March 16th, 1899.)

Be it enacted by the legislative assembly of the Territory of New Mexico:

SECTION 1. That section 54 of the compiled laws of 1897 be, and the same is hereby, amended to read as follows:

SEC. 54. It is hereby made unlawful for any person to cast the dead body of any animal or fowl, or any refuse matter, such as tin

cans, paper, ashes, bones, or other garbage into any running stream, spring, lake, pond, reservoir, ditch, or water course, or to run or empty any sewer or other foul substance into the same, or in any other manner or means to pollute or foul the said water so as to render the same offensive or dangerous to the health of the inhabitants of any community or of any person having the right to use the same for drinking or domestic purposes, or that may render said waters unfit or unhealthy for watering stock. But it shall be the duty of every person, outside of incorporated towns, cities, or villages, to destroy all domestic refuse and garbage by burning the same; any violation of this section shall be considered a misdemeanor and punished as provided by law.

SEC. 2. All acts and parts of acts in conflict herewith are hereby repealed; and this act shall take effect from and after its passage.

[Laws of 1903, chap. 21, p. 32.]

AN ACT to prevent injury to ditches, pipe lines, reservoirs, and the taking of and befouling of water therefrom. (Approved March 10th, 1903.)

Be it enacted by the legislative assembly of the Territory of New Mexico:

SECTION 1. Any person who shall wilfully and maliciously cut, break, or injure, or who shall by shooting or by damming or obstructing the same cause to break any ditch, flume, pipe line, or reservoir, or any of the attachments or fixtures used in connection therewith, shall be guilty of a misdemeanor and shall be punished by a fine of not less than ten dollars nor more than fifty dollars, or by confinement in the county jail for not more than sixty days, or by both such fine and imprisonment, in the discretion of the court trying the case, except in cases where such pipe line or reservoir is used for the purpose of supplying water to any community, village, town, or city for domestic purposes, in which event the person committing such offence shall be punished by a fine of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than thirty nor more than sixty days, or by both such fine and imprisonment in the discretion of the court trying the case.

SEC. 2. Any person who shall bathe in, or wilfully cast any filth in, any reservoir or ditch used for supplying water for domestic use shall be guilty of a misdemeanor, and upon conviction shall be fined not less than ten dollars or not more than twenty-five dollars

SEC. 3. All acts and parts of acts in conflict herewith are hereby repealed, and this act shall take effect from and after its passage.

NORTH CAROLINA.

[North Carolina Criminal Code and Digest (2d ed.), p. 436.]

SEC. 500. Putting poisonous substance in water for the purpose of killing fish is forbidden.

Laws of 1903, chapter 245, page 321, forbids throwing sawdust into the water courses of Yancey County.

[Laws of North Carolina, 1903, chap. 159, p. 182.]

AN ACT to protect water supplies.

Sections 1 to 10, inclusive, provide a thorough system of inspection and forbid any person or corporation to supply water for the public without taking the precautions therein prescribed.

Sections 11 to 17 are as follows:

SEC. 11. Whoever defiles, corrupts, pollutes any well, spring, drain, branch, brook, or creek, or other source of public water supply used for drinking purposes, in any manner, or deposits the body of any dead animal on the watershed of any such water supply, or allows the same to remain thereon unless the same is buried with at least two feet cover, shall be guilty of a misdemeanor, and fined and imprisoned, in the discretion of the court.

SEC. 12. Whoever shall collect and deposit human excreta on the watershed of any public water supply shall be guilty of a misdemeanor, and punished by fine and imprisonment, in the discretion of the court.

SEC. 13. No person, firm, corporation, or municipality shall flow or discharge sewage into any drain, brook, creek, or river from which a public drinking-water supply is taken, unless the same shall have been passed through some well-known system of sewage purification approved by the State board of health. Any person, firm, corporation, or the officer of any municipality having this work in charge, who shall violate this section shall be guilty of a misdemeanor, and the continued flow and discharge of such sewage may be enjoined by any person.

SEC. 14. That all schools, hamlets, villages, towns, or industrial settlements which are now located or may be hereafter located on the shed of any public water supply not provided with a sewerage system, shall provide and maintain a tub system for collecting human excrement, and provide for removal of the same from the watershed at least twice each week. Every person, firm, corporation, or municipality violating this section shall be guilty of a misdemeanor, and fined or imprisoned, in the discretion of the court.

SEC. 15. No burying ground or cemetery shall be established on the watershed of any public water supply nearer than five hundred yards of the source of supply.

SEC. 16. All water companies now operating under charters from the State or municipalities, which may maintain public water supplies, may acquire by condemnation such lands and rights in land and water as are necessary for the successful operation and protection of their plants, said proceedings to be the same as prescribed by chapter 49, volume 1, of the Code of North Carolina.

SEC. 17. For carrying out the provisions of this act the State board of health is authorized and empowered to have the bacteriological examination made as hereinbefore provided for, and to charge for the same the sum of five dollars (\$5.00) for each examination.

[Laws of 1905, chap. 415.]

AN ACT to establish a State laboratory of hygiene.

SECTION 1. That for the better protection of the public health and to prevent the spread of communicable diseases there shall be established a State laboratory of hygiene, the same to be under the control and management of the State board of health.

SEC. 2. That it shall be the duty of the State board of health to have made in such laboratory monthly examinations of samples from all the public water supplies of the State. The board shall also cause to be made examinations of well and spring waters when in the opinion of any county superintendent of health or any registered physician there is reason to suspect such waters of being contaminated and dangerous to health. The board shall likewise have made in this laboratory examinations of sputum in cases of suspected tuberculosis, of throat exudates in cases of suspected diphtheria, of blood in cases of suspected typhoid and malarial fever, of *faeces* in cases of suspected hook-worm diseases, and such other examinations as the public health may require.

SEC. 3. For the support of the said laboratory the sum of twelve hundred dollars is hereby appropriated and an annual tax of sixty dollars, payable quarterly, by each and every water company, municipal, corporate, and private, selling water to the people, said tax to be collected by the sheriff as other taxes and paid by said sheriff directly to the treasurer of the State board of health, and the printing and stationery necessary for the laboratory to be furnished upon requisition upon the State printer.

SEC. 4. Section seventeen of chapter one hundred and fifty-nine of the laws of one thousand nine hundred and three is hereby repealed.

SEC. 5. This act shall be in force from and after its ratification.

In the general assembly read three times, and ratified this 4th day of March, 1905.

OHIO.

[Bates's Annotated Revised Statutes of Ohio, p. 3343.]

SEC. 6921. *Nuisance.*—Whoever * * * corrupts or renders unwholesome or impure any water course, stream, or water * * * shall be fined not more than five hundred dollars.

SEC. 6923. (*Unlawful deposit of dead animals, offal, &c., into or upon land or water.*)—Whoever puts the carcass of any dead animal, or the offal from any slaughterhouse or butcher's establishment, packing house, or fish house, or any spoiled meat or spoiled fish, or any putrid substance, or the contents of any privy vaults, upon or into any lake, river, bay, creek, pond, canal, road, street, alley, lot, field, meadow, public ground, market place or common, and whoever, being the owner or occupant of any such place, knowingly permits any such thing to remain therein, to the annoyance of any of the citizens of this State, neglects or refuses to remove or abate the nuisance occasioned thereby, within twenty-four hours after knowledge of the existence of such nuisance upon any of the above-described premises, owned or occupied by him, or after notice thereof in writing from any supervisor, constable, trustee, or health officer of any municipal corporation or township in which such nuisance exists, or from a county commissioner of such county, shall be fined not more than fifty dollars nor less than ten dollars and pay the costs of prosecution, and in default of the payment of said fine and costs be imprisoned not more than thirty days; but the provisions hereinbefore made shall not prohibit the depositing of the contents of privy vaults and catch-basins into trenches or pits not less than three feet deep, excavated in any lot, field, or meadow, the owner thereof consenting, outside the limits of any municipal corporations, and not less than thirty rods distant from any dwelling, well, or spring of water, lake, bay, or pond, canal, run, creek, brook, or stream of water, public road or highway: *Provided*, That said contents deposited in said trenches or pits are immediately thereafter covered with dry earth to the depth of at least twelve inches; nor shall said provisions prohibit the depositing of said contents into furrows situate and distinct, as specified for said trenches or pits, provided the same are immediately thereafter wholly covered with dry earth by plowing or otherwise: *And provided also*, That the owner or occupant of the land in which said furrows are plowed consents and is a party thereto: *Provided also*, That the board of health of any municipal corporation may allow said contents to be deposited within corporate limits into trenches or pits or furrows, situate distant and to be covered as aforesaid.

SEC. 6925. *Emptying of coal dirt, petroleum, &c., into lakes, rivers, &c., or permitting same; penalty.*—Whoever intentionally throws or

deposits, or permits to be thrown or deposited, any coal dirt, coal slack, coal screenings, or coal refuse from coal mines, or any refuse or filth from any coal-oil refinery or gas works, or any whey or filthy drainage from a cheese factory, upon or into any of the rivers lakes, ponds, or streams of this State, or upon or into any place from which the same will wash into any such river, lake, pond, or stream; or whoever shall, by himself, agent, or employe, cause, suffer, or permit any petroleum, or crude oil, or refined oil, or any compound or mixture or other product of such well, except fresh or salt water, or residuum of oil or filth from oil well, or oil tank, or oil vat, or place of deposit, of crude or refined oil, to run into, or be poured, or emptied, or thrown into any river, or ditch, or drain, or water course, or into any place from which said petroleum, or crude oil, or residuum, or refined oil, or filth may run or wash, or does run or wash, into any such river, or ditch, or drain, or water course, upon indictment and conviction in the county in which such coal mines, coal-oil refinery, gas works, cheese factory, oil well, oil tank, oil vat, or place of deposit of crude or refined oil are situated, shall be fined in any sum not more than one thousand dollars nor less than fifty dollars.

(*Fine and costs a lien; execution.*)—And such fine and costs of prosecution shall be and remain a lien on said oil well, oil tank, oil refinery, oil vat, and place of deposit, and the contents of said oil well, oil tank, oil refinery, oil vat, or place of deposit until said fine and costs are paid; and said oil well, oil tank, oil refinery, oil vat, or place of deposit, and the contents thereof, may be sold for the payment of such fine and costs upon execution duly issued for that purpose.

SEC. 6927. (*Befouling well, spring, &c.*)—Whoever maliciously puts any dead animal carcass, or part thereof, or any other putrid, nauseous, noisome, or offensive substance into, or in any manner befouls, any well, spring, brook, or branch of running water, or any reservoir of waterworks, of which use is or may be made for domestic purposes, shall be fined not more than fifty nor less than five dollars, or imprisoned not more than sixty days, or both.

[Laws of 1904, house bill 277, p. 135.]

AN ACT to amend section 2433, Revised Statutes of Ohio, for the purpose of preventing the pollution of water and providing penalty therefor.

SEC. 1. That section 2433, Revised Statutes of Ohio, be, and the same is hereby, amended to read as follows:

“SEC. 2433. The jurisdiction of any municipal corporation to prevent the pollution of its water supply and to provide penalty therefor shall extend twenty miles beyond the corporation limits. Whoever pollutes any running stream, the water of which is used for domestic purposes by any municipality by putting therein any putrid or offen-

sive substance (other than fresh or salt water) injurious to health shall be guilty of a misdemeanor, which shall be punishable by a fine of not less than five or more than five hundred dollars. It shall be the duty of the board of public service or board of trustees of public affairs of any municipal corporation to enforce the provisions of this section."

SEC. 2. Original section 2433 is hereby repealed.

OREGON.

[Bellinger and Colton's Annotated Codes and Statutes of Oregon, vol. 1, p. 735.]

OF CRIMES AGAINST THE PUBLIC HEALTH.

SEC. 2128. *Polluting with sewage, &c., water for domestic use unlawful.*—Any person who shall put any sewage, drainage, or refuse, or polluting matter, as either by itself or in connection with other matter will corrupt or impair the quality of any well, spring, brook, creek, branch, or pond of water which is used or may be used for domestic purposes, shall be deemed guilty of misdemeanor. (Laws 1885, p. 110, sec. 1.)

SEC. 2129. *Animal carcass, &c., unlawful to place in water for domestic use or near dwelling.*—If any person shall put any dead animal carcass, or part thereof, excrement, putrid, nauseous, noisome, decaying, deleterious, or offensive substance into, or in any other manner not herein named befouls, pollutes, or impairs the quality of any spring, brook, creek, branch, well, or pond of water, which is or may be used for domestic purposes, or shall put any such dead animal carcass, or part thereof, excrement, putrid, nauseous, noisome, decaying, deleterious, or offensive substance within one-half mile of any dwelling house or public highway, and leave the same without proper burial, or, being in the possession or control of any land, shall knowingly permit or suffer any such dead animal carcass, or part thereof, excrement, putrid, nauseous, noisome, decaying, deleterious, or offensive substance to remain without proper burial upon such premises, within one-half mile of any dwelling house or public highway, whereby the same becomes offensive to the occupants of such dwelling or the traveling public, he shall be deemed guilty of a misdemeanor. (1885, p. 110, sec. 2.)

SEC. 2130. *Penalty for violating preceding provisions and jurisdiction to enforce.*—Any person violating the provisions of this act shall, upon conviction, be fined not less than ten nor more than fifty dollars, or be imprisoned not less than five days nor more than twenty-five days, or by both fine and imprisonment. Justices of the peace shall have jurisdiction of offences committed against the provisions of this act.

SEC. 2131. *Polluting water used for domestic purposes, or to which live stock have access, unlawful.*—If any person or persons shall put any dead animal's carcass, or part thereof, or any excrement, putrid, nauseous, decaying, deleterious, or offensive substance in any well, or into any spring, brook, or branch of running water, of which use is made for domestic purposes, or to which any cattle, horses, or other kind of stock have access, every person so offending shall, on conviction thereof, be fined in any sum not less than three nor more than fifty dollars.

SEC. 2133. *Animal carcass, unlawful to put in river or elsewhere to injury of health.*—If any person or persons shall put any part of the carcass of any dead animal into any river, creek, pond, road, street, alley, lane, lot, field, meadow, or common, or if the owner or owners thereof shall knowingly permit the same to remain in any of the aforesaid places to the injury of the health or to the annoyance of the citizens of this State, or any of them, every person so offending shall, on conviction thereof, be fined in a sum not less than two nor more than twenty-five dollars, and every twenty-four hours during which said owner may permit the same to remain thereafter shall be deemed an additional offence against the provisions of this act.

SOUTH DAKOTA.

[Revised Codes of 1903, Penal Code, p. 1146.]

SEC. 445. Every person who throws or deposits any gas tar, or refuse of any gas house or factory into any public waters, river, or stream, or into any sewer or stream emptying into such public waters, river, or stream, is guilty of a misdemeanor.

SEC. 446. It shall be unlawful for any person, persons, company, or corporation to place or cause to be placed any manure, butcher's offal, carcasses of animals, or other deleterious substances into any river, stream, or lake, in the State of South Dakota, or upon the banks thereof in such proximity that such substances may be washed into said water or water courses.

SEC. 447. Any violation of the provisions of this chapter is a misdemeanor, and the person, persons, company, or corporation so violating are deemed guilty thereof, and upon conviction shall be liable to a fine not less than ten dollars nor more than one hundred dollars, and in addition thereto such offending person or persons shall be subjected to imprisonment in the county jail for the period of thirty days unless he or they cause such deleterious substances to be removed.

SEC. 448. This act shall not be construed as to interfere with or prevent any necessary or legitimate mining operation or sewerage system.

TENNESSEE.

[Code of Tennessee, 1896.]

SEC. 6869. It is a public nuisance— * * *

3. To corrupt or render unwholesome or impure the water of any river, stream, or pond to the injury or prejudice of others.

SEC. 6520. If any person place or throw the dead body of any animal in any spring, well, cistern, or running stream of water he is guilty of a misdemeanor.

[1903, chap. 310, p. 905.]

Section 1 makes it a misdemeanor for "any person to in any way wilfully * * * disturb, pollute, contaminate, or injure the water in the tanks, standpipes, or reservoirs of any such waterworks by bathing therein or by any other act or acts tending to injure the water or to make it unpalatable, unwholesome, or unfit for domestic or manufacturing purposes of any plant supplying water for domestic or manufacturing purposes, however owned."

SEC. 2. That it shall be a misdemeanor for any person to wilfully corrupt or to permit anything to run or fall into any stream from which water shall be taken for the purpose of supplying water to any water plant such as is referred to in section 1 of this act, and any person violating this section shall be punished as provided in section 1 hereof.

Act takes effect April 7, 1903, on its passage.

TEXAS.

[White's Annotated Penal Code of Texas, p. 256.]

OFFENCES AFFECTING PUBLIC HEALTH.

ART. 424. If any person shall in any wise pollute of ^a [or?] obstruct any water course, lake, pond, marsh, or common sewer, or continue such obstruction or pollution so as to render the same unwholesome or offensive to the inhabitants of the county, city, town, or neighborhood thereabout, he shall be fined in a sum not exceeding five hundred dollars.

OFFENCES AGAINST THE PERSON.

ART. 647. If any person shall mingle or cause to be mingled any other noxious potion or substance with any drink, food, or medicine, with intent to kill or injure any other person, or shall wilfully poison or cause to be poisoned any spring, well, cistern, or reservoir of water with such intent, he shall be punished by imprisonment in the penitentiary not less than two nor more than ten years.

^a So in original.

UTAH.

[Revised Statutes, p. 910, Penal Code: Public Health and Safety.]

SEC. 4274. *Befouling waters.*—Any person who shall either:

1. Construct or maintain any corral, sheep pen, stable, pigpen, chicken coop, or other offensive yard or outhouse, where the waste or drainage therefrom shall flow directly into the waters of any stream, well, or spring of water used for domestic purposes; or

2. Deposit, pile, unload, or leave any manure heap, offensive rubbish, or the carcass of any dead animal where the waste or drainage therefrom will flow directly into the waters of any stream, well, or spring of water used for domestic purposes; or

3. Dip or wash sheep in any stream, or construct, maintain, or use any pool or dipping vat for dipping or washing sheep in such close proximity to any stream used by the inhabitants of any city, town, or village for domestic purposes as to make the waters thereof impure or unwholesome; or

4. Construct or maintain any corral, yard, or vat to be used for the purpose of shearing or dipping sheep within twelve miles of any city, town, or village, where the refuse or filth from said corral or yard would naturally find its way into any stream of water used by the inhabitants of any city, village, or town for domestic purposes; or

5. Establish and maintain any corral, camp, or bedding place for the purpose of herding, holding, or keeping any cattle, horses, sheep, or hogs within seven miles of any city, town, or village, where the refuse or filth from said corral, camp, or bedding place will naturally find its way into any stream of water used by the inhabitants of any city, town, or village for domestic purposes, shall be guilty of a misdemeanor.

[Laws of 1899, chap. 45, p. 66.]

SEC. 2. No house refuse, offal, garbage, dead animals, decaying vegetable matter, or organic waste substance of any kind shall be thrown on or allowed to remain upon any street, road, ditch, gutter, public place, private premises, vacant lot, water course, lake, pond, spring, or well.

VIRGINIA.

[Pollard's General Laws, 1887-1896, chap. 72, p. 44 (Acts 1887-88, p. 83).]

AN ACT to prevent the pollution of drinking water in this State. (Approved February 3, 1888.)

1. *Be it enacted by the general assembly of Virginia,* That any person or persons who shall knowingly and wilfully throw or cause to be thrown into any reservoir or other receptacle of drinking water,

or spring, or stream of running water ordinarily used for the supply of drinking water or domestic purposes of any person or family, town, or city in this Commonwealth the dead body of any animal, or shall drown and leave, or cause to be drowned and left any animal therein shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding one hundred dollars or imprisoned not exceeding six months, or both, at the discretion of the court in which such conviction is made.

[Idem, p. 115 (Acts 1891-92, p. 759).]

AN ACT to prevent the pollution of potable water used for the supply of cities and towns. (Approved February 29, 1892.)

1. *Be it enacted by the general assembly of Virginia*, That it shall be unlawful, except as hereinafter provided, for any person to defile or render impure, turbid, or offensive the water used for the supply of any city or town of this State, or the sources or streams used for furnishing such supply, or to endanger the purity thereof by the following means, or any of them, to wit, by washing or bathing therein, or by casting into any spring, well, pond, lake, or reservoir from which such supply is drawn, or into any stream so used, or the tributary thereof above the point where such supply is taken out of such stream or is impounded for the purposes of such supply, or into any canal, aqueduct, or other channel or receptacle for water connected with any works for furnishing a public water supply, any offal, dead fish, or carcass of any animal, or any human or animal filth or other foul or waste animal matter, or any waste vegetable or mineral substance, or the refuse of any mine, manufactory, or manufacturing process, or by discharging or permitting to flow into any such source, spring, well, reservoir, pond, stream, or the tributary thereof, canal, aqueduct, or other receptacle for water, the contents of any sewer, privy, stable, or barnyard, or the impure drainage of any mine, any crude or refined petroleum, chemicals, or any foul, noxious, or offensive drainage whatsoever, or by constructing or maintaining any privy vault or cesspool, or by storing manure or other soluble fertilizer of an offensive character, or by disposing of the carcass of any animal, or any foul, noxious, or putrescible substance, whether solid or fluid and whether the same be buried or not, within two hundred feet of any water course, canal, pond, or lake aforesaid, which is liable to contamination by the washing thereof or percolation therefrom: *Provided*, That nothing in this act contained shall be construed to authorize the pollution of any of the waters of this State in any manner now contrary to law: *And provided further*, That this act shall not apply to streams the drainage area of which, above the point where the water thereof is withdrawn for the supply of any city or

town, or is impounded for the purposes of such supply, shall exceed fifty square miles.

2. That any person knowingly or wilfully violating the terms of this act shall be deemed guilty of a misdemeanor, and shall be punished for each offence by a fine not exceeding one hundred dollars or by imprisonment not exceeding thirty days, or by both, at the discretion of the court: *And provided further*, That nothing herein contained shall be so construed as to prevent the washing of ore or minerals in any of the streams or waters of this Commonwealth other than such as may be used for the water supply of any city or town.

3. This act shall take effect fifteen days after its passage.

WASHINGTON.

[Ballinger's Annotated Codes and Statutes, including acts of 1897.]

NUISANCES. Sec. 3085. It is a public nuisance:

* * * * *

2. To throw or deposit any offal or other offensive matter, or the carcass of any dead animal, in any water course, stream, lake, pond, spring, well, or common sewer, street or public highway, or in any manner to corrupt or render unwholesome or impure the water of any such spring; stream, pond, lake, or well, to the injury or prejudice of others.

Punishment provided in section 3097.

[Acts of 1899. Chap. LXX. p. 114: Providing for a pure water supply.]

AN ACT to preserve from pollution the water supplied to the inhabitants of cities and towns in the State of Washington; to declare what are nuisances in the vicinity of the source of such water supply; providing for the abatement thereof, and for the punishment of the violations of this act.

Be it enacted by the legislature of the State of Washington:

SECTION 1. That for the purpose of protecting the water furnished to the inhabitants of towns and cities within this State from pollution, the said towns and cities are hereby given jurisdiction over all property occupied by the works, reservoirs, systems, springs, branches, and pipes by means of which, and of all sources of supply from which, such cities or the companies or individuals furnishing water to the inhabitants of such cities or towns obtain their supply of water or store or conduct the same.

SEC. 2. That the establishment or maintenance of any slaughter pen, stock-feeding yards, hogpens, or the deposit or maintenance of any uncleanly or unwholesome substance, or the conduct of any business or occupation, or the allowing of any condition upon or sufficiently near the sources from which the supply of water for the

inhabitants of any such city or town is obtained, or where such water is stored, or the property or means through which the same may be conducted or conveyed, so that such water would be polluted or the purity of such water or any part thereof destroyed or endangered, is hereby prohibited and declared to be unlawful, and is hereby declared to be and constitute a nuisance, and as such to be abated as other nuisances are abated under the provisions of the existing laws of the State of Washington, or under the laws which may be hereafter enacted in relation to the abatement thereof; and that any person or persons who shall do, establish, maintain, or create any of the things hereby prohibited for the purpose of or which shall have the effect of polluting any such sources of water supply or water, or shall do any of the things hereby declared to be unlawful, shall be deemed guilty of creating and maintaining a nuisance, and may be prosecuted therefor, and upon conviction thereof may be fined in any sum not exceeding five hundred dollars.

SEC. 3. If upon the trial of any person or persons for the violation of any of the provisions of this act such person or persons shall be found guilty of creating or maintaining a nuisance as hereby defined or of violating any of the provisions of this act, it shall be the duty of such person or persons to forthwith abate such nuisance, and in the event of their failure so to do within one day after such conviction, unless further time be granted by the court, a warrant shall be issued by the court wherein such conviction was obtained directed to the sheriff of the county in which such nuisance exists, and the sheriff shall forthwith proceed to abate the said nuisance, and the cost thereof shall be taxed against the party so convicted as a part of the costs of such case.

SEC. 4. It is hereby made the duty of the city health officer, city physician, board of public health, mayor of the city, or such other officer as may have the sanitary condition of such city or town in charge, to see that the provisions of this act are enforced, and, upon complaint being made to any such officer, to immediately investigate the said complaint and see if the same shall appear to be well founded; and if the same shall appear to be well founded, it shall be, and is hereby, declared to be the duty of such officer to proceed and file a complaint against the person or persons violating any of the provisions of this act and cause the arrest and prosecution of such person or persons.

SEC. 5. That any city supplied with water from any source of supply as hereinbefore mentioned, or any corporation owning water-works for the purpose of supplying any city or the inhabitants thereof with water, in the event that any of the provisions of this act are being violated by any person, may, by civil action in the superior

court of the proper county, have the maintenance of the nuisance which pollutes or tends to pollute the said water, as provided for by section 2 of this act, enjoined, and such injunction may be perpetual.

WEST VIRGINIA.

[Code of West Virginia, 1891, p. 933.]

OFFENCES AGAINST PUBLIC HEALTH—MISDEMEANOR TO PUT DEAD ANIMALS, ETC., INTO WATER USED FOR DOMESTIC PURPOSES.

If any person or persons shall knowingly and willfully throw or cause to be thrown into any well, cistern, spring, brook, or branch of running water which is used for domestic purposes, any dead animal, carcass, or part thereof, or any putrid, nauseous, or offensive substance, he or they shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than five dollars nor more than one hundred dollars, and may, at the discretion of the jury, be confined in the jail of the county not exceeding ninety days, and shall moreover be liable to the party injured in a civil action for damages. (Acts 1872-73, ch. 176.)

PREVENTING THE DEPOSIT OF THE CARCASSES OF DEAD ANIMALS AND OTHER NOXIOUS MATTER IN CERTAIN WATERS OF THE STATE, ETC.

It shall be unlawful to put the carcass of any dead animal, or the offal from any slaughterhouse, butcher's establishment, or packing house, or slop or other refuse from any hotel or a tavern, or any spoiled meats or spoiled fish, or any putrid animal substance, or the contents of any privy vault, upon or into any river, creek, or other stream within this State, or upon the surface of any road, street, alley, city lot, public ground, market space, or common, or on the surface within one hundred feet of any public road.

III. A justice of the peace shall have jurisdiction of any offence against the provisions of this act, committed within his county. Any such offence shall be punished by a fine of not less than five or more than fifty dollars, and the proceedings in the case, as well as in all other cases under this act, shall be in conformity with sections 221 to 230, inclusive, or chapter 50 of the Code of West Virginia, which sections are hereby made applicable to such cases. Upon a conviction for any such offence the accused must bury at least three feet under the ground, or destroy by fire, any of the things named in the first section which he has placed in any of the waters or places named in such section, or which he has knowingly permitted to remain upon a city lot, public ground, market space, or common, contrary to the provisions of the second section, within twenty-four hours after such conviction, and if he shall fail to do so, the justice shall further fine him not less than ten nor more than fifty dollars. (Acts 1887, ch. 25.)

WYOMING.

[Revised Statutes, 1899.]

CRIMES AGAINST THE PERSON.

SEC. 4966. *Poisoning springs.*—Whoever poisons any spring, well, cistern, or reservoir of water with intent to injure or kill any human being shall be imprisoned in the penitentiary not more than fourteen years.

CRIMES AGAINST PUBLIC HEALTH AND SAFETY.

SEC. 5114. *Putting offensive substances in creek or highway declared a nuisance.*—If any person or persons, association of persons, company, or corporation shall deposit, place, or put, or cause to be deposited, placed, or put upon or into any river, creek, bay, pond, canal, ditch, lake, stream, railroad, public or private road, highway, street, alley, lot, field, meadow, public place or public ground, common, market place, or in any other and different locality in this State, where the same may become a source of annoyance to any person or detrimental to the public health, the carcass of any dead animal or the offal or refuse matter from any slaughterhouse, butcher's establishment, meat market, packing house, fish house, hogpen, stable, or any spoiled meats, spoiled fish, or any animal or vegetable matter in a putrid or decayed state, or liable to become putrid, decayed, or offensive, or the contents of any privy vault, or any offensive matter or substance whatever, or shall cause to be maintained any privy, slaughterhouse, meat market, or any other or different place, building, or establishment that shall directly or indirectly be the cause of polluting the waters of any spring, reservoir, stream, lake, or water supply used wholly or partly for domestic purposes, or if the owner or owners, tenant or tenants, occupant or occupants of any lands or tenements, dwellings, or places of business, or any other and different places or localities, whether defined in this section or not, shall knowingly permit any of the said offensive matters or substances, or any other and different offensive matter or substances, to remain in any of the aforesaid places or other and different places or localities, or shall permit any of the aforesaid places to be maintained which shall cause the pollution of any stream, spring, reservoir, lake, or water supply, either directly or indirectly, in any locality, place, or situation in this State, to the annoyance of the citizens or residents of this State, or any of them, or to the detriment of the public health, or who shall neglect or refuse to remove or abate the nuisance, offence, or inconvenience occasioned or caused thereby within twenty-four hours after knowledge of the existence of such nuisance, offence, or inconvenience in or upon any of the above-described premises or places,

or any other and different place or locality, owned or occupied by him her, it, or they,^a [them?] or after notice in writing from the sheriff, deputy sheriff, or coroner of any county in this State, or the constable of any precinct, or the marshal or any of the policemen of any city, town, or village in which such nuisance shall exist, or from any peace officer in this State of the locality wherein such nuisance shall exist, every such person so offending shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than ten dollars nor more than fifty dollars, and if such nuisance is not abated within forty-eight hours after the same is created or exists to the knowledge of such offender, or within forty-eight hours after said written notice is given, such failure to abate such nuisance shall be deemed a second offence against the provisions of this section, and every like failure and neglect to abate such nuisance of each twenty-four hours thereafter shall be considered an additional offence, and shall be subject to a like penalty as is herein provided.

SEC. 5115. *Abatement of nuisance.*—Provides that officer shall remove nuisance, on neglect of owners so to do, expenses collectible in civil action.

SEC. 5116. *Throwing sawdust into streams.*—If any person or persons who may own, run, or have charge of any sawmill in this State shall throw or permit the sawdust therefrom to be thrown or placed in any manner into any river, stream, creek, bay, pond, lake, canal, ditch, or other water course in this State, such person or persons shall be liable to a like penalty as is provided in section 5114.

[Laws of Wyoming, 1905, chap. 31, p. 25.]

FISH—POLLUTING WATERS.

AN ACT To repeal section 1 of chapter 22 of the session laws of Wyoming of the year A. D. 1903, being an act entitled "An act to amend and reenact section 2146, revised statutes of Wyoming, 1899, relating to the unlawful taking or having in possession of certain kinds of fish," and to amend and reenact section 2148, revised statutes of Wyoming, 1899, relating to the unlawful placing of deleterious substances, poisons, or explosives in the waters of the State.

SEC. 1. That section 1, chapter 22, of the session laws of Wyoming, 1903, being "An act to amend and reenact section 2146 of the revised statutes of Wyoming, 1899, relating to the unlawful taking or having in possession of certain kinds of fish," be and the same is hereby repealed.

SEC. 2. That section 2148 of the revised statutes of Wyoming, 1899, be amended and reenacted so as to read as follows:

"SEC. 2148. Any owner or owners of any sawmill, reduction works, smelter, refining or contraction works, or any of the employees

^a So in original.

thereof, who shall throw, deposit, or in any way permit to pass into any natural stream or lake wherein are living fish, any sawdust, chemicals, or other matter or substance that will tend to drive away from such waters any fish shall be deemed guilty of a misdemeanor and shall be fined not less than twenty-five dollars nor more than one hundred dollars, or shall be imprisoned in the county jail not less than thirty days nor more than sixty days. Any person who shall kill in any of the waters of this State, by use of any poison or deleterious drug, or by the use of any explosive substance, or explode or cause to be exploded any powder, giant powder, hercules powder, dynamite, nitroglycerine, lime gas, or any other explosive substance for the purpose of catching, killing, or destroying food fish in such waters shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not less than fifty dollars nor more than two hundred dollars, and shall be imprisoned in the county jail not less than ninety days nor more than one year: *Provided further*, That nothing in this title contained shall prevent the owner or owners of any quartz mill or reduction works in this State, now located or to be hereafter located upon any natural stream or lake, from operating or working said quartz mill or reduction works, where the said owner or owners thereof shall build or cause to be built a suitable dam, to be used in connection with said quartz mill or reduction works, and which dam shall be so constructed as to prevent any tailings or substance from passing into the stream or lake which will destroy or drive away the fish or any number of them from said stream, lake, or water."

SEC. 3. This act shall take effect and be in force from and after its passage.

Approved February 15, A. D. 1905.

[Chapter 83, House bill No. 87.]

FISH.

AN ACT to repeal section 1 of chapter 22 of the session laws of Wyoming of the year A. D. 1903, being an act entitled "An act to amend and reenact section 2146, revised statutes of Wyoming, 1899, relating to the unlawful taking or having in possession of certain kinds of fish," and to amend and reenact section 2148, revised statutes of Wyoming, 1899, relating to the unlawful placing of deleterious substances, poisons, or explosives in the waters of the State.

SEC. 1. *Repeal of sec. 1, chap. 22, laws 1903.*—That section 1, chapter 22, of the session laws of Wyoming, 1903, being "An act to amend and reenact section 2146 of the revised statutes of Wyoming, 1899, relating to the unlawful taking or having in possession of certain kinds of fish" be, and the same is hereby, repealed.

SEC. 2. *Use of explosives and poison.*—That section 2148 of the revised statutes of Wyoming, 1899, be amended and reenacted so as to read as follows:

“SEC. 2148. Any owner or owners of any sawmill, or any of the employees thereof, who shall throw, deposit, or in any way permit to pass into any natural stream or lake wherein are living fish any sawdust or other matter or substance that will tend to drive away from such waters any fish, shall be deemed guilty of a misdemeanor, and shall be fined not less than twenty-five dollars nor more than one hundred dollars, or shall be imprisoned in the county jail not less than thirty days nor more than sixty days. Any person who shall kill in any of the waters of this State, by use of any poison or deleterious drug, or by use of any explosive substances, or explode or cause to be exploded any powder, giant powder, hercules powder, dynamite, nitroglycerine, lime gas, or any other explosive substance for the purpose of catching, killing, or destroying the food fish in such waters, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than fifty dollars nor more than two hundred dollars, and shall be imprisoned in the county jail not less than ninety days nor more than one year.”

SEC. 3. This act shall take effect and be in force from and after its passage.

Approved February 21, A. D. 1905.

CLASS III. STATES WITH SEVERE RESTRICTIONS.

This group consists of those States which have adopted unusual and stringent methods to enforce the right of their citizens to unpolluted natural waters. The adoption of the legislation embodied in the following pages under this group indicates that the inhabitants of the States in which these laws have been adopted have begun to realize the immense harm which the increased pollution of waters, owing to increase of population, is doing to persons and property within their borders. It is noticeable that in several of the States stringent methods are adopted by which pollution by cities can be regulated and controlled; while in at least one State (New Jersey) a system has been instituted which, carried to its logical conclusion, will result in conveying all sewage matter from cities and large towns so far beyond the borders of the land as to render it wholly inoffensive or in some other way preventing its getting into any inland waters in an offensive form.

CONNECTICUT.

[General Statutes, revision of 1902, sec. 1328, as amended by chap. 28, of the laws of 1905.]

Every person who shall wantonly and indecently expose his person, or who shall bathe in any reservoir from which the inhabitants of any town, city or borough are supplied with water, or in any lake, pond or stream tributary to such reservoir, or who shall cast any filthy or impure substance into said reservoir, or any of its tributaries, or commit any nuisance in or about it or them, shall be fined not more than one hundred dollars, or imprisoned not more than six months, or both.

[General Statutes, revision of 1902, p. 668.]

SEC. 2593. *Pollution of water from which ice is taken.*—Every person who shall put any substance into waters from which ice is procured for consumption which shall defile, pollute, or injure the quality of said ice, or who shall throw anything into such waters or upon the ice with intent to injure the quality of the ice or obstruct the cutting or gathering of the same, shall be fined not more than thirty dollars or imprisoned not more than thirty days. This section shall not affect the rights of any manufacturing establishment now existing or hereafter established to use any waters in carrying on its business.

SEC. 2594. *Pollution of waters.*—Every person who shall put or leave a dead animal or carcass in a pond, spring, or reservoir, the water of which is conveyed to any building, or who shall wilfully put and leave in any of the waters of this State a dead animal, shall be fined not more than fifty dollars or imprisoned not more than thirty days.

SEC. 2595. *Penalty for polluting drinking water.*—Every person who shall put anything into a well, spring, fountain, or cistern, or other place from which water is procured for drinking or other purposes, with the intent to injure the quality of said water, shall be fined not more than five hundred dollars or imprisoned not more than six months.

SEC. 2596. *Analysis of water.*—Town, borough, and city health officers shall, when in their judgment health is menaced or impaired through a water supply, send, subject to the approval of the county health officer, samples of such water to the State board of health for examination and analysis, and the expense of such examination and analysis shall be paid out of the funds appropriated to said board to investigate the pollution of streams.

SEC. 2598. *Location of cemeteries.*—No cemetery or place of sepulture shall hereafter be located or established within one-half mile of

any reservoir from which the inhabitants of a town, city, or borough are supplied with water; nor shall such reservoir be located or established within one-half mile of a cemetery or place of sepulture unless the superior court of the county wherein such cemetery or place of sepulture or reservoir is located shall, upon application or notice find that such cemetery or place of sepulture or such reservoir so proposed to be located is of public convenience and necessity and will not be detrimental to the public health.

SEC. 2602. *Pollution of reservoirs—Penalty.*—No person, after notice shall have been posted that any reservoir, or any lake, pond, or stream tributary thereto, is used for supplying the inhabitants of a town, city, or borough with water, shall wash any animal, clothing, or other article therein. No person shall throw any noxious or harmful substance into such reservoir, lake, pond, or stream, nor shall any person, after receipt of written notice from any county or town health officer having jurisdiction that the same is detrimental to such water supply, suffer any such substance to be placed upon land owned, occupied, or controlled by him, so that the same may be carried by rains or freshets into the water of such reservoir, lake, pond, stream, or drain, or allow to be drained any sewage from said land into such water. Every person who shall violate any provision of this section shall be fined not more than one hundred dollars or imprisoned not more than thirty days, or both.

SEC. 2603. *Appointment of special police.*—The governor may, upon the application of such town, borough, city, or company, commission during his pleasure one or more persons who, having been sworn, may act as policemen for the purpose of preventing and abating nuisances and protecting such water supply from contamination. Such policemen shall arrest without previous complaint and warrant any person for any offense under the provisions of any law for the protection of water supplies when the offender shall be taken or apprehended in the act or on the speedy information of others, and all persons so arrested shall be immediately presented before proper authority. Every such policeman shall, when on duty, wear in plain view a shield bearing the words "Special police" and the name of the town, city, borough, or company for which he is commissioned.

[Acts of 1903, chap. 192, p. 148.]

AN ACT concerning injunctions.

Be it enacted by the senate and house of representatives in general assembly convened.

SECTION 1. Section 2599 of the General Statutes is hereby amended to read as follows: Whenever any land or building is so used, occupied or suffered to remain, that it is a source of injury to the water

stored in a reservoir used for supplying a town, city, or borough with water, or to any source of supply to such reservoir, or when such water is liable to pollution in consequence of the use of the same, either the authorities of such town, city, or borough, or the company having charge of said water, may apply to the superior court, or any judge thereof in vacation, in the county in which said town, city, borough, or company is located, for relief; and said court or judge may order the removal of any building, enjoin any use or occupation of any land or building or of said water which is detrimental to said water, or make any other order, temporary or permanent, which in its or his judgment may be necessary to preserve the purity of said water. Said town, city, borough, or company may, by its officers or agents, duly appointed for such purpose, at all reasonable times enter upon and inspect any premises within the watershed tributary to such water supply, and in case any nuisance shall be found thereon which pollutes or is likely to pollute such water, may abate such nuisance at its own expense after reasonable notice to the owner or occupant of said premises and upon his neglect or refusal to abate the same; but such town, city, borough, or company shall be liable for all unnecessary or unreasonable damage done to said premises.

SEC. 2. Section 2600 of the General Statutes is hereby amended to read as follows: Any city, town, borough, or corporation authorized by law to supply the inhabitants of any city, town, or borough with pure water for public or domestic use may take and use such lands, springs, streams, or ponds, or such rights or interests therein as the superior court or any judge thereof in vacation may, on application, deem necessary for the purposes of such supply. For the purpose of preserving the purity of such water and preventing any contamination thereof, such city, town, borough, or corporation may take such lands or rights as the superior court or any judge thereof in vacation may, on application, deem necessary therefor. Compensation shall be made to all persons entitled thereto in the manner provided by section 2601.

SEC. 3. Section 2601 of the General Statutes is hereby amended to read as follows: In all cases where the law requires compensation to be made to any person whose rights, interests, or property are injuriously affected by said orders, such court or judge shall appoint a committee of three disinterested freeholders of the county who shall determine and award the amount to be paid by such authorities before such order is carried into effect.

Approved June 18, 1903.

MASSACHUSETTS.

[Revised laws of the Commonwealth of Massachusetts, enacted November 21, 1901, taking effect January 1, 1902, chap. 75, p. 677.]

OF THE PRESERVATION OF THE PUBLIC HEALTH.

SEC. 112. *Supervision of inland waters.*—The State board of health shall have the general oversight and care of all inland waters and of all streams and ponds used by any city, town, or public institution, or by any water or ice company, in this Commonwealth as sources of water supply, and of all springs, streams, and water courses tributary thereto. It shall be provided with maps, plans, and documents suitable for such purposes and shall keep records of all its transactions relative thereto.

SEC. 113. *Examination of water supply.*—Said board may cause examinations of such waters to be made to ascertain their purity and fitness for domestic use or their liability to impair the interests of the public or of persons lawfully using them or to impair the public health. It may make rules and regulations to prevent the pollution and to secure the sanitary protection of all such waters as are used as sources of water supply.

SEC. 114. *Effect of publication of notice.*—The publication of an order, rule, or regulation made by the board under the provisions of the preceding section, or section one hundred and eighteen, in a newspaper of the city or town in which such order, rule, or regulation is to take effect, or, if no newspaper is published in such city or town, the posting of a copy of such order, rule, or regulation in a public place in such city or town, shall be legal notice to all persons, and an affidavit of such publication or posting by the person causing such notice to be published or posted, filed and recorded with a copy of the notice in the office of the clerk of such city or town, shall be admitted as evidence of the time at which, and the place and manner in which, the notice was given.

SEC. 115. *Report and recommendations.*—Said board shall annually, on or before the tenth day of January, make a report to the general court of its doings for the preceding year, recommend measures for the prevention of the pollution of such waters and for the removal of polluting substances in order to protect and develop the rights and property of the Commonwealth therein and to protect the public health, and recommend any legislation or plans for systems of main sewers necessary for the preservation of the public health and for the purification and prevention of pollution of the ponds, streams, and inland waters of the Commonwealth. It shall also give notice to the attorney-general of any violation of law relative to the pollution of water supplies and inland waters.

SEC. 116. *Agents and assistants.*—Said board may appoint, employ, and fix the compensation of such agents, clerks, servants, engineers, and expert assistants as it considers necessary. Such agents and servants shall cause the provisions of law relative to the pollution of water supply and of the rules and regulations of said board to be enforced.

SEC. 117. *Advice as to methods.*—Said board shall consult with and advise the authorities of cities and towns and persons having, or about to have, systems of water supply, drainage, or sewerage as to the most appropriate source of water supply, and the best method of assuring its purity or as to the best method of disposing of their drainage or sewage with reference to the existing and future needs of other cities, towns, or persons which may be affected thereby. It shall also consult with and advise persons engaged or intending to engage in any manufacturing or other business whose drainage or sewage may tend to pollute any inland water as to the best method of preventing such pollution, and it may conduct experiments to determine the best methods of the purification or disposal of drainage or sewage. No person shall be required to bear the expense of such consultation, advice, or experiments. Cities, towns, and persons shall submit to said board, for its advice, their proposed system of water supply or of the disposal of drainage or sewage, and all petitions to the general court for authority to introduce a system of water supply, drainage, or sewerage shall be accompanied by a copy of the recommendation and advice of said board thereon. In this section the term "drainage" means rainfall, surface, and subsoil water only, and "sewage" means domestic and manufacturing filth and refuse.

SEC. 118. *Removal of causes of pollution.*—Upon petition to said board by the mayor of a city or the selectmen of a town, the managing board or officer of any public institution, or by a board of water commissioners, or the president of a water or ice company, stating that manure, excrement, garbage, sewage, or any other matter pollutes or tends to pollute the waters of any stream, pond, spring, or water course used by such city, town, institution, or company as a source of water supply, the board shall appoint a time and place within the county where the nuisance or pollution is alleged to exist for a hearing, and after notice thereof to parties interested and a hearing, if in its judgment the public health so requires, shall, by an order served upon the party causing or permitting such pollution, prohibit the deposit, keeping, or discharge of any such cause of pollution, and shall order him to desist therefrom and to remove any such cause of pollution; but the board shall not prohibit the cultivation and use of the soil in the ordinary methods of agriculture if no human excrement is used thereon. Said board shall not prohibit the

use of any structure which was in existence on the eleventh day of June, in the year eighteen hundred and ninety-seven, upon a complaint made by the board of water commissioners of any city or town or by any water or ice company, unless such board of water commissioners or company files with the State board a vote of its city council, selectmen, or company, respectively, that such city, town, or company will, at its own expense, make such changes in said structure or its location as said board shall deem expedient. Such vote shall be binding on such city, town, or company. All damages caused by such changes shall be paid by such city, town, or company; and if the parties can not agree thereon, the damages shall, on petition of either party, filed within one year after such changes are made, be assessed by a jury in the superior court for the county where the structure is located.

SEC. 119. *Appeal from order.*—Whoever is aggrieved by an order passed under the provisions of the preceding section may appeal therefrom in the manner provided in sections 95 and 97, but such notice as the court shall order shall also be given to the board of water commissioners and mayor of the city or chairmen of the selectmen of the town or president or other officer of the water or ice company interested in such order. While the appeal is pending the order of the board shall be complied with, unless otherwise authorized by the board.

SEC. 120. *Enforcement of law.*—The supreme judicial court or the superior court shall have jurisdiction in equity, upon the application of the State board of health or of any party interested, to enforce its orders or the orders, rules, and regulations of said board of health, and to restrain the use or occupation of the premises or such portion thereof as said board may specify, on which said material is deposited or kept, or such other cause of pollution exists, until the orders, rules, and regulations of said board have been complied with.

SEC. 121. *Entry on premises.*—The agents and servants of said board may enter any building, structure, or premises for the purpose of ascertaining whether sources of pollution or danger to the water supply there exist, and whether the rules, regulations, and orders aforesaid are obeyed. Their compensation for services rendered in connection with proceedings under the provisions of section 118 shall be fixed by the board and shall in the first instance be paid by the Commonwealth; but the whole amount so paid shall, at the end of each year, be justly and equitably apportioned by the tax commissioner between such cities, towns, or companies as, during said year, have instituted said proceedings, and may be recovered in an action by the treasurer and receiver-general, with interest from date of the demand.

SEC. 122. *Penalties.*—Whoever violates any rule, regulation, or order made under the provisions of section 113 or section 118 shall be punished for each offence by a fine of not more than five hundred dollars, to the use of the Commonwealth, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 123. *Application of preceding sections.*—The provisions of the eleven preceding sections shall not apply to the Merrimac or Connecticut rivers, nor to so much of the Concord River as lies within the limits of the city of Lowell, nor to springs, streams, ponds, or water courses over which the metropolitan water board has control.

SEC. 124. *Sources of water supply—as to.*—The provisions of the refuse, or polluting matter of such kind and amount as either by itself or in connection with other matter will corrupt or impair the quality of the water of any pond or stream used as a source of ice or water supply by a city, town, public institution, or water company for domestic use, or render it injurious to health, and no human excrement shall be discharged into any such stream or pond, or upon their banks if any filter basin so used is there situated, or into any feeders of such pond or stream within twenty miles above the point where such supply is taken.

SEC. 125. *Prescriptive rights unaffected—application limited.*—The provisions of the preceding section shall not destroy or impair rights acquired by legislative grant prior to the first day of July in the year 1878, or destroy or impair prescriptive rights of drainage or discharge, to the extent to which they lawfully existed on that date; nor shall it be applicable to the Merrimac or Connecticut rivers, or to so much of the Concord River as lies within the limits of the city of Lowell.

SEC. 126. *Injunction against pollution of water supply.*—The supreme judicial court or the superior court, upon application of the mayor of a city, the selectmen of a town, managing board or officer of a public institution, or a water or ice company interested, shall have jurisdiction in equity to enjoin the violation of the provisions of sec. 124.

SEC. 127. *Penalty for corrupting spring, etc.*—Whoever willfully and maliciously defiles or corrupts any spring or other source of water, or reservoir, or destroys or injures any pipe, conductor of water, or other property pertaining to an aqueduct, or aids or abets in any such trespass, shall be punished by a fine of not more than one thousand dollars or by imprisonment for not more than one year.

SEC. 128. *Penalty for corrupting sources of water supply.*—Whoever willfully deposits excrement or foul or decaying matter in water which is used for the purpose of domestic water supply, or upon the shore thereof within five rods of the water, shall be punished by a

fine of not more than fifty dollars or by imprisonment for not more than thirty days; and a police officer or constable of a city or town in which such water is wholly or partly situated, acting within the limits of his city or town, and any executive officer or agent of a water board, board of water commissioners, public institution, or water company furnishing water or ice for domestic purposes, acting upon the premises of such board, institution, or company, and not more than five rods from the water, may, without a warrant, arrest any person found in the act of violating the provisions of this section and detain him until a complaint can be made against him therefor. But the provisions of this section shall not interfere with the sewage of a city, town, or public institution, or prevent the enriching of land for agricultural purposes by the owner or occupant thereof.

SEC. 129. *Penalty for bathing in public ponds.*—Whoever bathes in a pond, stream, or reservoir the water of which is used for the purpose of domestic water supply for a city or town, shall be punished by a fine of not more than ten dollars.

SEC. 130. *Penalty for driving on ice of pond used for water supply.*—Whoever, not being engaged in cutting or harvesting ice, or in hauling logs, wood, or lumber, drives any animal on the ice of a pond or stream which is used for the purpose of domestic water supply for a city or town, shall be punished by a fine of not more than fifty dollars or by imprisonment for not more than thirty days.

NOTE.—Sections 95 and 97, referred to in section 119, provide for an appeal to the superior court of the county and a jury trial. The verdict may alter, affirm, or annul the order, and shall be returned to the court for acceptance, and, if accepted, shall have the authority and effect of a valid order of the board.

MINNESOTA.

[General Statutes, p. 120.]

SEC. 430. *Pollution of sources of water supply forbidden.*—No sewage, drainage, or refuse, or polluting matter of such kind as, either by itself or in connection with other matter, will corrupt or impair the quality of the water of any spring, well, pond, lake, stream, or river for domestic use, or render it injurious to health, and no human or animal excrement shall be placed in or discharged into or placed or deposited upon the ice of any pond, lake, stream, or river used as a source of water supply by any town, village, or city; nor shall any such sewage, drainage, refuse, or polluting matter or excrement be placed upon the banks of any such pond, lake, stream, or river within five miles above the point where such supply is taken, or into any feeders or the banks thereof of any such pond, lake, stream, or river:

Provided, nothing in this section contained shall apply to Lake Superior. (1885. Chap. 225, sec. 1.)

SEC. 431. *Supervision of sources of water supply—procedure in cases of pollution.*—The State board of health shall have the general supervision of all springs, wells, ponds, lakes, streams, or rivers used by any town, village, or city as a source of water supply, with reference to their purity, together with the waters feeding the same, and shall examine the same from time to time, and inquire what, if any, pollution exists and their causes. In case of a violation of any of the provisions of section one of this act (sec. 430) said board may appoint a time and place for hearing parties to be affected, and shall give due notice thereof, as hereinafter provided, to such parties; and after such hearing, if in its judgment the public health requires it, may order any person or corporation, or municipal corporation, to desist from the acts causing such pollution, and may direct any such person or corporation to remedy the pollution, or to cleanse or purify the polluting substances in such a manner and to such a degree as shall be directed by said board, before being cast or allowed to flow into the waters thereby polluted, or placed or deposited upon the ice or banks of any of the bodies of water in the first section of this act mentioned. Upon the application of the proper officers of any town, village, or city, or of not less than ten legal voters of any such town, village, or city, to said State board, alleging the pollution of the water supply of any such town, village, or city by the violation of any of the provisions of this act, said State board shall investigate the alleged pollution, and shall appoint a time and place when and where it will hear and examine the matter, and shall give notice of such hearing and examination to the complainant, and also to the person or corporation or municipal corporation alleged to have caused such pollution, and such notice shall be served not less than ten days prior to the time so appointed, and shall be served in the same manner that now is or hereafter may be by law provided for the service of a summons in a civil action in the district court. Said board, if in its judgment any of the provisions of this act have been violated, shall issue the order or orders already mentioned in this section. (1885. Chap. 225, sec. 2.)

NEW HAMPSHIRE.

[Public statutes of New Hampshire and general laws in force Jan. 1. 1901. p. 337, chap. 108. (Wm. M. and Arthur H. Chase.)]

Section 13, entitled, "The prevention and removal of nuisances," is as follows: "If a person shall place, leave, or cause to be placed or left in or near a lake, pond, reservoir, or stream tributary thereto, from which the water supply for domestic purposes of a city, town, or village is taken, in whole or in part, any substance or fluid that may

cause the water thereof to become impure or unfit for such purposes, he shall be fined not exceeding twenty dollars or be imprisoned not exceeding thirty days, or both."

SEC. 14. The board of health of the town or the water commissioners having charge of the water supply or the proprietors thereof may remove such substance or fluid, and they may recover the expense of removal from the person who placed the same or caused it to be placed in or near the water as aforesaid in an action on the case.

[Laws of 1895, chap. 76, p. 433.]

AN ACT to protect waters used for domestic purposes.

Be it enacted by the senate and house of representatives in general court convened:

SECTION 1. Whoever knowingly and wilfully poisons, defiles, pollutes, or in any way corrupts the waters or ice of any well, spring, brook, lake, pond, river, or reservoir used as the source of a public water or ice supply for domestic purposes, or knowingly corrupts the sources of the water of any water company or of any city or town supplying its inhabitants with water, or the tributaries of said sources of supply, in such a manner as to affect the purity of the water or ice so supplied at the point where the water or ice is taken for such domestic use, or puts the carcass of any dead animal or other offensive material into said waters or upon the ice thereof, shall be punished by a fine not exceeding one thousand dollars or by imprisonment not exceeding one year. The provisions of this section shall not apply to the deposit of any bark, sawdust, or any other waste of any kind arising from the business of cutting, hauling, driving, or storing logs, or the manufacture of lumber; and the use of any stream for the purposes of manufacturing and for the necessary drainage connected therewith, if more than four miles distant from the point where the water is taken for such domestic purposes, shall not be deemed a violation of this section.

SEC. 2. No person shall cut or take ice from any lake, pond, or reservoir used as the source of a public water or ice supply for domestic purposes for man, unless he first shall comply in all respects with such reasonable rules and regulations in regard to the manner and place of cutting and taking such ice on said lake, pond, or reservoir as may be prescribed by the local board of control or officers of a water company who may have charge of the works of any city or town supplying its inhabitants with water from said lake, pond, or reservoir. The supreme court shall have power to issue injunctions restraining any person from cutting or taking ice from such lakes, ponds, or reservoirs until they have complied with the reasonable regulations made as aforesaid.

SEC. 3. Said local boards and officers may also make all reasonable rules and regulations in regard to fishing and the use of boats in and upon any such lake, pond, or reservoir, and in regard to racing or speeding horses upon the ice thereof, which they may deem expedient. Any person who shall violate any of said rules and regulations after notice thereof shall be fined not exceeding twenty dollars, or imprisoned not exceeding six months.

SEC. 4. If any person shall bathe in such lake, pond, or reservoir within one-fourth mile of the point where said water is taken, he shall be fined not exceeding twenty dollars, or imprisoned not exceeding six months.

SEC. 5. Whoever shall wilfully injure any of the property of any water company or of any city or town, used by it in supplying water to its inhabitants, shall be punished by a fine not exceeding one thousand dollars, or by imprisonment not exceeding one year; and such person shall also forfeit and pay to such water company, city, or town three times the amount of actual damages sustained, to be recovered in an action on the case.

SEC. 6. All acts and parts of acts inconsistent with this act are hereby repealed, but nothing in this act shall be construed to repeal any special act applying to cities and towns.

[Laws of 1897, chap. 85, p. 82.]

SECTION 1. It shall be the duty of boards of health of the cities and towns of the State to examine and inspect the sources from which ice is cut, or is proposed to be cut, for domestic use in such cities and towns, and to employ such means as may be necessary to determine whether the waters of such sources of ice supply have been polluted, or whether ice taken therefrom will be deleterious to the public health.

SEC. 2. In each case where the waters of the sources of ice supplies shall be found so polluted that the ice taken therefrom will be unhealthy or unsafe for domestic use, the board of health of the city or town concerned in the same shall immediately notify such person or persons as may have taken, or who propose to take ice from such polluted source for their own domestic use or for sale for domestic use, of the dangerous character of the waters inspected and that the taking of such ice for domestic use must cease.

SEC. 3. Whoever knowingly or wilfully shall cut or take any ice for domestic purposes from any waters which are polluted with sewage or other substance deleterious or dangerous to life or health, or from waters which a board of health has condemned, shall be fined not exceeding two hundred and fifty dollars or imprisoned not exceeding six months.

[Acts of 1899, chap. 57.]

SECTION 1. Whenever any board of water commissioners, local board of health, or ten or more citizens of any town or city have reason to believe that a public water or ice supply is being contaminated or is in danger of contamination, and that the local regulations are not sufficient or effective to prevent such pollution, they may petition the State board of health to investigate the case and to establish such regulations as the said board may deem necessary for the protection of the said supply against any pollution that in its judgment would endanger the public health.

SEC. 2. The State board of health shall, after due investigation, make such regulations as it may deem best to protect the said supply against any dangerous contamination, and the regulations so made shall be in force when a copy is filed with the town clerk and posted in two or more public places in said town, or published in some newspaper in the county, and it shall be the duty of the local board of health to enforce said regulations.

SEC. 3. Any person violating any regulation established by the State board of health shall be punished by a fine of twenty dollars for each offense, and a certified copy under oath of such regulation, made by the secretary of the State board of health or by the town clerk where the regulations are filed, shall be received as prima facie evidence of such regulations in any court of the State.

[Laws of 1905, chap. 12.]

AN ACT to protect the waters of Alton Bay from pollution by sawdust and other waste.

SEC. 1. That no sawdust, shavings, or other waste product of saw-mills, planing mills, or other manufactories shall be deposited, dumped, or placed in that part of Lake Winnepesaukee known as Alton Bay, nor shall any sawdust, shavings, or other waste products be allowed to escape into, or be deposited, dumped, or placed in any stream which runs or empties into said bay.

SEC. 2. Any person, or any officer of any corporation, violating the provisions of this act shall be fined not exceeding twenty-five dollars for each offense, and each day of a violation of the same shall be deemed a separate offense.

SEC. 3. All acts and parts of acts inconsistent with this act are hereby repealed.

SEC. 4. This act shall take effect on April 1, 1905.

Approved February 9, 1905.

[Laws of 1905, chap. 73.]

AN ACT to prohibit the deposit of sawdust and other sawmill refuse and other waste in Swift River and its tributaries in the town of Tamworth.

SEC. 1. Any person who shall deposit, dump, place, or cause to be deposited, dumped, or placed any sawdust or other sawmill refuse, rubbish, or other waste in Swift River and its tributaries, in the town of Tamworth, shall be fined not less than ten dollars nor more than fifty dollars.

SEC. 2. This act shall take effect upon its passage.

Approved March 9, 1905.

[Laws of 1905, chap. 74.]

AN ACT to protect Mink Brook from pollution by sawdust and other waste.

SEC. 1. No person or corporation shall put or place, or cause or allow to be put or placed, any sawdust, shavings, edgings, chips, bark, or other waste from woodwork establishments into Mink Brook in the town of Hanover.

SEC. 2. Any person or corporation violating the provisions of this act shall be punished by a fine not exceeding ten dollars for each offense, and every day that they violate the same shall be deemed a separate offense.

SEC. 3. This act shall take effect June 1, 1905.

Approved March 9, 1905.

[Laws of 1905, chap. 88.]

AN ACT to protect Union River and its tributaries from pollution by sawdust and other waste.

SEC. 1. No person or corporation shall put or place, or cause to be put or placed, any sawdust, shavings, edgings, chips, bark, or other waste from sawmills or other woodwork establishments into Union River, so called, or its tributaries, in the towns of Brookfield and Wakefield in Carroll County, and the town of Milton in Strafford County. Any person or corporation violating the provisions of this act shall be punished by a fine not exceeding one hundred dollars for each offense.

SEC. 2. This act shall take effect on April 15, 1905.

Approved March 10, 1905.

NEW JERSEY.

[General Statutes, p. 1109.]

AN ACT to prevent the pollution of the waters of any of the creeks, ponds, or brooks of this State. (Approved March 29, 187?)

322. SECTION 1. That if any person or persons shall throw, cause or permit to be thrown, into the waters of any creek, pond, or brook of

this State, the waters of which may be used for the cutting or harvesting of ice, any carcasses of any dead animal or any offal or offensive matter whatsoever, calculated to render said waters impure or create noxious or offensive smells, or shall connect any water-closet with any sewer or other means whereby the contents thereof may be conveyed to and into any such creek, pond, or brook, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one hundred dollars, or imprisonment not exceeding thirty days, or both.

[2 *General Statutes*, p. 2215.]

AN ACT to enable towns and townships in this State to construct waterworks for the extinguishment of fires and supplying the inhabitants thereof with pure and wholesome water. (Approved March 9, 1893.)

419. SEC. 13. That if any person or persons shall willfully pollute or adulterate the waters in any reservoir erected under the provisions of this act, any person so offending shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding five hundred dollars, or by imprisonment at hard labor not exceeding three years, or both, at the discretion of the court before whom such conviction shall be had.

[*General Statutes*, p. 1107.]

Supplement to an act to prevent the willful pollution of waters of any of the creeks, ponds, or brooks of this State. (Approved February 27, 1880.)

SECTION 1. (As amended by act passed March 14, 1893. *General Statutes*, p. 1107, sec. 311.) That if any person or persons shall throw, cause or permit to be thrown into any reservoir, or into the waters of any creek, pond, or brook of this State which runs through or along the border of any city, town, or borough of this State, or the waters of which are used to supply any aqueduct or reservoir for distribution for public use, any carcass of any dead animal, or any offal or offensive matter whatsoever calculated to render said waters impure, or to create noxious or offensive smells, or shall connect any water-closet with any sewer, or other means whereby the contents thereof may be conveyed to and into any such creek, pond, or brook, or shall so deposit or cause or permit to be deposited any such carcass, offal, or other offensive matter that the washing or waste therefrom shall or may be conveyed to and into any such creek, pond, brook, or reservoir, such person or persons shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars, or by imprisonment not exceeding two years, or both.

309. SEC. 2. That it shall be the duty of the owner or owners, occupant or occupants of any land whereon any such carcass, offal, or other offensive matter may be to cause the same to be buried forth-

with, so that all portions thereof shall be covered with solid earth to a depth of at least two feet below the surface of the ground, and not within a distance of two hundred feet from such creek, pond, or brook used as aforesaid; and any such owner or occupant who shall refuse or neglect for the space of two days to remove and bury as aforesaid, or cause to be removed and buried, any such carcass, offal, or offensive matter shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars, or by imprisonment not exceeding two years, or both.

[Laws of 1898, chap. 136, p. 233.]

AN ACT authorizing the appointment of commissioners to consider the subject of the pollution of rivers and streams within this State, to provide a plan for the prevention thereof, and for the relief of the persons and property affected thereby, and to provide for the expenses necessary for that purpose.

Be it enacted by the senate and general assembly of the State of New Jersey:

1. The governor of this State shall have power and authority to appoint and commission not less than three suitable persons commissioners to consider the subject of the pollution of any stream or river within this State, whose duty it shall be, after having duly investigated the cause, character, and extent of such pollution, if they shall deem it necessary and expedient, to prepare and perfect a plan for the prevention thereof and for the relief of the persons and property affected thereby, and to report their conclusions and present their plan to the legislature of this State, together with a bill providing therefor and for the expenses thereof.

2. Such commissioners, when so appointed, shall organize by the selection of one of their number as chairman and one to act as treasurer, and they are authorized to select a clerk and to employ such other agents and assistants as may be necessary. The salary and compensation of such commissioners shall be fixed by the governor, and shall not exceed one thousand dollars each, and they shall have power and authority to fix the compensation of their agents and assistants.

3. Such commissioners are authorized to raise and expend for the purposes of this act a sum not exceeding twenty-five thousand dollars, which sum, or such part thereof as may be required and be necessary, they are hereby authorized to apportion among the several local municipalities which the said commissioners shall deem to be affected by such pollution, in proportion to the population of such municipalities as shown by the last State or National census, and the sum or sums so apportioned shall be certified by the said commissioners under their hands to the assessors or other taxing officers of the said several municipalities, and it shall be the duty of the proper taxing

officer or officers in each of the said municipalities to whom such apportionment is made to proceed to have the same levied and assessed and collected in the same manner and at the same time as other taxes are levied and collected therein, and it shall be the duty of the collector or other equivalent officer of each of the said municipalities to pay over the said several sums of money, when so levied, assessed, and collected, to the said commissioners or to such person or persons as they may appoint to receive the same, and the said commissioners are authorized to use and disburse the same for the purposes of this act.

4. The commissioners appointed under the authority of this act shall have the power and authority to anticipate the collection and receipt of the sums of money hereby authorized to be raised by taxation, and may issue from time to time certificates of indebtedness, or other obligations, to be paid from the funds to be raised by taxation in the manner herein provided; and they are authorized to use the funds received from the sale or negotiation of such certificates or obligations authorized to be issued by this act.

5. Said commissioners are hereby required, at any time, on the order of the governor, to render to him a report and statement of their receipts and expenditures under the authority of this act.

6. Vacancies caused by the death or resignation of any commissioner appointed under the authority of this act, or from other cause, shall be filled by the governor, and the governor may remove any of the persons so appointed and appoint another commissioner in his place.

7. This act shall take effect immediately.

Approved April 2, 1898.

[Laws of 1899, chap. 41, p. 73.]

AN ACT to secure the purity of the public supplies of potable waters in this State.

Be it enacted by the senate and general assembly of the State of New Jersey:

1. No sewage, drainage, domestic or factory refuse, excremental or other polluting matter of any kind whatsoever which, either by itself or in connection with other matter, will corrupt or impair, or tend to corrupt or impair, the quality of the water of any river, brook, stream, or any tributary or branch thereof, or of any lake, pond, well, spring, or other reservoir from which is taken, or may be taken, any public supply of water for domestic use in any city, town, borough, township, or other municipality of this State, or which will render, or tend to render, such water injurious to health, shall be placed in, or discharged into, the waters, or placed or deposited upon the ice, of

any such river, brook, stream, or any tributary or branch thereof, or of any lake, pond, well, spring, or other reservoir above the point from which any city, town, borough, township, or other municipality shall or may obtain its supply of water for domestic use, nor shall any such sewage, drainage, domestic or factory refuse, excremental or other polluting matter be placed or suffered to remain upon the banks of any such river, brook, stream, or of any tributary or branch thereof, or of any lake, pond, well, spring, or other reservoir above the point from which any city, town, borough, township, or other municipality shall or may obtain its supply of water for domestic use as aforesaid; and any person or persons, or private or public corporation, which shall offend against any of the provisions of this section shall be liable to a penalty of one hundred dollars for each offense; and each week's continuance, after notice by the State or local board of health to abate or remove the same, shall constitute a separate offense: *Provided, however,* That this section shall not be held to apply to any city, town, borough, township, or other municipality of this State which, at the date of the passage of this act, has a public sewer or system of sewers, drain or system of drains, legally constructed under municipal or township authority, discharging its drainage or sewage into any such river, brook, stream, lake, pond, well, spring, or other reservoir: *And provided further,* That nothing in this section contained shall be construed to repeal, modify, or otherwise affect any law or statute now conferring upon any local board of health the power or authority to institute any proceedings in any court of this State for the recovery of any penalty for, or obtaining any injunction against, the pollution of any of the waters of this State.

2. Any penalty incurred under any of the provisions of the first section of this act may be recovered, with costs, in a summary proceeding, either in the name of the board of health of the State of New Jersey or in the name of the local board of health of the township, city, borough, town, or other local municipal government within whose jurisdiction the penalty may have been incurred; it shall be the duty of any health inspector, or member of any local board of health, who shall know or be informed of any violation of any of the provisions of the first section of this act whereby any penalty may have been incurred, to make, and any other person having such knowledge may make, under oath or affirmation, a complaint against the person or persons or private or public corporation incurring such penalty, setting forth the facts of such violation, which complaint shall be filed in the office of the clerk of the district court, or with any justice of the peace of the county within which the offense may have been committed, or with any police justice or recorder of the township, city, or other municipality within which any local board bring-

ing suit shall have jurisdiction; and the district court, justice of the peace, police justice, or recorder, with whom any complaint shall be filed as aforesaid, setting forth facts sufficient to show that the penalty prescribed by the first section of this act has been incurred, is hereby authorized and required to issue process either in the nature of a summons or warrant, which process, when in the nature of a warrant, shall be returnable forthwith, and when in the nature of a summons shall be returnable in not less than five nor more than fifteen days. On the return of such process, or at any time to which the trial shall have been adjourned, the said court, justice of the peace, police justice, or recorder shall proceed to hear the testimony of witnesses and the proofs in the case, and to determine and give judgment in the matter without the filing of any pleadings, and, if judgment shall be given in favor of the plaintiff, execution shall forthwith issue against the goods and chattels of the defendant for the amount of the penalty, with costs; and all judgments so rendered shall have the same force and effect as other judgments in civil actions before civil courts and officers, and may be docketed in like manner in the office of the clerk of the court of common pleas; the officers to serve and execute any process or execution issued as aforesaid shall be the constables of the counties, which service and execution, in the case of any execution issued out of the district court, shall be made in the same manner and under the same liabilities as other executions issued out of said court are served and executed; the officers to serve and execute any process or execution issued by a justice of the peace, police justice, or recorder, shall be the constables of the county, which service and execution shall be made in the same manner and under the same liabilities as prescribed in cases of the service and execution of processes and executions by the act entitled "An act constituting courts for the trial of small causes," and the supplements thereto; all moneys recovered in any such proceeding shall be paid to the plaintiff therein and applied by such plaintiff to any purpose for which it may be legally authorized to expend money.

3. The State board of health shall have the general supervision, with reference to their purity, of all rivers, brooks, streams, lakes, ponds, wells, springs, or other reservoirs in this State the waters of which are or may be used as the source or sources of public water supplies for domestic use, together with the waters feeding the same, and shall have the authority from time to time, as they deem necessary or proper, to examine the same and to inquire what, if any, pollutions exist and their causes; and the said State board of health, in carrying out the provisions of this section, may from time to time, as they deem it necessary or proper, address inquiries in printed or written form to any local board of health, municipal or township authority, corporation, or person or persons, which inquiries it shall

be the duty of the persons or parties addressed to answer within such time as the said State board of health may in such inquiries prescribe.

4. If any person or persons, corporation or corporations, city, town, borough, township, or other municipality of this State, or any municipal or township authority, shall violate any of the provisions of the first section of this act, it shall be lawful for the said State board of health, instead of proceeding in a summary way to recover the penalty prescribed in said section, to file a bill in the court of chancery, in the name of the State, on the relation of such board, for an injunction to prohibit the further violation of the said section, and every such action shall proceed in the court of chancery according to the rules and practice of bills filed in the name of the attorney-general on the relation of individuals, and cases of emergency shall have precedence over other litigation pending at the time in the court of chancery, and may be heard on final hearing within such time and on such notice as the chancellor shall direct.

5. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

6. This act shall take effect immediately.

Approved March 17, 1899.

[Laws of 1899, chap. 210, p. 536.]

AN ACT to prevent the pollution of the waters of this State by the establishment of a State sewerage commission, and authorizing the creation of sewerage districts and district sewerage boards, and prescribing, defining, and regulating the powers and duties of such commission and such boards.

Be it enacted by the senate and general assembly of the State of New Jersey:

1. It shall be the duty of the governor, within thirty days next succeeding the approval or passage of this act, to appoint, by and with the advice and consent of the senate, five citizens of this State, to compose and be known as "the State sewerage commission." In the original nomination of the members of said commission to the senate the governor shall designate one of them to serve for one year, and two for two years, and two for three years, and thereafter the members of said commission shall be appointed by the governor, by and with the advice and consent of the senate, for the term of three years and until their successors are duly appointed, confirmed, and qualified. Any vacancy occurring in said commission when the legislature is not in session shall be filled by appointment of the governor until the next regular session of the legislature, when such vacancy shall be filled in the manner hereinbefore provided, but any such last-mentioned appointment and confirmation by the senate shall be for the unexpired term only. Members of said commission, before enter-

ing upon the duties of their office, shall make and subscribe an oath or affirmation (before some person authorized by the laws of this State to administer the same) to truly, faithfully, and impartially perform and discharge the duties of their office according to law and file the same with the secretary of state. The terms of office of the members of said commission (except those appointed by the governor to fill vacancies as aforesaid) shall commence on the first Monday of May next succeeding their appointment by the governor and confirmation by the senate. On the first Monday of May next succeeding the original appointment of said commission the members thereof shall meet at the statehouse in the city of Trenton and organize by the election of one of their number to be chairman of said commission and one to be treasurer thereof, which officers shall hold office at the pleasure of the commission. After having so met and organized subsequent meetings of the commission shall be held at such times and places as the commission may direct or as it may be called to meet by the chairman.

2. Said commission shall keep a record of all its proceedings and transactions, also full and accurate account of its receipts, disbursements, expenditures, assets, and liabilities, and shall annually report to the legislature its operations, proceedings, and transactions for the preceding year, with a statement or abstract of such receipts, disbursements, expenditures, assets, and liabilities.

3. The members of said commission shall each receive an annual salary of one thousand dollars, to be paid as other salaries of State officers are paid. Said commission may have a secretary (not a member of the commission), to be appointed by the commission or a majority thereof, who shall hold his office at the pleasure of the commission or a majority thereof, and receive such salary as the commission or a majority thereof, with the approval of the governor, may fix; said commission or a majority thereof may also from time to time employ or appoint such experts, engineers, officers, agents, employes, workmen, and servants as it may deem necessary or proper to enable it to perform its duties and carry out the objects and purposes of this act; and said commission or a majority thereof may fix and determine the duties and compensation of said experts, engineers, officers, agents, employes, workmen, and servants, and remove or discharge the same or any of them at pleasure.

4. It shall be the duty of the secretary to keep a record of all the proceedings and transactions of the commission, to prepare the annual report to the legislature, and perform such other duties as the commission may require. It shall be the duty of the treasurer to take charge of the moneys received by the commission, to keep accurate accounts of the receipt and disbursement thereof, and to deposit and

pay out said moneys as the commission may direct and under such rules and regulations as it may from time to time establish. The treasurer may be required to give bond to the commission for the due and faithful performance of his duties as such treasurer, in such sum and with such sureties as the commission or a majority thereof may require and approve.

5. It shall be the duty of said commission to investigate the various methods of sewage disposal, either in this country or elsewhere, in order that they may be able to make proper recommendations in regard thereto. They shall investigate all complaints of pollution of the waters of this State which shall be brought to their notice, and shall advise as to the best methods of sewage disposal in order to prevent such pollution.

6. It shall be unlawful for any person, corporation, or municipality to build any sewer or drain or sewerage system from which it is designed that any sewage or other harmful and deleterious matter, solid or liquid, shall flow into any of the waters of this State so as to pollute or render impure said waters, except under such conditions as shall be approved by the State sewerage commission: *Provided*, That the provisions of this section shall not be deemed to prohibit the use or extension of existing sewers, drains, or sewerage systems.

7. It shall be unlawful for any person, corporation, or municipality to build or cause to be built any plant for the treatment of sewage or other polluting substance from which the effluent is to flow into any of the waters of this State, except under such conditions as shall be approved by the State sewerage commission, to whom the plans shall be submitted before building.

8. On or before the first day of January, one thousand nine hundred, and thereafter whenever required by said commission, the mayor of every municipality and the chairman of every township committee of every township now having, using, owning, leasing, or controlling a sewerage plant or system shall furnish to said commission, on blanks to be provided by said commission, a statement showing the disposition made of the sewage of their respective municipalities or townships, and, as near as possible, the amount discharged each twenty-four hours, and such other information and data as may be called for by said blanks to be provided as aforesaid by said commission.

9. The words "waters of this State," as used in this act, shall be held and construed to mean and include any and all waters of any pond, lake, creek, inlet, bay, estuary, river, or stream of this State.

10. To enable said commission to carry out and enforce the provisions of this act, the said commission may expend a sum not exceeding five thousand dollars, when duly appropriated.

11. And whereas, in order to prevent the pollution of the waters of this State, it is deemed necessary to establish a proper system or sys-

tems of sewerage and drainage wherein may or may not be included a system or systems of sewage-disposal works for the scientific treatment and proper disposal of sewage and sewage matter and the effluent thereof, and the establishment of any such system or systems may render proper or necessary the formation or creation of sewerage districts embracing portions or the whole of the territory of two or more of the municipalities of this State, within which districts such system may be constructed, maintained, and operated, and such municipalities may be unable, through lack of power and authority or otherwise, to agree upon the establishment of any such system or systems or upon the extent or limits of the territory of their respective municipalities to be included in any such district or districts and devoted to the uses and purposes of any such system or systems as aforesaid; therefore upon presentation to said the State sewerage commission of a petition in writing, setting forth that in order to prevent the pollution of the waters of this State, or any of them, it is proper or necessary that portions or the whole of the territory of two or more of the municipalities of this State should be erected into a sewerage district for the construction, maintaining, and operation within such district of a system of sewerage and drainage or a system of sewage-disposal works, or of both such systems, and naming each municipality, the whole or any portion of the territory whereof it is proposed shall be included in such district, and stating generally the boundaries and outlines of such proposed district with sufficient exactness to show approximately the quantity or extent of territory of each municipality to be embraced in such proposed district, and requesting said commission to create and establish such district for either or both of the purposes aforesaid; and if said petition be signed by the mayors or other chief executive officers of all of the municipalities named in said petition, any of whose territory is proposed to be included in said district, said signatures being respectively affixed to said petition by authority or direction of the respective governing bodies of such municipalities (full power and authority to authorize and direct the signing of any such petition being hereby conferred upon and vested in all such governing bodies), and the signing of said petition by such authority or direction being made to appear by affidavit or other due proof thereof, it shall be lawful for said the State sewerage commission to appoint a time and place when and where it will attend and give public hearing of the matters contained in said petition to all persons and parties interested therein; said commission shall cause at least twenty days' notice to be given of the time and place of any such hearing by publishing the same in the newspaper or newspapers, if any, published within said proposed district, and if none be published therein, then in a newspaper or newspapers published in the neighborhood of said proposed district and

circulating therein; said notice may also, at the discretion of said commission, be published in a newspaper or newspapers published outside of said proposed district, whether or not any paper or papers be published within the same; said commission shall also, at least ten days prior to the day fixed for such hearing, cause notice of the time and place thereof to be mailed to or served upon the mayor or other chief executive officer of any and all municipalities named in said petition, any territory whereof is included in said proposed district; and said commission may, if it deem proper so to do, require a copy of said petition to be mailed to or served upon such mayors or other chief executive officers such number of days prior to said hearing as it may direct; said hearing may be adjourned from time to time as said commission may decide; the sessions of said commission on said hearing, or any adjournment thereof, when sitting for the taking of testimony or hearing argument of counsel, shall be open and public, and witnesses may be examined under oath or affirmation, which any member of said commission or the secretary thereof is hereby authorized and empowered to administer; the secretary of said commission shall attend at all such hearings and keep minutes of the proceedings thereat; said commission may, if it deem proper so to do, employ a stenographer to take and transcribe the testimony produced before it at any such hearing; and said commission may require the persons or parties presenting to it any such petition as aforesaid to pay in advance or assume or guarantee to pay all or such part of the costs, charges, and expenses to be made or incurred by reason of the filing of said petition and subsequent proceedings to be had thereupon or thereunder, as said commission may think proper.

12. If, after such hearing, said commission, or a majority thereof, shall deem it advisable to comply with the request of said petition, and that a district for the purpose or purposes, or either of them therein stated, should be created and established, said commission shall adopt a resolution to that effect, defining the limits and boundaries of such district with certainty and declaring the territory included within such limits and boundaries to be a sewerage district, within which a system of sewerage and drainage, or a system of sewage-disposal works, or both, may be constructed, maintained, and operated under the provisions of this act; the said districts shall be called and known as "sewerage districts," and the boards to construct, maintain, and operate the system or systems of sewerage or sewage-disposal works within such districts shall be called and known as "sewerage boards;" in and by said resolution, said commission shall assign to the district therein and thereby established a name and number, thus, "Sewerage district number ——," and shall also specify the name by which the board thereafter to be elected in such

district shall be called and designated, thus, "Sewerage board of district number —," the number of any such district and that of the sewerage board therein to be always the same. The first sewerage district created and established under this act shall be "Sewerage district number one," the second number two, and so on in regular order, as the same may be respectively created. Said commission shall also cause a map to be prepared of said district so created and established, whereon and whereby shall be shown with accuracy the limits and boundaries of such district, of what municipalities the lands included in said district form a part, and what extent or quantity of territory of each municipality (whether the whole or a portion thereof) is included in said district. The original of said map shall be filed with said commission, and within ten days after the adoption of said resolution a copy thereof and of said map shall be filed in the office of the secretary of state and in the clerk's office of each county in which any of the lands included in said district may be situate; and from and after the filing of such resolution and maps as aforesaid the territory included in said district as stated and shown in and by said resolution and map shall be deemed to be and constitute a sewerage district by the name and number and for the purposes stated in said resolution.

13. The members of the several sewerage boards shall consist of two members from each municipality, in whole or part, within the sewerage district, to be appointed by the governing body of each of such municipalities, and one member to be appointed by the State sewerage commission, all of whom shall be residents of the district; provided that in case more than three municipalities shall be included in whole or part in any sewerage district there shall be but one member from each municipality in addition to the number appointed by the State sewerage commission.

14. The members of any district sewerage board first appointed shall meet at such time and place as the State sewerage commission shall designate; each member of said board (and all members thereof afterwards appointed thereto) shall take and subscribe an oath or affirmation, before some person authorized to administer the same, to faithfully and truly perform his duty as member of such board to the best of his ability, and within two days after making thereof forward the same to the secretary of state; said board when met as aforesaid (the members thereof having each made and subscribed said oath or affirmation) shall organize by the election of one of their number as chairman, one as secretary, and one as treasurer; the members of said board shall serve for the term of three years each, and the terms of such members shall commence on the date of their first meeting as

designated by the State sewerage commission; the chairman, secretary, and treasurer of said board shall, respectively, serve for the period of one year and until their successors are elected; a certificate or statement of such meeting and organization of said board shall, on the day of such meeting, be prepared and mailed to the secretary of state, to be filed in his office; meetings of said board subsequent to such first meeting for organization shall be held at such times and places as the board may decide or as it may be called to meet by the chairman.

15. From and after such meeting and organization of said board and the filing of such certificate as aforesaid, said board shall be deemed to be and shall be a body politic and corporate, under the same name and title as that designated and specified in the resolution of the State sewerage commission creating and defining the said sewerage district, to wit, "Sewerage board of district number —," and by such name and title said sewerage board shall have perpetual succession, with power to sue and be sued, and the right, power, and authority to acquire, hold, use, and dispose of all such property, real or personal, as may be proper or necessary for the objects, uses, and purposes for which said sewerage board was created, and with all other powers necessary or incident to bodies politic and corporate or that may be necessary or proper to carry out and effectuate the objects and purposes of this act and the objects and purposes for which said sewerage board was created.

16. Any such board incorporated as aforesaid shall have full power and authority within its respective district, under the supervision, direction, and control of the State sewerage commission as hereinbefore or hereinafter provided, to construct, maintain, and operate in said district a system of sewerage and drainage, or of sewage-disposal works, or both, with the necessary pipes, drains, conduits, fixtures, pumping works, and other appliances for the purpose of taking up sewage and all other offensive and deleterious matter and convey the same to some proper place or places of deposit or disposal to be selected by the said board, there to be deposited, treated, disinfected, or disposed of as to the said board may seem proper and as may be deemed most advantageous; and it shall be the duty of all persons and all corporate bodies and municipalities owning or controlling sewers or drains or having charge thereof within the limits of the district wherein intercepting or main sewers have been or may be constructed by the said board as herein provided, to cause the same to be connected therewith; and it shall be the duty of said board in constructing such main or intercepting sewers to have them so constructed that such connection can be made therewith at all necessary and proper points and places; all such connections shall be made in

accordance with the rules and regulations from time to time adopted by the said board in relation thereto, and under the direction and supervision of its officers and agents.

17. The said board shall have power and authority to purchase and acquire all lands, rights, or interest in lands which may be deemed necessary for the construction of sewers, drains, disposal pumping, and other works authorized by this act; and if in any case the said board shall be unable to agree with the owner or owners of any lands, rights, or interests in lands deemed necessary by the said board in the construction of the works herein authorized, or when, by reason of the legal incapacity or absence of such owner or owners, no agreement can be made for the purchase thereof, the lands or rights in lands so desired shall be acquired in the manner provided by the general laws of this State relating to the condemnation of lands for public use.

18. Before determining upon the final plan or route for the building or construction of any work authorized by this act, the said board may, by its officers, agents, servants, and employés, enter at all times upon any lands or waters for the purpose of exploring, surveying, leveling, and laying out the route of any drain or sewer, locating any disposal, pumping, or other works, establishing grades and doing all necessary preliminary work, doing, however, no unnecessary damage or injury to private or other property.

19. The said board shall have power and authority to construct any sewer or drain, by it to be made or constructed under or over any water course, under, over, or across, or along any street, turnpike, road, railroad, highway or other way, and in or upon private or public lands under water, in such way and manner, however, as not unnecessarily to obstruct or impede travel or navigation, and may enter upon and dig up any road, street, highway, or private or public land, for the purpose of laying down sewers and drains upon or beneath the surface thereof, and for maintaining and repairing the same, and in general may do all other acts and things necessary, convenient, and proper for the purposes of this act; and whenever the said board shall dig up any road, street, or way, as aforesaid, it shall, as far as practicable, restore the same to as good condition and order as the same was when such digging commenced.

20. The said board shall have power and authority also to alter or change the course or direction of any water course, and, with the consent of the board or body having control of the streets and highways in any city, town, or municipality, to alter or change the location or grade of any highway, public street, or way crossed by any sewer or drain constructed or to be constructed under the provisions of this act, or in which such sewers or drains may be located.

21. The said board shall at all times keep full and accurate accounts of its receipts, expenditures, disbursements, assets, and liabilities, and shall annually make a report of its operations and doings, in which report it shall include an abstract of such receipts, expenditures, disbursements, assets, and liabilities, and publish the same in one or more newspapers, published in each of the counties in said district.

22. To provide for the payment of the costs and expenses incurred or to be incurred by the said board in making the constructions and executing the work and performing the duties imposed upon it by this act, it shall have power and authority from time to time to issue bonds in its corporate name, not to exceed in amount such costs and expenses, and not to exceed that part of such cost and expense incurred in the work of constructing sewers, drains, disposal, and other works, including the cost of lands, rights and interests in lands, of which a separate account is to be kept by said board as hereinafter provided; such bonds shall be of the form and payable at such time, not exceeding thirty years from the date thereof, and at such place, either in currency or coin, as the said board may determine; they shall bear interest at a rate not exceeding five per centum per annum; in issuing such bonds the said board may, in its discretion, make the same or any part thereof, fall due at stated periods less than thirty years, or may reserve therein an option to redeem and pay the same or any part thereof at stated periods at any time between the date thereof and the date at which they would otherwise fall due, and all such bonds may be negotiated, sold, or disposed of at not less than their par value, and the same or the proceeds thereof may be used by the said board for the purpose aforesaid.

23. The said board shall keep the costs and expenses of the construction of sewers, drains, disposal and other works, in which shall be included the cost of lands, rights, and interests in lands, separate from the costs and expenses of maintenance, operation, and repairs, and shall, after having prepared and adopted plans (which, however, the board or the State sewerage commission shall have the power to change or modify, if such change or modification shall be found necessary or desirable), make a careful estimate of the cost and expense of such construction, and shall divide and apportion the same, according to their best judgment, to and between the several municipalities or parts thereof (if any) included within such sewerage districts ratably and proportionally to the benefits received or to be received by such municipalities or parts thereof from such construction, and shall furnish to the governing body of each and every municipality the whole or any part whereof is included in such sewerage district, a statement of such estimated cost and expense and of the division and

apportionment thereof as aforesaid, and service of said statement upon the mayor or other chief executive officer or upon the clerk of any such municipality shall be deemed to be a service upon the municipality; if the governing body of any such municipality (whether a whole or only a part thereof is included in such sewerage district) shall be dissatisfied with such division and apportionment and shall within twenty days after service thereof as aforesaid express such dissatisfaction by a resolution adopted by a majority of such body, then it shall be lawful for such body, in the corporate name of such municipality, to make application to any justice of the supreme court of this State for the appointment of three disinterested persons, residents of this State, commission to review such division and apportionment, and correct, amend, revise, alter, or confirm the same, as they or a majority of them shall deem just and proper, and it shall be the duty of said justice to make such appointment; the commissioners so appointed (having respectively taken and subscribed an oath or affirmation before some person authorized to administer the same faithfully and impartially to perform the duties imposed upon them by ^a), shall forthwith, at such time and place as they or a majority of them may appoint, and upon such notice as the said justice in the order appointing said commissioners shall direct to be given, hear the parties interested in said matter and such proofs and witnesses as may be produced before them; said commissioners may adjourn said hearing from time to time as occasion may require; on any such hearing the parties, if they so choose, may be represented by counsel, and the witnesses may be examined under oath or affirmation, which any of said commissioners are hereby authorized to administer; said commissioners may designate one of their number to act as chairman and one to act as clerk or secretary; at the conclusion of such hearing, and within ten days thereafter, said commissioners, or a majority of them, shall correct, amend, revise, alter, or confirm such division and apportionment as they or a majority of them shall deem just and proper under the evidence and proofs produced before them and shall make and sign a statement or certificate thereof, which statement or certificate shall be final and conclusive and binding upon all parties; the application for the appointment of such commissioners, the order of the justice appointing them, the oath or affirmation of said commissioners, and their said statement or certificate shall, within two days after the making of such statement or certificate, be filed with the secretary of the sewerage board which made the division or apportionment reviewed by said commissioners; and such sewerage board, within five days after the filing of such statement or certificate as aforesaid, shall cause a certified copy thereof to be served in manner

^a So in original.

aforesaid upon each of the municipalities that the original division and apportionment made by said sewerage board was served upon, which certified copy so served shall be in lieu and stead of that originally served and (as aforesaid) be final and conclusive and binding upon all parties; if, in any case, where only a part of a municipality is included in a sewerage district, the governing body of such municipality shall not within said twenty days after service upon it of any such original statement as aforesaid adopt a resolution expressing its dissatisfaction as aforesaid provided, then, and in every such case, it shall and may be lawful for one or more of the residents and taxpayers, or residents and nonresident taxpayers of said sewerage district, to join in such application as aforesaid to any justice of the supreme court for the appointment of commissioners to review, as aforesaid, the said division and apportionment, and thereupon the said justice may, in his discretion, appoint such commissioners, and if such appointment be made, said commissioners shall proceed in the same manner, and the proceedings before them had shall be similar to those hereinbefore provided, and the statement or certificate of said commissioners made upon any such last-mentioned application shall be final and conclusive and binding upon all parties.

24. The said sewerage board shall also, in the manner hereinbefore directed, serve upon or furnish to each of said municipalities after every issue and sale of bonds a statement of the amount of such bonds and the date of interest thereon and the proportion thereof allotted to each municipality (where such municipality is entirely within the sewerage district) or (where only a part of the municipality is included in the sewerage district) of the proportion of such division and apportionment allotted to the part of the municipality in said sewerage district; and it shall be the duty of each of said municipalities, and of its proper officers, in the next annual tax levy made in such municipality and in each succeeding year thereafter to include and raise by taxation the amount required to pay the interest on the proportion of such bonded indebtedness allotted to such municipality or part thereof, as the case may be, and if such municipality be entirely within such sewerage district then it shall be the duty of such municipalities to cause to be levied and assessed therein a sum equal to the amount of interest so apportioned and allotted to such municipality together with such additional sum, to be divided and apportioned and allotted to and between said municipalities or parts thereof as aforesaid as may be necessary to establish and maintain a sinking fund sufficient to pay the principal of the bonds issued by the said sewerage board under authority of this act when the same fall due. If only a part of the municipality be included in the sewerage district, then it shall be the duty of such municipality and its

proper officers, instead of levying and assessing the same upon the whole municipality, to cause, in manner aforesaid, the sum or sums that may, as aforesaid, be apportioned and allotted to such part of the municipality as is included in the sewerage district to be levied and assessed in and upon such part of the municipality as is included in the sewerage district, in the same manner as other taxes may be levied and assessed therein; and it shall be the duty of all taxing officers and all collecting officers in the said municipalities to levy, assess, and collect the said amount or sums so to be raised in such municipalities or parts thereof, as the case may be; and it shall also be the duty of the collector of taxes in each of the said municipalities, or other proper officer, to pay to the sewerage board thereunto entitled the money so levied, assessed, and collected. After each census, State or national, a new allotment shall be made of the sinking fund or redemption fund in the manner herein provided.

25. As soon as the work of construction by this act authorized (or the cost and expense of which a preliminary estimate shall have been made as herein provided) has been completed the said board shall proceed at once to ascertain the actual cost and expense of such work, and shall furnish to each of the said municipalities or municipal divisions a statement of such cost and expense.

26. The cost of maintenance, operation, and repairs, together with the cost of supervision, and all other expenses of every kind not included in the cost and expense of construction, shall be annually estimated by the said board and divided and apportioned between the said several municipalities or parts thereof upon the same basis as herein provided for the division of the cost and expense of construction; and that the same, when so divided and apportioned, shall be levied, assessed, collected, and paid annually in the same manner provided for the levying, assessment, and collection of the cost and expense of construction: *Provided, however,* That if at the end of any year when such cost and expense shall have been accurately ascertained such estimate shall be found to have been more or less than the proper proportion of any such municipality, then the surplus or deficiency, as the case may be, shall be deducted from or added to the sum to be levied, assessed, and collected for the succeeding year.

27. The said board shall, immediately after receiving from the said municipalities, or either of them, or from the collector or treasurer of any such municipality, any moneys on account of the apportionment made, as hereinbefore provided, or as soon thereafter as practicable, cause the same to be invested in securities, the character of which shall be the same as required by law for savings banks of this State, except so much thereof as may be required to pay interest due or to fall due during the current year; and all such funds, and the

securities in which the same or any part thereof shall be invested, and the interest received therefrom, shall be held, used, and applied by the said board as a sinking fund to meet and pay the interest and principal on the bonds issued by the said board under the authority of this act, and for no other purpose whatever, until all such bonds and all arrears of interest thereon are fully paid. It shall be the duty of said sewerage board to include in its annual report the amount of money received by it for the purposes aforesaid, the sources from which such money was received, and the investment of the same; and the said board shall keep a record and account of all bonds issued by it, when the same fall due, the time and place of payment, and the rate of interest thereon, and of the amount received on the sale or disposition thereof, and shall also keep an account of all moneys invested, held, and used as a sinking fund, and of the securities in which the same may be invested. The books, records, accounts, papers, and documents of the said board shall be open to the inspection of any person appointed by the governing body of any municipality within said district to inspect the same: *Provided, however,* That in case the said board shall issue bonds which shall fall due and become payable at stated periods less than thirty years or shall retain in any such issue the option to redeem bonds prior to the date at which they would otherwise fall due as hereinbefore provided, then it shall be lawful for the said board to make application of the moneys received by it from the several municipalities and of the funds temporarily invested by the said board so received for the purpose of paying off and discharging the said obligations according to their tenor and effect.

28. During the year preceding the year in which the bonds issued under the authority of this act shall fall due the said board shall cause a careful computation to be made of the moneys that will be available for the payment of the same, and if it shall be found that any deficiency will exist in the fund that will be available therefor, after the application of moneys received and the use of all securities held, such deficiency shall be apportioned and allotted to the said municipalities in the same manner and upon the same basis as the original apportionment, and shall be added to the amount so levied, assessed, collected, and paid by the said municipalities, respectively, in the succeeding year; and if any excess shall be found to exist in such fund the surplus shall be credited to each of the said municipalities in the same proportion and deducted from future estimates of the respective shares or proportions of such municipalities of the cost and expense of maintenance, operation, and repairs.

29. In and about the performance and discharge of the duties imposed upon it by this act any such sewerage board as aforesaid,

or a majority thereof, may employ such experts, engineers, contractors, officers, agents, employes, clerks, workmen, and servants as it may deem necessary or proper to enable it to perform its duties and carry out the objects and purposes of this act; and said board, or a majority thereof, may fix and determine the duties and compensation of such experts, engineers, contractors, officers, agents, employes, clerks, workmen, and servants, and remove or discharge the same, or any of them, at pleasure.

30. The secretary of any such sewerage board shall keep a record of all the proceedings and transactions of said board; under the direction of said board he shall prepare the estimate, division, and apportionment provided for in section twenty-six hereof; he shall prepare the annual report of said board and perform such other duties as the board may from time to time require. The secretary shall receive an annual salary, to be fixed by the board, or a majority thereof, but he shall not receive any per diem allowance.

31. The treasurer of any such sewerage board shall have charge and custody of all moneys and securities received or owned or held by said board; he shall keep accurate record and account of the receipt, disbursement, and disposition of all such moneys and securities, and invest, deposit, dispose of, disburse, and pay out the same at such times and in such manner as the board may direct, and under such rules and regulations as it may from time to time establish. The treasurer shall give bond to such board for the due and faithful performance of his duties as such treasurer in such sum and with such sureties as the board, or a majority thereof, may require. The treasurer shall receive an annual salary, to be fixed and determined by the board, or a majority thereof, but he shall not receive any per diem allowance.

32. The members of any such board, except the secretary and treasurer thereof, when actually engaged in and about the business of said board, shall receive a per diem compensation of five dollars; said per diem compensation, and the salaries to be paid the secretary and treasurer, shall be included in said estimate hereinbefore mentioned.

33. Any such sewerage board is authorized and empowered to rent an office or offices as may be required for the due transaction and carrying out of its work and duties, and to properly equip and furnish such office or offices, the expense thereof to be included in said estimate mentioned in section twenty-six hereof.

34. This act shall take effect immediately.

Approved March 24, 1899.

[Laws of 1902, p. 195, chap. 49.]

AN ACT authorizing the appointment and defining the powers and duties of commissioners in sewerage and drainage districts created for the purpose of relieving the streams and rivers therein from pollution, and to provide a plan for the prevention thereof, and providing for the raising, expenditure, and payment of moneys necessary for this purpose.

Be it enacted by the senate and general assembly of the State of New Jersey:

1. Upon the creation and incorporation by the legislature of any sewerage and drainage district for the purpose mentioned in the title of this act it shall be the duty of the governor of this State forthwith to appoint therein and therefor five able and discreet men, residents within such district (having regard in making such appointments to locality, so that each section of the district may be represented, as far as practicable), who, when so appointed, commissioned, and sworn, shall constitute a board of commissioners, to be known as the _____ district sewerage and drainage commissioners (inserting in each case in the blank space the name of the district designated in the act of incorporation), and the persons so appointed shall receive as compensation for their services an annual salary of twenty-five hundred dollars, payable in equal monthly installments. In making the first appointments under this act the members of the said board shall be appointed as follows: One for a term of one year, one for a term of two years, one for a term of three years, one for a term of four years, and one for a term of five years, and thereafter one shall be appointed each year for a term of five years. Any vacancy occurring in the said board by death, resignation, or otherwise, shall be filled in the same manner as the original appointment for the balance of the term. Each of the said commissioners so appointed shall, before they enter upon the duties of their office, take and subscribe an oath that they will faithfully and impartially execute and perform the duties imposed upon them by law, and cause the same to be filed in the office of the secretary of state of this State. The governor of this State shall have power to remove such commissioners from office for cause during their term of office and, upon removal, to fill the vacancy thus occasioned for the unexpired term in the manner herein provided for filling vacancies.

2. The said board shall, as soon as may be after appointment, and annually thereafter on the first Tuesday in May in each year, organize by the choice of one of its members as chairman, and may elect a clerk, who may or may not be a member of the said board, and may from time to time appoint such agents, officers, and servants and employ such engineers and assistants as it may deem necessary to

carry out the purposes of this act, and may determine their duties and compensation and remove the same at its pleasure.

3. The said board of commissioners, when duly organized, shall be deemed to be and shall become a body corporate, with power to sue and be sued and with the right to acquire, hold, use, and dispose of all such property as may be necessary for the uses and purposes for which the said board was created and with all other necessary powers incident to corporate bodies.

4. When duly organized, the said commissioners shall at once, with the aid and assistance of such engineers and other agents as they may deem proper, proceed to investigate methods and plans for relieving the streams and rivers within the said district from pollution and for preventing the pollution of the same, and to determine the apportionment of the capacity of sewer provided for each municipality in any intercepting sewer, sewers, or disposal works: *Provided*, That before a final determination as to the plan or method to be adopted for the purpose, an opportunity shall be given the governing body of each municipality to be heard in relation thereto, and after said hearing, as soon as the said commissioners have adopted a plan or method for this purpose, they shall report the same to the respective municipalities of the district and to the legislature of this State, together with a bill providing therefor and for the expenses thereof.

5. Before determining upon the final plan or route for the building or construction of any work investigated under this act the said board may, by its officers, agents, servants, and employees, enter at all times upon any lands or waters for the purpose of exploring, surveying, leveling, and laying out the route of any drain or sewer, locating any disposal, pumping, or other works, establishing grades, and doing all necessary preliminary work in the way of designating locations, doing, however, no unnecessary damage or injury to private or other property.

6. The said board shall at all times keep full and accurate account of its receipts and expenditures, disbursements, assets, and liabilities, and shall annually cause a detailed statement thereof to be published in one or more newspapers published or circulating in the respective municipalities in said district.

7. To provide for the payment of the cost and expense incurred or to be incurred by the said board in investigating and performing the duties imposed upon it by this act, one-half of said cost of^a expense shall be paid out of the State treasury on certificate of the governor to the comptroller, who shall draw his warrant on the State treasurer in favor of the said board for the amount thereof, the same to be

^a So in original.

ascertained on a duly verified statement of such expenses being filed with the governor and in the office of the secretary of state; as to the balance of the said costs and expense incurred or to be incurred under this act, the said board shall have power and authority:

I. To issue from time to time, for the said one-half of the costs and expenses, temporary certificates, to run for a period not to exceed two years, the aggregate issue of said certificates not to exceed the sum of twenty-five thousand dollars; such certificates, when issued, shall be deemed and considered the indebtedness of the sewerage and drainage district, and shall constitute a charge upon persons and property therein, and shall be retired and paid in the manner hereinafter provided.

II. The said board shall have power and authority to order and cause a tax to be levied, assessed, and collected upon persons and property within the said sewerage and drainage district, the proceeds of which to be used in payment of the said certificates and the interest due and to grow thereon; the amount to be assessed and collected in the respective municipalities composing such districts shall be determined by the said board, and shall be apportioned according to the taxable ratables of the last preceding year as returned by the taxing officers in said district, and a certificate by the said board shall be filed with the taxing officers of such municipalities composing the said sewerage district, and it shall be the duty of the taxing officers within the said municipalities included in the said sewerage and drainage district, to levy, assess, and collect and pay over to the said commissioners any tax ordered by them to be assessed by virtue of the provisions of this act.

8. It shall be the duty of the said board annually to make and file with the secretary of state of this State a report showing the amount of money received by it for the purposes aforesaid, sources from which money was received, and the expenditure of the same; and it shall be the duty of the said board to keep an account of all certificates issued by it, when the same fall due, the time and place of payment, the rate of interest thereon, and of the amount received on the sale or disposition thereof; and the books, records, accounts, papers, and documents of the said board shall be open for the inspection of the governor of this State, or any person or persons whom he may appoint to inspect the same.

9. For the purpose of carrying out the provisions of this act with dispatch the sum of twenty-five thousand dollars is hereby appropriated by the State out of any moneys now in the State treasury not otherwise appropriated, and the governor is hereby authorized and empowered to give an order on the comptroller for advanced payments to the said board on account of the State's share of such expenses to be incurred.

10. When the said board of commissioners are appointed and organized under this act it shall have absolute control of and supervision over the prevention of pollution throughout the said sewerage or drainage district for which the said commissioners were appointed, exclusive of any other body or board in this State now having control of the same: *Provided, however,* That nothing herein contained shall in any way affect or delay or interfere with any action or proceedings which may have heretofore been taken by the State sewerage commission for the purpose of preventing pollution in said sewerage district, or that may hereafter be taken by said State sewerage commission for the enforcement thereof.

11. All acts or parts of acts inconsistent with the provisions of this act be, and the same are hereby, repealed, and this act shall take effect immediately.

Approved March 27, 1902.

[Act passed by the special session of the legislature convened April 21, 1903. Laws of 1903, p. 777.]

AN ACT to relieve from pollution the rivers and streams within the Passaic Valley sewerage district, established and defined by an act of the legislature entitled "An act to create a sewerage district to be called the Passaic Valley sewerage district," approved March twenty-seventh, one thousand nine hundred and two, and for this purpose establishing therefor a district board of commissioners, defining its powers and duties, and providing for the appointment, terms of office, duties, and compensation of such commissioners, and further providing for the raising, collecting, and expenditure of the necessary moneys.

Whereas the legislature of this State has created and defined a sewerage district, embracing a large number of municipalities and parts of municipalities, in the counties of Passaic, Bergen, Hudson, and Essex, under the name of the Passaic Valley sewerage district; and

Whereas the Passaic River and many streams flowing into it within said sewerage district are polluted by sewage and other deleterious matter to the extent that the health of the people residing in said district is seriously endangered; and

Whereas immediate relief therefrom is imperative; and

Whereas the governor of this State, by sanction of the legislature, has appointed five commissioners for said district with power, among other things, to investigate methods and plans for relieving the streams and rivers within said district from pollution, and for preventing the pollution of the same; and

Whereas said commissioners have adopted an effectual plan or method for relieving the streams and rivers within said district from pollution, and for preventing the pollution of the same, and have reported said plan or method to the legislature; and

Whereas in order to carry into effect such plan or method, with

such modifications or additions thereto as shall hereafter be approved by said commissioners, it is necessary that further and greater power be given to said commissioners:

Be it enacted by the senate and general assembly of the State of New Jersey:

1. The commissioners heretofore appointed by the governor of this State in and for the Passaic Valley sewerage district shall continue in their respective offices for the terms for which they were severally appointed, and said terms are hereby extended to the first Tuesday of May succeeding the date when their terms under said appointments would respectively expire; and hereafter one commissioner shall be appointed by the governor, by and with the advice and consent of the senate, in each year for a term of five years, beginning on the first Tuesday of May next following the date of his appointment. Any vacancy occurring in the office of commissioner by death, resignation, or otherwise shall be filled by the governor, but for the unexpired term only. Each of the said commissioners hereafter appointed, before he enters upon the duties of his office, shall take and subscribe an oath that he will faithfully and impartially execute and perform the duties imposed upon him by law, and cause the same to be filed in the office of the secretary of state of this State. The commissioners shall each receive for services under this act an annual salary of twenty-five hundred dollars, payable in equal monthly installments, and the said commissioners shall henceforth receive no other compensation than that provided under this act. The governor of this State shall have power to remove any commissioner from office for cause during his term of office, and upon removal to fill the vacancy thus occasioned for the unexpired term. In making appointments, either for full terms or to fill vacancies, regard shall be had by the governor both to ability and fitness, and also to locality, so that each section of the district may be represented as far as practicable. No commissioner shall be directly or indirectly interested in any contract awarded under the provisions of this act, nor in furnishing materials or supplies therefor to any contractor, nor in furnishing security for the performance of any contract. If at any time it shall appear to the satisfaction of the governor of this State that any commissioner is or has been so interested, or is or has been a stockholder in any corporation furnishing material or supplies to any contractor for work done or to be done under the provisions of this act, or that he is the owner of any lands or water or water rights taken or to be taken or used in or for the construction of any work under the provisions of this act, or a stockholder in any corporation owning or leasing any such lands or waters or water rights, it shall be the duty of the governor to remove such commissioner from office forthwith, and all contracts made by such sewerage commissioners wherein any such

commissioner shall have been interested, directly or indirectly, as aforesaid, or otherwise, shall thereupon become and be null and void, and no further payments on account thereof shall be made by said sewerage commissioners.

2. The said commissioners shall, on the first Tuesday in May of each year, at the hour of two o'clock in the afternoon, organize by the choice of one of their members as chairman of the board, and they may elect a treasurer, who may or may not be a member of the board, and a clerk, who may or may not be a member of the board, and may also from time to time appoint such other officers, attorneys, agents, employees, and servants, and such engineers and assistants as they may deem necessary to carry out the purposes of this act, and may prescribe the duties and fix the compensation of all officers, attorneys, agents, employees, servants, engineers, and assistants; and all appointees of said commissioners may be removed at their pleasure. The organization of said board and the appointment of officers, agents, clerks, servants, engineers, and assistants heretofore made by the said board shall have the same effect as if made under this act.

3. The said commissioners heretofore appointed and their successors in office are and shall continue to be a body politic and corporate, with perpetual succession under the name of "Passaic Valley sewerage commissioners," with power to sue and be sued, with power to adopt and use a corporate seal, and the right, power, and authority to acquire, hold, use, and dispose of all such property, real and personal, as may be proper or necessary, and with all other powers proper or necessary to carry out and effectuate the purposes for which said board is created.

4. The board of Passaic Valley sewerage commissioners, incorporated as aforesaid, is hereby given full power and authority to make, construct, maintain, and operate intercepting, main, trunk, and outlet sewers with the necessary pipes, conduits, pumping works, and other appliances for the purpose of taking up, within the said Passaic Valley sewerage district, sewage and other offensive and deleterious matter which would or might otherwise pollute the streams and rivers in said district and convey the same to some proper place or places of deposit, discharge, or outfall in the New York Bay, within the State of New Jersey, to be selected by the said sewerage commissioners, there to be discharged, which place or places of deposit, discharge, or outfall shall be at least one and one-quarter miles, measured at right angles, in an easterly direction, from the exterior line for solid filling in the New York Bay, as now established by the riparian commissioners of this State, and in a tidal channel of not less than forty feet in depth at mean low water; and the said sewerage commissioners shall also have power to establish within said sewerage district, when necessary, sewage disposal works and works

for the treatment, disinfecting, and disposal of sewage: *Provided, however,* That no sewage disposal work and works for the treatment, disinfecting, and disposal of sewage shall be erected, established, or maintained within the distance of five miles from the outfall of said trunk sewer herein provided for: *Provided, however,* That nothing herein contained shall in any way be construed to allow or permit said sewerage commission to establish or build more than one sewage disposal works or more than one plant or works for the treatment, disinfecting or disposal of sewage; no contract of any kind shall be awarded at any one time for more than one million dollars: *Provided, however,* That this provision shall not apply to the sale of bonds. All work done and materials purchased in the prosecution of said work or works, the cost of which shall exceed five thousand dollars, shall be by contract awarded, after due advertisement, to the lowest responsible bidder, and all contractors shall be required to give bonds satisfactory in security and amount to the said board; and no contract involving an expenditure of more than twenty-five thousand dollars shall be awarded until after the same shall have been submitted to and approved by the governor: *Provided,* That no contract for any of the work herein required to be performed by contract shall be awarded except on the express stipulation that so far as practicable all said work shall be performed by union labor, and preference shall be given to citizens of the State of New Jersey.

5. It shall be the duty of all persons, corporations, and municipalities owning or controlling the sewers or drains within the limits of said sewerage district, which discharge directly or indirectly into the streams or rivers within the said sewerage district any sewage or deleterious matter, to cause the same to be connected with and to be discharged into the sewers constructed by the said sewerage commissioners when the same shall have been constructed, and at the places which shall have been designated for that purpose by the said sewerage commissioners; all sewers and drains hereafter constructed by any person, corporation, or municipality within the said sewerage district conveying or discharging sewage or other deleterious matter, which might otherwise discharge into or be discharged into the streams or rivers within the said sewerage district, directly or indirectly, shall be so constructed that the outfall or discharge therefrom shall be delivered into the drains or sewers provided by the said sewerage commissioners at the points and places designated by the said commissioners; and it shall be the duty of the said sewerage commissioners, in constructing said intercepting or main sewers, to have them so constructed that connection therewith can be made at necessary or proper points; and all such connections shall be made in accordance with the rules and regulations from time to time adopted by the said sewerage

commissioners in relation thereto, and under the direction and supervision of their officers and agents, and all such connections shall be the property of such sewerage commissioners; the main, intercepting or trunk sewer to be constructed by the said sewerage commissioners shall commence at or near the Valley of Rocks, in the city of Paterson, and shall extend to the point of discharge or outfall in the New York Bay, within the limits of the State of New Jersey; before any moneys expended or obligations are incurred for the construction of any trunk or outlet sewer which shall discharge into New York Bay, the said board shall carefully investigate whether said discharge is likely to pollute the waters of said bay within the jurisdiction of the State of New York to such an extent or in such a degree as to cause a nuisance to persons or property within said State, and shall present the result of their investigation to the governor with their opinion thereon and their reasons for their opinion; and thereupon the same shall be considered by the governor and the attorney-general, and no work shall be done or further proceedings taken unless the attorney-general shall, in writing, advise that no cause of action either for damages or an injunction will arise in favor of the State of New York or any of its inhabitants by reason of such discharge of sewage into the waters of New York Bay, and the governor shall, by order, in writing, advise said board that, in his judgment, it is safe and prudent to proceed with its work, due regard being had to all the risks and dangers of injunctive litigation.

6. The said sewerage commissioners shall have power and authority to purchase and acquire lands and rights or interests in lands within and without the said sewerage district which may be deemed necessary for the construction of sewers, drains, disposal, pumping or other works authorized by this act, but no ventilating plant, sewage disposal works, or works for the treatment, disinfecting, or disposal of sewage shall be erected or maintained outside of said sewerage district; and if in any case the said sewerage commissioners shall be unable to agree with the owner or owners of any lands or rights or interests in lands deemed necessary by said sewerage commissioners in the construction and prosecution of the work hereby authorized, or when by reason of legal incapacity or absence of such owner or owners no agreement can be made for the purchase thereof, the lands or rights or interests in lands so deemed necessary for the purposes of this act shall be acquired by condemnation by the said sewerage commissioners in the manner provided by the general laws of this State relating to the condemnation of lands for public uses: *Provided*, That no private property shall be taken for the purposes of this act without compensation therefor shall have first been made or tendered to the owner or owners thereof, or, in lieu thereof, paid to the clerk of the

county in which the lands taken are located for the use of the person or persons entitled to receive the same; and in case such payment or tender to the owner or owners, or payment into court, is made by the said sewerage commissioners upon the award of commissioners, the said sewerage commissioners shall be entitled to take immediate possession of the property so condemned, notwithstanding any appeal, and the acceptance by the owner or owners of the lands or rights so condemned of any award of commissioners shall not interfere with or prevent the taking of any appeal provided by law.

7. The said board of sewerage commissioners shall have power to construct any sewer or drain by it to be made or constructed under or over any water course, under or over or across or along any street, turnpike, railway, canal, highway, or other way, and in or upon private or public lands, and in or upon lands of this State and under waters of this State, in such manner, however, as not unnecessarily to obstruct or impede travel or navigation, and may enter upon and dig up any street, road, highway, or private or public lands either within or without the said sewerage district for the purpose of constructing or laying sewers or drains upon or beneath the surface thereof, and for maintaining and operating the same, and in general may do all other acts or things necessary, convenient, and proper to carry out the purposes of this act; but no part of said sewer where laid under the waters of this State beyond the exterior lines for solid filling, as established by the riparian commissioners of this State, shall in said Newark Bay be above an elevation of thirty feet below mean low water, or shall in said New York Bay be above an elevation of thirty-five feet below mean low water; and the said board of sewerage commissioners shall have power, for the purpose of carrying such sewage or other matter to the place of deposit or discharge in New York Bay, to construct sewers within territory outside of the said sewerage district, and with its sewers, pipes, and drains to pass through or partly through the territory of municipalities outside of said sewerage district; and whenever the said board shall dig up any road, street, or highway as aforesaid, it shall, as far as possible, restore the same to as good condition and order as the same was when such digging commenced: *Provided, however,* That when such streets, roads, or highways lie outside of such sewerage district, the laying down of sewers or drains under or across said streets, roads, or highways shall be subject to such police regulations of the governing bodies of such municipalities as are applicable and enforceable in the construction of sewers or drains for such municipality.

8. The said sewerage commissioners shall have power and authority to alter or change the course or direction of any water course, and, with the consent of the township committee of any township and of the board or body having control of the streets or highways in any

city, town, or other municipality, to alter or change the grade or location of any highway, public street, or way crossed by any sewer or drain to be constructed under the provisions of this act.

9. The said board of sewerage commissioners may, by its officers, agents, servants, and employees, enter at all times upon any lands or waters within or without the said sewerage district for the purpose of exploring, surveying, leveling, and laying out the route of any drain or sewer, locating any disposal, pumping, or other works, establishing grades, and doing all necessary preliminary work; doing, however, no unnecessary damage or injury to private property.

10. The said board of sewerage commissioners shall at all times keep full and accurate accounts of its receipts, expenditures, disbursements, and liabilities, and shall annually cause a detailed statement thereof to be published and a copy thereof mailed to the secretary of state of this State and to the clerk of each of the municipalities in the district. The fiscal year of said sewerage commissioners shall end on the first Tuesday of May in each year, and said report so to be published shall be a report for the previous fiscal year, and shall be made as soon after the end of each fiscal year as conveniently may be; and the mayor or chief officer of any city or other municipality included within said drainage district shall be given full access to all the books, accounts, and vouchers of the said board, at all reasonable times, for the purpose of examination and report in the interest of such municipalities, respectively, and of the taxpayers therein.

11. To provide for the payment of costs and expenses incurred or to be incurred by the said sewerage commissioners for the purchase of lands, rights, or interests in lands or other property or rights, and in the construction of said disposal works, pumping stations, sewers, drains, and all other works by them to be constructed, and for engineering, administrative, and other expenses connected therewith, including interest during construction, said board of sewerage commissioners shall have power from time to time to issue its corporate bonds in an amount not to exceed nine million dollars and not to exceed the total estimated cost and expenses of the whole work; such bonds shall be in the form and payable at a time not exceeding fifty years from the date thereof and at such places, and either in currency or coin, as the said sewerage commissioners may determine; such bonds shall bear interest at a rate not exceeding four per centum per annum, payable semiannually; all such bonds shall be signed by the chairman of the said board of sewerage commissioners and countersigned by the treasurer, and shall be sealed with its corporate seal, attested by the clerk; in issuing such bonds the board of sewerage commissioners may, in its discretion, make the same or any part thereof fall due at stated periods less than fifty years from the date of issue, and may reserve in said bonds an option to redeem or pay

the same or any part thereof at stated periods at any time between the date thereof and the date at which they would otherwise fall due; the said bonds may be either coupon or registered bonds or partly coupon and partly registered bonds, and all such bonds may be negotiated, sold, and disposed of at not less than their par value, and the same or the proceeds thereof may be used by the said sewerage commissioners for the purposes aforesaid; the said board of sewerage commissioners shall keep the cost and expenses of the construction of its plant—in which shall be included the cost of lands, rights, or interests in lands, and the cost of all other property and rights, and the cost of construction of all works, including engineering expenses, administrative expenses, and legal expenses, and including interest during the course of construction—separate from the cost and expenses of maintenance, operation, and repairs; all sales of bonds shall be made after public notice and advertisement calling for bids and shall be made to the highest responsible bidders.

12. The said board of sewerage commissioners may, in anticipation of the issuing of bonds, and from time to time as it may need money, borrow such sum or sums of money, not exceeding at any one time one-fifth of the estimated cost of the whole work, and may issue its certificates of indebtedness, promissory notes, or other obligations therefor, retiring the same from time to time as the bonds hereinbefore authorized to be issued are sold. In order that the said bonds issued for the purchase of land, rights in land, and for the construction of the works, plant and extensions, betterments and improvements thereof may be paid and retired at maturity, the sewerage commissioners shall provide a proper and suitable sinking fund not exceeding in amount to be raised in any one year one per centum of the face value of the bonds issued, which sum shall be raised annually, beginning with the fifth year after the issuing of said bonds, at the time and in the manner herein provided for the raising of the moneys necessary to pay the interest on said bonds. The money so raised for sinking-fund purposes shall be kept in a separate account by the treasurer of the board of sewerage commissioners, and shall, under its direction, be used or invested from time to time in the purchase or retirement of its own bonds, or in the purchase of securities in which savings banks and savings institutions of this State are authorized to invest.

13. All indebtedness of the said board of sewerage commissioners incurred for the purchase of lands, rights, or interests in land or other property, and in the construction of its works or plant, or otherwise lawfully incurred, pursuant to the provisions of this act, whether such indebtedness is represented by bonds, certificates of indebtedness, promissory notes, or other form of indebtedness, with interest accrued or to accrue thereon, shall be a charge upon all per-

sons and property in the municipal or taxing districts lying in whole or in part within said sewerage district as fully as the legislature of this State shall have power to authorize the same; and all bonds, certificates of indebtedness, promissory notes, and other obligations issued by the said board of sewerage commissioners shall be free from all State, county, municipal, and other taxes, and the property, real and personal, of the said board of sewerage commissioners held by it under authority of this act, wherever situated, shall in like manner be free from taxation.

14. The said sewerage commissioners shall, on or before the fifteenth day of June in each year, ascertain and determine the amount of money necessary to be raised for the payment of interest upon bonds and other indebtedness and for sinking-fund charges for the current fiscal year, and shall apportion the same among the respective municipalities and taxing districts lying in whole or in part within said sewerage district, in such proportion as the taxable ratables within so much of said municipality or taxing district as is embraced within said sewerage district bears to the total amount of taxable ratables within the whole of said sewerage district, as returned and certified by the respective taxing boards and taxing officers of the said municipalities or taxing districts for the preceding year: *Provided, however,* That all ratables in said district for this purpose be assessed at their true value; and it shall be the duty of each assessor, taxing board, or taxing officer for the several municipalities and taxing districts lying in whole or in part within said sewerage district for this purpose, to examine, compute, determine, and certify to the said sewerage board annually, and by the first day of April of each year, the amount of taxable property or ratables assessed in the last preceding year to or upon persons and property within so much of the several municipalities and taxing districts as lie within the said sewerage district, and the books of each of the said assessors, taxing boards, and taxing officers shall at all times be open for examination by the board of sewerage commissioners, its officers and agents, for the purpose of examining, checking, and, if necessary, correcting said certificates.

15. The said board of sewerage commissioners shall, on or before the fifteenth day of June in each year, ascertain and determine as near as may be the amount of money necessary to be raised for operating, maintaining, and repairing its works and plant for the current fiscal year, and shall apportion the money so estimated to be necessary among the several municipalities or taxing districts lying in whole or in part within said sewerage district according to the amount of sewage by them respectively delivered to or discharged into any sewers or other receptacles provided or constructed by the said sewerage commissioners for the reception thereof. Before such apportionment is finally made and adopted by the sewerage commis-

sioners for any year and on the fourth Tuesday of May, at two o'clock in the afternoon, the said sewerage commission shall sit at its principal office for the purpose of hearing such municipalities as desire to be heard upon the apportionment of the estimated amount of money required for the operation, maintenance, and repair of said works and plant, but the apportionment when made by the said sewerage commissioners shall be final and conclusive; in case, however, the estimate of moneys necessary to be raised in any year for operating, maintaining, and repairing the works and plant of the sewerage commissioners shall, at the end of the year, be found to have been too low, the deficiency shall be made good by adding the same to the estimated amount required for operating, maintaining, and repairing the said works for the next succeeding year; and if said estimate shall be found to have been excessive, then such excess shall be deducted from the estimate for the next succeeding year.

16. The said board of sewerage commissioners shall, on or before the twentieth day of June in each year, order and cause a tax to be levied and assessed upon all persons and property within each of the municipal and taxing districts lying in whole or in part within said sewerage district, for the purpose of raising the money necessary to pay interest upon its bonds and other indebtedness and necessary sinking-fund charges and for the sum or sums of money estimated as necessary to provide for the proper maintenance and operation of its works and plant, and for all the other expenses of the said sewerage commissioners, and to this end it shall, on or before the twentieth day of June in each year, certify to the tax assessor, taxing board, or taxing officer of each of said municipalities or taxing districts lying in whole or in part within said sewerage district, the amount of tax required to be levied, assessed, and raised in each of their respective municipalities and taxing districts for said purposes; and the said assessors, taxing boards, and taxing officers shall assess said sums so directed to be assessed (and certified to them) upon all the persons and property within their respective municipalities or taxing districts liable to be assessed for State or county taxes, and the said tax shall be levied, assessed, and collected by the same officers at the same time and in the same manner and with the same effect as State or county taxes are required to be levied, assessed, and collected within said municipalities or taxing districts; and the taxes so levied upon real estate in said municipalities and taxing districts shall be and remain a first and paramount lien thereon until paid.

17. Out of the first moneys collected in any year in any municipality or taxing district, and not required by law to be paid to the county collector for State or county purposes, it shall be the duty of the disbursing officer or officers of such municipality or taxing dis-

trict to pay to the treasurer of the sewerage commissioners the sum or sums of money directed by said sewerage commissioners to be assessed, levied, and collected in such municipality or taxing district.

18. The said board of sewerage commissioners may, from time to time, in anticipation of the collection of moneys directed by it to be assessed, levied, and collected within the municipalities or taxing districts lying in whole or in part within its sewerage district, borrow such sum or sums of money as may be necessary for the payment of interest upon bonds or other indebtedness, and for the payment of sinking-fund charges, and for the payment of its officers, agents, employees, and for all other necessary or proper expenses in maintaining and operating its works and plant, and the payment of the moneys so borrowed shall be secured by a lien upon said taxes as levied and assessed, or so directed to be levied and assessed, and said taxes when collected shall be applied to the payment of the moneys so borrowed; all loans made in pursuance of this section shall be after public notice and advertisement, and shall be made or taken from the person or persons offering the most favorable terms.

19. If in any case the streams and rivers within the said sewerage district are or may be polluted by sewage or other deleterious matter discharged therein, directly or indirectly, from any municipality or any part of a municipality lying without the said sewerage district, it shall and may be lawful for the said board of commissioners to enter into contract with such municipality for the disposal of all such sewage and deleterious matter, and every such municipality is hereby authorized to enter into such contract with the said board, and the said board may, in the constructions made by it under the authority of this act, make provisions for such disposal; such contracts may be made upon such terms and for such lengths of time and for such annual or semiannual payments as shall be mutually agreed upon, and the municipalities and taxing districts so contracting shall have the power to raise annually, by taxation, the moneys necessary to make the payments required to be made under such contracts, or to use for this purpose any moneys not otherwise appropriated; and the moneys received by the said commissioners under such contracts shall be applied by them as follows: Two-thirds thereof to the payment of interest upon bonds issued by the said board, and one-third thereof to the payment of the expense of operation, maintenance, and repair of work.

20. The said sewerage commissioners shall have within said sewerage district powers exclusive of all other boards to protect the rivers and streams thereof from pollution and to prevent the pollution of the same, and to this end the said sewerage commissioners may prohibit the deposit or discharge into the rivers or streams within said sewerage district of any sewage or other matter or thing which may

pollute the same; they may also in like manner prohibit or prevent the emptying into any tributary of said rivers or streams, by any municipality or part of a municipality lying within the said sewerage district, of any sewage or other matter or thing which will directly or indirectly cause the rivers or streams within said sewerage district to be polluted; and the said board of sewerage commissioners may at any time, when it has reason to believe that any river or stream within its district is being polluted by any such municipality or part of a municipality by deposit or discharge into said rivers, streams, or their tributaries of any sewage or other matter or thing which will pollute the same, or when such deposit or discharge is threatened, to apply by bill or petition to the court of chancery of this State for injunction to prevent the said pollution or threatened pollution of said rivers or streams or their tributaries, and the court of chancery shall have power to hear and dispose of said petition or bills in a summary manner, and to grant any and all relief necessary to prevent said pollution or threatened pollution or the continuation of any pollution of said rivers, streams, or their tributaries.

21. The said board of sewerage commissioners shall have power from time to time to adopt all such reasonable rules and regulations for its own government and the government of its officers and agents, and also for the use, protection, and management of its works, property, and plant, and for the protection of the rivers and streams within its district from pollution, not inconsistent with the provisions of this act and the laws of this State.

22. The chairman shall preside at all meetings of the sewerage commissioners, and shall, with the treasurer, sign all bonds, promissory notes, certificates of indebtedness, and other obligations of the board; he shall also countersign all checks; in the absence of the chairman, or in case he is incapacitated by illness or other cause, the sewerage commissioners shall have power to elect an acting chairman, who for the time being shall have all the powers and perform all the duties of the chairman; the treasurer shall give bond in such sum as the sewerage commissioners may determine, and shall be the receiving and disbursing officer of the said sewerage commissioners, and all moneys required by law to be paid to said sewerage commissioners shall be paid to the treasurer thereof, and shall be by him deposited in such bank or banks of deposit or trust company or trust companies in this State as shall be determined upon by the said sewerage commissioners; all disbursements shall be by check, signed by the treasurer and countersigned by the chairman; the clerk shall have charge of the seal of the corporation and shall affix it to such instruments as he shall be directed by the said board, and he shall attest the same; he shall keep full minutes of all the meetings of the board and of its committees and shall perform all such other duties

as he may be directed by the said board of commissioners to perform; no deposit of moneys in the charge of the said board shall be made in any bank or trust company except upon the condition that the said board shall receive interest at the rate of not less than two per centum per annum upon the said deposits.

23. In case for any reason any section or any provision of this act shall be questioned in any court and shall be held to be unconstitutional or invalid, the same shall not be held to affect any other section or provision of this act.

24. All acts and parts of acts inconsistent with this act are hereby repealed; and this act shall take effect immediately.^a

Approved April 22, 1903.

NEW YORK.

[Revised Statutes, 3d ed. (C. F. Birdseye), vol. 2, pp. 2822 ff., Article V: Public health law.]

POTABLE WATERS.

SEC. 70. *Rules and regulations of State board.*—The State board of health may make rules and regulations for the protection from contamination of any or all public supplies of potable waters and

^a This act was declared unconstitutional by the court of errors and appeals of New Jersey in March, 1905. *Van Cleve v. Passaic Valley Sewerage Commissioners*, 60 Atlantic Rep., 214. It is retained here, however, because the ground upon which it was held unconstitutional affects only the mode of raising the necessary funds for carrying out the work.

It was subjected to an attack by the city of Paterson and by a property owner who had been assessed for public sewers in the city of Paterson. Argument was conducted by several of the ablest counsel in the State on each side and the act was sustained upon all grounds in the supreme court, but by a divided court. In the court of errors and appeals the action of the supreme court was reversed, and the act declared to be unconstitutional upon the ground that it contained an unlawful delegation to the sewerage commissioners of the power of taxation. The court says, per Garrison, J., "To relieve a river from pollution and to construct and maintain for this purpose sewers to the seaboard or to other point of output and to carry away through such sewers all that would otherwise pollute such river is clearly within the power of the central legislative body."

The act under examination authorized the commissioners to raise by taxation any amount in their discretion, subject only to the limit of nine million dollars (\$9,000,000) in the matter of construction, but without any limit in the matter of maintenance. The taxation was laid upon a taxation area that was not coterminous with the sewerage district established by the legislature; and neither the taxation area nor the sewerage district is a political division of the State nor invested with any governmental function. The court held that the fundamental law of New Jersey required, "that the district to be taxed shall be coterminous with a district to which some right of local self-government is given." The act is, therefore, held invalid. The court then proceeds as follows: "Having stated the considerations that lead me to the conclusion that the act before us is invalid, because of its fiscal provision, I shall, to avoid misapprehension, add that nothing in this opinion is intended to imply a lack of power in the legislature to effectuate the object expressed in this act by means that are in harmony with the fundamental principles of taxation illustrated by the decisions I have cited. If, for instance, as was suggested by the arguments before us, powers adequate to the execution of the legislative scheme of drainage were conferred upon the entire area to be taxed and duties respecting the exercise of such powers constitutionally imposed in such manner as indicated and that their exercise was compulsory, a question not touched upon in this opinion would be presented."

their sources within the State. If any such rule or regulation relates to a temporary source or act of contamination, any person violating such rule or regulation shall be liable to prosecution for misdemeanor for every such violation, and on conviction shall be punished by a fine not exceeding two hundred dollars, or imprisonment not exceeding one year, or both. If any such rule or regulation relates to a permanent source or act of contamination, said board may impose penalties for the violation thereof or the noncompliance therewith not exceeding two hundred dollars for every such violation or noncompliance. Every such rule or regulation shall be published at least once in each week for six consecutive weeks in at least one newspaper of the county where the waters to which it relates are located. The cost of such publication shall be paid by the corporation or municipality benefited by the protection of the water supply to which the rule or regulation published relates. The affidavit of the printer, publisher, or proprietor of the newspaper in which such rule or regulation is published may be filed with the rule or regulation published in the county clerk's office of such county, and such affidavit and rule and regulation shall be conclusive evidence of such publication and of all the facts therein stated in all courts and places.

SEC. 71. *Inspection of water supply.*—The officer or board having by law the management and control of the potable water supply of any municipality, or the corporation furnishing such supply, may make such inspection of the sources of such water supply as such officer, board, or corporation deems it advisable, and to ascertain whether the rules or regulations of the State board are complied with. If any such inspection discloses a violation of any such rule or regulation relating to a permanent source or act of contamination, such officer, board, or corporation shall cause a copy of the rule or regulation violated to be served upon the person violating the same with a notice of such violation. If the person served does not immediately comply with the rule or regulation violated, such officer, board, or corporation shall notify the State board of the violation, which shall immediately examine into such violation, and if such person is found by the State board to have actually violated such rule or regulation, the secretary of the State board shall order the local board of health of such municipality to convene and enforce obedience to such rule or regulation. If the local board fails to enforce such order within ten days after its receipt, the corporation furnishing such water supply, or the municipality deriving its water supply from the waters to which such rule or regulation relates, may maintain an action in a court of record, which shall be tried in the county where the cause of action arose against such person, for the recovery of the penalties incurred by such violation, and for an injunction restraining him from the continued violation of such rule or regulation.

SEC. 71a. *Rules and regulations legalized.*—All rules and regulations heretofore duly made and published for the sanitary protection of public water supplies, pursuant to chap. 543 of the laws of 1885 and chap. 661 of the laws of 1893, as amended, are hereby legalized, ratified, confirmed, and continued in force until new rules and regulations become operative.

SEC. 71b. *Construction of act.*—This act shall not be construed to repeal or affect any of the provisions of chap. 378 of laws of 1897, or its amendments.

SEC. 72. *Sewerage.*—When the State board of health shall, for the protection of a water supply from contamination, make orders or regulations the execution of which will require or make necessary the construction and maintenance of any system of sewerage, or a change thereof, in or for any village or hamlet, whether incorporated or unincorporated, or the execution of which will require the providing of some public means of removal or purification of sewage, the municipality or corporation owning the waterworks benefited thereby shall, at its own expense, construct and maintain such system of sewerage, or change thereof, and provide such means of removal and purification of sewage and such works or means of sewage disposal as shall be approved by the State board of health. When the execution of any such regulations of the State board of health will occasion or require the removal of any building or buildings the municipality or corporation owning the waterworks benefited thereby shall, at its own expense, remove such buildings and pay to the owner thereof all the damages occasioned by such removal.

When the execution of any such regulation will injuriously affect any manufacturing or industrial enterprise which is not a public nuisance, such municipality or corporation shall pay all damages occasioned by the enforcement thereof. Until such construction or change of such system or systems of sewerage, and the providing of such means of removal or purification of sewage, and such works or means or sewage disposal and the removal of any building, are so made by the municipality or corporation owning the waterworks to be benefited thereby at its own expense there shall be no action or proceeding taken by such municipality or corporation against any person or corporation for the violation of any regulation of the State board of health under this article, and no person or corporation shall be considered to have violated or refused to obey any such rule or regulation. The owner of any building the removal of which is occasioned or required, or which has been removed by any rule or regulation of the State board of health made under the provisions of this article, and all persons whose rights of property are injuriously affected by the enforcement of any such rule or regulation, shall have a cause of action against the municipality or corporation owning the

waterworks benefited by the enforcement of such rule or regulation for all damages occasioned or sustained by such removal or enforcement, and an action therefor may be brought against such municipality or corporation in any court of record in the county in which the premises or property affected is situated and shall be tried therein; or such damages may be determined by a special proceeding in the supreme court or the county court of the county in which the property is situated. Such special proceedings shall be commenced by petition and notice to be served by such owner upon the municipality or corporation in the same manner as for the commencement of condemnation proceedings. Such municipality or corporation may make and serve an answer to such petition as in condemnation proceedings. The petition and answer shall set forth the claims of the respective parties, and the provisions of the condemnation law shall be applicable to the subsequent proceedings upon the petition and answer, if any. Either party may, before the service of the petition or answer, respectively, offer to take or pay a certain sum, and no costs shall be awarded against either party unless the judgment is more unfavorable to him than his offer.

SEC. 72a. *Actions by municipalities.*—Any incorporated city or village in the State of New York which has made such provision for the disposal of its sewage as not to pollute or contaminate therewith any river, stream, lake, or other body of water may have and maintain an action in the supreme court to prevent the discharge of any sewage or substance deleterious to health, or which shall injure the potable qualities of the water in any river, stream, lake, or other body of water from which such incorporated city or village shall take or receive its water supply; provided, that such river, stream, lake, or other body of water is wholly or in part within the boundaries of the county in which such plaintiff is located.

SEC. 72b. *Duty of supreme court.*—Whenever such action shall be brought under the provisions of this act, it shall be the duty of the supreme court, upon proof of the existence of facts justifying the bringing and maintenance of such action under the provisions of this act, to render a judgment in which shall be incorporated a mandatory injunction requiring the person, body, board, corporation, municipality, village, county, or town being a defendant to said action which directly or indirectly, or by its servants, agents, or officers, shall discharge or dispose of its sewage or any other substance deleterious to health, which shall injure the potable qualities of the water in such wise as that the same shall enter into any river, stream, lake, or other body of water from which such plaintiff shall take or receive its water supply, within such reasonable time as may be prescribed by the court, to take such action as shall prevent such discharge, or the dis-

posal of such sewage or other substance into such waters, or the pollution thereof, with such further directions in the premises as may be proper and desirable to effect such purpose; provided, that such river, stream, lake, or other body of water is wholly or in part within the boundaries of the county in which such plaintiff is located.

SEC. 72c. *Examination by State board of health.*—But no such action shall be brought as provided for in section 2 (i. e., 72b) of this act until the State board of health has examined and determined whether the sewage does pollute or contaminate the river, stream, lake, or other body of water into which said sewage is discharged. The expense of such examination by said board shall be a charge upon and paid by the municipality in whose interest and on whose behalf such examination is made.

SEC. 72d. *Approval of plans.*—In case the State board of health shall find upon examination that the discharge of said sewage does pollute or contaminate said waters, or any of them, in such manner as to be of menace or danger to the health of those using said waters, the plans for the removal or disposal of the sewage ordered to be prepared by the court as provided in section 2 (i. e., 72b) shall be submitted to the State board of health for its approval.

[Laws of 1901, vol. 3, p. 214, charter of New York City.]

SEC. 481. It shall not be lawful for any person to throw or deposit, or cause to be thrown or deposited, in any lake, pond, or stream, or in any aqueduct from or through which any part of the water supply of the city of New York shall be drawn, or either of the reservoirs, any dead animal or other offensive matter or anything whatever. Any person offending against the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by fine or imprisonment, or both, in the discretion of the court, such fine not to exceed the sum of one hundred dollars and such imprisonment not to exceed a period of three months, such imprisonment to be in the jail of the county in which the offense shall have been committed.

SEC. 482. If any person shall willfully do or cause to be done any act whereby any work, materials, or property whatever, erected or used, or hereafter to be erected or used, within the city or elsewhere by the said city, or by any person acting under their authority, for the purpose of procuring or keeping a supply of water, shall in any manner be injured, or shall erect or place any nuisance on the banks of any river, lake, or stream from which the water supply of said city shall be drawn, or shall throw anything into the aqueduct or into any reservoir, or pipe, such person on conviction thereof shall be deemed guilty of a misdemeanor.

Section 483 authorizes the commissioner of water supply, gas, and electricity to carry out the provisions of this act and to prevent contamination.

Section 484 authorizes proceedings to acquire title of lands necessary for this purpose.

By laws of 1893, chapter 661, section 73, the discharge of sewage or other matter deleterious to public health or destructive to fish into Wallkill Creek, in the counties of Ulster and Orange, is prohibited, and section 74 of the same act contains a similar protection for the Susquehanna River or any of its tributaries between the Rock Bottom dam in such river at the city of Binghamton and a point one mile east of the bridge that crosses such river at Conklin.

Law of 1893 was amended by an act passed in 1903, adding the following sections:

[Laws of 1903, chap. 468; became a law May 7, 1903, with the approval of the governor; passed, a majority being present.]

AN ACT to amend the public health law relative to the discharge of sewage and other refuse or waste matter into the waters of this State.

The people of the State of New York, represented in senate and assembly, do enact as follows:

SEC. 1. *Public health law amended.*—Article 5 of chapter 661 of the laws of 1893, entitled “An act in relation to the public health, constituting chapter 25 of the general laws,” as amended by chapter 251 of the laws of 1899, is hereby amended by adding at the end thereof the following new sections:

SEC. 75. *Discharge of sewage and other refuse matter in certain waters prohibited.*—No person, corporation, or municipality shall place or cause to be placed, or discharged or cause to be discharged, into any of the waters of this State, unless the same shall have been permitted by the State commissioner of health, any sewage, garbage, offal, dead animal, dead fish, dead bird or part thereof, or any decomposable or putrescible matter of any kind, or any substance, chemical or otherwise, containing the same in quantities injurious to the public health, or any refuse or waste matter, either solid or liquid, in quantities injurious to the public health, from any shop, factory, mill, or industrial establishment, unless express permission to do so shall have been first given in writing by the State commissioner of health, as provided in this article, except as hereinafter provided. But this act shall not prevent the discharge of sewage from any public sewer system owned and maintained by a municipality, or the discharge of refuse or waste matter from any shop, factory, mill, or industrial establishment, provided such sewer system was in operation and was discharging sewage, or such shop, factory, mill, or industrial establishment was in operation and discharging refuse or waste matter,

into any of the waters of this State at or prior to the time of the passage of this act, nor to any extension or modification of such shop, factory, mill, or industrial establishment, or reconstruction thereof, provided the refuse or waste matter discharged therefrom is not materially changed or increased; but this exception shall not permit any increase in the discharge of such sewage, nor shall it permit the discharge of sewage from a sewer system which shall be extended, modified, or reconstructed subsequent to the passage of this act.

SEC. 76. *Permission to discharge sewage.*—Upon application duly made to the State commissioner of health by the public authorities having by law the charge of the sewer system of any municipality, the State commissioner of health shall have power to consider the case of a sewer system otherwise prohibited by this act from discharging sewage into any of the waters of the State, and whenever in his opinion the general interests of the public health would be subserved thereby he may issue a permit for the discharge of sewage from any such sewer system into any of the waters of the State, and may stipulate in the permit modifications, regulations, and conditions on which such discharge may be permitted. Such permit before being operative shall be recorded in the county clerk's office of the county wherein the outlet of the said sewer system is located, and a copy of the permit shall be transmitted by the State commissioner of health to the board of health of the municipality wherein the outlet of said sewer system is located.

SEC. 77. *Permission to discharge refuse or waste matter from industrial establishments.*—Upon application duly made to the State commissioner of health by the proprietor, lessee, or tenant of any shop, factory, mill, or industrial establishment from which the discharge or refuse or waste matter into any of the waters of the State is otherwise prohibited by this act, the State commissioner of health shall have power to consider the case of the said shop, factory, mill, or industrial establishment, and whenever the public health and purity of the waters shall warrant it he shall issue a permit for the discharge of refuse or waste matter from such shop, factory, mill, or industrial establishment into any of the waters of the State, and may stipulate in the permit such modifications, regulations, and conditions as the public health may require. Such permit, before being operative, shall be recorded in the county clerk's office of the county where such shop, factory, mill, or industrial establishment is located, and a copy of such permit shall be transmitted by the State commissioner of health to the board of health of the municipality wherein the outlet discharging refuse or waste matter from such shop, factory, mill, or industrial establishment shall be located.

SEC. 77a. *Plans to be submitted.*—Before any conduit or discharge pipe or other means of discharging or casting any refuse or waste

matter from any shop, factory, mill, or industrial establishment not constructed or in process of construction when this act takes effect shall be put in or constructed for the purpose of discharging any refuse or waste matter therefrom into any waters in this State, the plan or plans therefor, together with a statement of the purpose for which the same is to be used, shall be submitted to the commissioner. If the same is not detrimental to the public health he shall issue a permit therefor to the applicant. No such conduit, discharge pipe, or other means of discharging or casting any refuse or waste matter from any such shop, factory, mill, or establishment into any of the waters of this State shall be put in or constructed before such permit is granted, and if put in or constructed the person putting in or constructing or maintaining the same shall forfeit to the people of the State five dollars a day for each day the same is used or maintained for such purpose, to be collected in an action brought by the commissioner. He may also maintain an action in the name of the people to restrain a violation of this section.

SEC. 78. *Revocation of permit.*—Every such permit for the discharge of sewage from a sewer system or for the discharge of refuse or waste matter from a shop, factory, mill, or industrial establishment shall, when necessary to conserve the public health, be revocable or subject to modification or change by the State commissioner of health on due notice after an investigation and hearing and an opportunity for all interested therein to be heard thereon being served on the public authorities of the municipality owning and maintaining the sewer system, or on the proprietor, lessee, or tenant of the shop, factory, mill, or industrial establishment. The length of the time after receipt of the notice within which the discharge of sewage or of refuse or waste matter shall be discontinued may be stated in the permit, but in no case shall it exceed two years in the case of a sewer system nor one year in the case of a shop, factory, mill, or industrial establishment, and if the length of time is not specified in the permit it shall be one year in the case of a sewer system and six months in the case of a shop, factory, mill, or industrial establishment. On the expiration of the period of time prescribed after the service of a notice of revocation, modification, or change from the State commissioner of health, the right to discharge sewage or refuse or waste matter into any of the waters of the State shall cease and terminate, and the prohibition of this act against such discharge shall be in full force as though no permit had been granted, but a new permit may thereafter again be granted as hereinbefore provided.

SEC. 79. *Reports of municipal authorities to local boards of health.*—It shall be the duty of the public authorities having by law charge of the sewer system of every municipality in the State, from which sewer

system sewage was being discharged into any of the waters of the State at the time of the passage of this act, to file with the board of health of the municipality within which any sewer outlet of the said sewer system is located and within sixty days after the passage of this act a report of each sewer system having an outlet within the municipality, which report shall comprise such facts and information as the State commissioner of health may require and on blanks or forms to be furnished by him on application. The board of health of each municipality being satisfied as to the correctness and completeness of each report submitted to it shall within thirty days after its receipt certify the same and transmit it to the State commissioner of health. Such report when satisfactory to the State commissioner of health shall be filed by him in his office and shall constitute the evidence of exemption from the prohibition of this act. No sewer system shall be exempt from the prohibition of this act against the discharge of sewage into the waters of the State for which a satisfactory report shall not be filed in the office of the State commissioner of health in accordance with this section.

SEC. 79a. *Reports of proprietors of industrial establishments.*—It shall be the duty of the proprietor of every shop, factory, mill, and industrial establishment in the State from which refuse or waste matter was being discharged into any of the waters of the State at the time of the passage of this act to file with the State commissioner of health within sixty days after the passage of this act a report of each shop, factory, mill, and industrial establishment from which refuse or waste matter was being discharged through an outlet within the municipality at the time of the passage of this act, which report shall comprise such facts and information in regard to the size, location, and character of shop, factory, mill, or industrial establishment, the machinery in use therein, and the character and quantity of goods produced as the State commissioner of health may require and on blanks or forms to be furnished by him on application. Such report shall be filed by him in his office, and shall constitute the evidence of exemption of the shop, factory, mill, or industrial establishment from the prohibition of this act. No shop, factory, mill, or industrial establishment shall be exempt from the prohibition of this act against the discharge of refuse or waste matter into the waters of the State, for which a report shall not be made as required by the State commissioner of health in accordance with this section.

SEC. 79b. *Record of permits; inspection of local boards of health.*—Each board of health shall preserve in its office, and in a form to be prescribed by the State commissioner of health, a permanent record of each permit issued by the State commissioner of health granting

the right to discharge sewage or refuse or waste matter into any of the waters of the State within that municipality and of each revocation of a permit; and also a permanent record of each report received by the board of health concerning each sewer system and each shop, factory, mill, or industrial establishment which at the time of the passage of this act was discharging sewage or refuse or waste matter into any of the waters of the State within that municipality. Each local board of health shall make and maintain such inspection as will at all times enable it to determine whether this act is being complied with in respect to the discharge of sewage, refuse, or waste matter or other materials prohibited by this act into any of the waters of the State within that municipality. For the purpose of such inspection every member of such board of health, or its health officers, or any person duly authorized by it, shall have the right to make all necessary examinations of any premises, building, shop, factory, mill, industrial establishment, process, or sewage system.

SEC. 79c. *Violations; service of notice; actions by local boards.*—The local board of health of each municipality shall promptly ascertain every violation of or noncompliance with any of the provisions of this act or of the permits for the discharge of sewage or refuse or waste material into any of the waters of the State herein provided which may occur within that municipality. The board of health shall, on the discovery of every violation of or noncompliance with any of the provisions of this act or of any permit duly issued, serve a written notice on the person or corporation responsible for the violation or noncompliance, together with a copy of this act and of the permit, if any, violated or noncomplied with, specifying the particular provision being violated or noncomplied with, and stipulating the length of time within which the violation or noncompliance must cease. If at the expiration of the stipulated length of time the violation or noncompliance shall still continue, the board of health shall at once report the violation and noncompliance to the State commissioner of health, who shall at once give a hearing to and take the proof of the persons charged with such violation or noncompliance and investigate the matter, and if he finds a violation or noncompliance to exist he shall at once certify the fact to the board of health of the municipality, which shall immediately bring an action in a court of record, which action shall be tried in the county wherein the cause of action arose against the person or corporation responsible for the violation or the noncompliance for the recovery of the penalties incurred and for an injunction against the continuation of the violation or the noncompliance.

SEC. 79d. *Penalties.*—The penalty for the discharge of sewage from any public sewer system into any of the waters of the State

without a duly issued permit for which a permit is required by this act shall be five hundred dollars, and a further penalty of fifty dollars per day for each day the offence is maintained. The penalty for the discharge of sewage from any public sewer system into any of the waters of the State without filing a report for which a report is required to be filed with the board of health of the municipality shall be fifty dollars. The penalty for the discharge of refuse or waste matter from any shop, factory, mill, or industrial establishment for which a permit is required by this act without such permit shall be one hundred dollars and ten dollars a day for each day the offence is maintained. The penalty for the discharge of refuse or waste matter from any shop, mill, factory, or industrial establishment without filing a report where a report is required by this act to be filed shall be twenty-five dollars and five dollars per day for each day the offence is maintained. The penalty for discharging into any of the waters of the State any other matter prohibited by this act besides that specified above shall be twenty-five dollars and five dollars per day for each day the offence is maintained.

SEC. 2. *Common-law rights not affected.*—Nothing in this act shall be construed to diminish or otherwise to modify the common-law rights of riparian owners in the quality of waters of streams covered by such rights, nor in the case of actions brought against the pollution of waters to limit their remedy to indemnities.

SEC. 3. This act shall take effect immediately.

[Laws of 1905, chap. 454.]

AN ACT regulating the sanitary condition of bathing establishments, and amending section two hundred and twelve of chapter twenty-five of the general public health laws, as amended by the laws of eighteen hundred and ninety-three; being renumbered by the laws of nineteen hundred, chapter six hundred and sixty-seven; number of section being originally two hundred and two.

SECTION 1. Section two hundred and twelve of chapter twenty-five of the general public health laws, as amended by the laws of eighteen hundred and ninety-three, is hereby amended so as to read as follows:

§ 212. *Regulating the sanitary condition of bathing establishments and the preservation of life at bathing places.*—It shall be unlawful for any person to maintain, either as owner or lessee, any bathing establishment of any kind, in this state, for the accommodation of persons, for pay, or any consideration, at a point less than five hundred feet from any sewer connection emptying therein, or thereat, so as to pollute in any way, the waters used by those using or hiring bathing houses at such bathing establishments; it shall be the duty of such owner or lessee to provide separate toilet rooms, with water-closets properly provided with sanitary plumbing, constructed in a manner approved by the local board of health and in such a way as not to contaminate the waters used by the bathers; it shall also be

the duty of such owner or lessee to thoroughly wash and disinfect, or cause to be thoroughly washed and disinfected, in a manner approved by the local board of health, all bathing suits that have been hired or used, before rehiring or permitting the use of the same again. Any person or persons violating any of the provisions of this section shall forfeit and pay a penalty of not less than fifty dollars nor more than two hundred dollars to be recovered by the sheriff of the county in which such violation is committed, except in the city of New York, when the penalty shall be sued for in the name of the department of health of the city of New York and collected by it. It shall be the duty of the sheriffs and constables of the several counties of this State abutting upon the seashore, to see that in their respective counties the provisions of this section are enforced, and to bring suit for the recovery of the penalty therein provided, unless some other person had already brought suit for the same. A separate penalty may be recovered for each day that any person subject to the provisions of this section may violate any of the provisions of the same; but no penalty shall be recovered for any other violation thereof than shall have occurred during the days when the owner or lessee, or other person or persons, maintaining the said bathing establishments, shall have kept the same open for the use of the public, or for such persons as may be the guests of any hotel that such bathing establishments may be connected with. The owner of a bathing house shall not be subject to the provisions of this section when it is used, occupied or maintained by a lessee for hire, but such lessee shall be deemed the keeper or proprietor or person or persons maintaining such bathing establishment thereof. Nothing in this section shall be construed, in any to affect any bathing establishments, in any city or municipality, at which there is maintained at public expense a life-saving guard.

§ 2. This act shall take effect the first day of June, nineteen hundred and five.

Approved, May 16, 1905.

PENNSYLVANIA.

[Pepper and Lewis Digest, Supplement, p. 98.]

BURIAL. SEC. 7.—*Pollution of water by use of land for burial purposes prohibited.*—That it shall be unlawful to use for the burial of the dead any land the drainage from which passes into any stream furnishing the whole or any portion of the water supply of any city, except beyond the distance of one mile from such city: *Provided, however,* That the prohibitions of this act shall not be enforceable against any land now devoted to burial purposes in which there shall have heretofore been burials and sales of burial lots.

NUISANCES. Same, col. 253.

SEC. 27.—*Penalty for pollution of water used for drinking purposes.*—Any person who shall wilfully enter upon the enclosed land of any company incorporated under the laws of this Commonwealth for the purpose of supplying water to the public for drinking purposes, on which land is erected any dam, reservoir, pond, or other artificial means for storing water, and pollute or attempt to pollute the water on such land, shall be deemed, and the same is hereby declared to be, a misdemeanor, and may be prosecuted and convicted as such under the laws of this Commonwealth, and on conviction thereof in the court of quarter sessions of the proper county shall be fined not exceeding fifty dollars, and imprisoned not exceeding sixty days.

SEC. 28.—*Offender to be arrested on view.*—That any duly constituted watchman of any such water company, or any constable or policeman, is hereby authorized and empowered, upon his own view of any such trespass, to make arrests and bring before any alderman or magistrate of the proper county offenders found violating the provisions of this act.

[Laws of 1905, No. 182.]

AN ACT to preserve the purity of the waters of the State, for the protection of the public health.

SEC. 1. *Be it enacted, &c.,* That the term “waters of the State,” wherever used in this act, shall include all streams and springs, and all bodies of surface and of ground water, whether natural or artificial, within the boundaries of the State.

SEC. 2. Every municipal corporation, private corporation, company, and individual supplying or authorized to supply water to the public, within the State, shall, within sixty days after the passage of this act, file with the commissioner of health a certified copy of the plans and surveys of the waterworks, with a description of the source from which the supply of water is derived; and no additional source of supply shall thereafter be used without a written permit from the commissioner of health, as hereinafter provided.

SEC. 3. No municipal corporation, private corporation, company, or individual shall construct waterworks for the supply of water to the public within the State, or extend the same, without a written permit, to be obtained from the commissioner of health, if, in his judgment, the proposed source of supply appears to be not prejudicial to the public health. The application for such permit must be accompanied by a certified copy of the plans and surveys for such waterworks, or extension thereof, with a description of the source from which it is proposed to derive the supply; and no additional source of supply shall subsequently be used for any such waterworks with-

out a similar permit from the commissioner of health. When application shall be made for a permit under either of the above provisions of this section, it shall be the duty of the commissioner to proceed to examine the application without delay, and, as soon as possible, he shall make a decision, in writing; and, within thirty days after such decision, the corporation, company, or individual making such application may appeal to any court of common pleas of the county, and said court shall, without delay, hear the appeal, and shall make an order approving, setting aside, or modifying such decision, or fixing the terms upon which said permit shall be granted. The penalty for failure to file copies of plans, surveys, and descriptions of existing waterworks within the time hereinbefore fixed, and for the construction or extension of waterworks, or the use of an additional source of supply without a permit from the commissioner of health, shall be five hundred dollars, and further penalty of fifty dollars per day for each day that the works are in operation contrary to the provisions of this act, recoverable by the Commonwealth, at the suit of the commissioner of health, as debts of like amount are recoverable by law.

SEC. 4. No person, corporation, or municipality shall place, or permit to be placed, or discharge, or permit to flow into any of the waters of the State, any sewage, except as hereinafter provided. But this act shall not apply to waters pumped or flowing from coal mines or tanneries, nor prevent the discharge of sewage from any public sewer system, owned and maintained by a municipality, provided such sewer system was in operation and was discharging sewage into any waters of the State at the time of the passage of this act. But this exception shall not permit the discharge of sewage from the sewer system which shall be extended subsequent to the passage of this act.

For the purpose of this act, sewage shall be defined as any substance that contains any of the waste products, or excrementitious or other discharges from the bodies of human beings or animals.

SEC. 5. Upon application duly made to the commissioner of health, by the public authorities having by law the charge of the sewer system of any municipality, the governor of the State, the attorney-general, and the commissioner of health shall consider the case of such a sewer system, otherwise prohibited by this act from discharging sewage into any of the waters of the State, and, whenever it is their unanimous opinion that the general interests of the public health would be subserved thereby, the commissioner of health may issue a permit for the discharge of sewage from any such sewer system into any of the waters of the State, and may stipulate in the permit the conditions on which such discharge may be permitted. Such per-

mit, before being operative, shall be recorded in the office of the recorder of deeds for the county wherein the outlet of the said sewer system is located. Every such permit for the discharge of sewage from a sewer system shall be revokable, or subject to modification and change, by the commissioner of health, on due notice, after an investigation and hearing, and an opportunity for all interested therein to be heard thereon being served on the public authorities of the municipality owning, maintaining, or using the sewage system. The length of time after receipt of the notice within which the discharge of sewage shall be discontinued may be stated in the permit, but in no case shall it be less than one year or exceed two years, and if the length of time is not specified in the permit it shall be one year. On the expiration of the period of time prescribed, after the service of a notice of revocation, modification, or change, from the commissioner of health, the right to discharge sewage into any of the waters of the State shall cease and terminate; and the prohibition of this act against such discharge shall be in full force, as though no permit had been granted, but a new permit may thereafter again be granted, as hereinbefore provided.

SEC. 6. It shall be the duty of the public authorities having by law charge of the sewer system of every municipality in the State from which sewage was being discharged into any of the waters of the State at the time of the passage of this act, to file with the commissioner of health, within four months after the passage of this act, a report of such sewer system, which shall comprise such facts and information as the commissioner of health may require. No sewer system shall be exempt from the provisions of this act against the discharge of sewage into the waters of the State for which a satisfactory report shall not be filed with the commissioner of health in accordance with this section.

SEC. 7. The penalty for the discharge of sewage from any public sewer system into any of the waters of the State without a duly issued permit in any case in which a permit is required by this act shall be five hundred dollars, and a further penalty of fifty dollars per day for each day the offense is maintained, recoverable by the Commonwealth at the suit of the commissioner of health as debts of like amount are recoverable by law. The penalty for the discharge of sewage from any public sewer system into any of the waters of the State without filing a report, in any case in which a report is required to be filed, shall be fifty dollars, recoverable by a like suit.

SEC. 8. All individuals, private corporations, and companies that, at the time of the passage of this act, are discharging sewage into any of the waters of the State may continue to discharge such sewage unless, in the opinion of the commissioner of health, the discharge

of such sewage may become injurious to the public health. If at any time the commissioner of health considers that the discharge of such sewage into any of the waters of the State may become injurious to the public health he may order the discharge of such sewage discontinued.

SEC. 9. Every individual, private corporation, or company shall discontinue the discharge of sewage into any of the waters of the State within ten days after having been so ordered by the commissioner of health.

SEC. 10. Any individual, private corporation, or company that shall discharge sewage, or permit the same to flow, into the waters of the State contrary to the provisions of this act shall be deemed guilty of a misdemeanor, and shall upon conviction be punished by a fine of twenty-five dollars for each offense and a further fine of five dollars per day for each day the offense is maintained, or by imprisonment not exceeding one month, or both, at the discretion of the court.

SEC. 11. Any order or decision, under this act, of the commissioner of health, or that of the governor, attorney-general, and commissioner of health, shall be subject to an appeal to any court of common pleas of the county wherein the outlet of such sewer or sewer system, otherwise prohibited by this act, is situated; and said court shall have power to hear said appeal, and may affirm or set aside said order or decision, or modify the same, or otherwise fix the terms upon which permission shall be granted. But the order or decision appealed from shall not be superseded by the appeal, but shall stand until the order of the court, as above.

Approved the 22d day of April, A. D. 1905.

[Laws of 1905. No. 223.]

AN ACT authorizing and empowering cities, owning and operating waterworks systems, to enter, by any of its employes, upon private lands through which may pass any stream or streams of water supplying such cities, for the purpose of patrolling the drainage area, and making investigations or inquiries pertaining to the condition of the stream or streams, sanitary or otherwise.

SEC. 1. *Be it enacted, &c.*, That any city owning and operating a waterworks system is hereby authorized and empowered to enter, by any of its employes, upon private lands through which may pass any stream or streams of water supplying such city, for the purpose of patrolling the drainage area of such stream or streams, and making investigations or inquiries pertaining to the condition of the stream or streams, sanitary or otherwise; Provided, however, That any injury or damage done to the property so entered upon shall be paid by such city.

Approved the 2d day of May, A. D. 1905.

VERMONT.

[Statutes, 1894, p. 842, Preservation of public health.]

SEC. 4695. If any person puts or causes to be put a dead animal or animal substance into or upon the bank of a lake, pond, running stream, or spring of water so that it is drawn or washed into the same, and suffers it to remain therein, he shall be fined not more than twenty dollars and not less than five dollars.

[Laws of 1898, No. 150, p. 115.]

AN ACT in amendment of act No. 137 of the acts of 1894, relating to pollution of the waters of Missisquoi River.

It is hereby enacted by the general assembly of the State of Vermont:

SECTION 1, number 137, of the public acts of 1894, is hereby amended so as to read as follows: "A person owning or operating a mill who shall by himself or his agent deposit or suffer to be deposited any sawdust, shavings, or any mill refuse in the waters of the Missisquoi River above Enosburgh Falls, or in any of the tributaries of said Missisquoi River above Enosburgh Falls, shall be fined not less than twenty dollars nor more than one hundred dollars, in the discretion of the court, for each offence."

SEC. 2. This act shall take effect from March 1st, 1899. Approved November 16th, 1898.

[Laws of 1902, No. 115, p. 144.]

AN ACT to prevent the pollution of the sources of water supply, as amended by No. 141, Laws of 1904.

It is hereby enacted by the general assembly of the State of Vermont:

SECTION 1. The State board of health shall have the general oversight and care of all waters, streams, and ponds used by any cities, towns, villages, or public institutions, or by any water or ice companies in this State as sources of water supply, and of all springs, streams, and water courses tributary thereto. It shall have power to call for, and when it calls for it shall be provided with maps, plans, and documents suitable for such purposes, at the expense of such city, town, village, public institution, water or ice company, and shall keep records of all its transactions relative thereto.

Said board shall have authority to prohibit any town, city, village, public institution, individual or water or ice company from using water or ice from any given source whenever in its opinion the same is so contaminated, unwholesome and impure that the use thereof endangers the public health. And the court of chancery shall have

jurisdiction and power, upon application therefor by the State board of health, to enforce by proper order and decree any order, rule or regulation which said board may make under and by virtue of this section.

SEC. 2. Said board may cause examinations of such waters to be made to ascertain the purity and fitness for domestic use, or their liability to impair the interests of the public or of persons lawfully using them or to imperil the public health. It may make rules and regulations to prevent the pollution and to secure the sanitary protection of all such waters as are used as sources of water supply.

SEC. 3. The publication of an order, rule, or regulation made by the board under the provisions of sec. 2 or sec. 6 hereof, in the newspaper of any town or village in which such order, rule, or regulation is to take effect, or if no newspaper is published in such city, town, or village, the posting of a copy of such order, rule, or regulation in three public places in such city, town, or village, shall be legal notice to all persons, and an affidavit of such publication or posting by the persons causing such to be published or posted, filed, and recorded with a copy of the notice in the office of the clerk of such city, town, or village shall be admitted as evidence of the time at which and the place and manner in which the notice was given.

SEC. 4. Said board shall include in its biennial report to the general assembly its doings for the preceding biennial term, and shall recommend measures for the prevention of the pollution of such waters and for the removal of polluting substances in order to protect and develop the rights and property of the State therein, and to protect the public health, and shall recommend any legislation or plans for systems of main sewers necessary for the preservation of the public health and for the purification and prevention of pollution of the ponds, streams, and waters of the State. It shall also give notice to the State's attorney for the county wherein any violation of the law relative to the pollution of the water supplies occurs. It shall have the power to employ such expert assistants as it considers necessary.

SEC. 5. Cities, towns, villages, and persons shall submit to said board for its advice their proposed systems of public water supply or for the disposal of drainage or sewage. Said board shall consult with and advise the authorities of the cities, towns, villages, and persons having or about to have systems of public water supply, drainage, or sewage, as to the most appropriate sources of water supply, and the best methods of assuring its purity or as to the best methods of disposing of their drainage or sewage, with reference to the existing and future needs of other cities, towns, villages, or persons which may be affected thereby. It shall also consult with and advise persons engaged or intending to engage in any manu-

facturing or other business whose drainage or sewage may tend to pollute any water or source of water supply as to the best method of preventing such pollution, and it may conduct experiments to determine the best methods of purification or disposal of drainage or sewage. No person shall be required to bear the expense of such consultation, advice, or experiments. In this section the term "drainage" means the rainfall, surface, and subsoil water only, and "sewage" means domestic and manufacturing filth and refuse.

SEC. 6. Upon petition to said board by the mayor of a city, the selectmen of a town, the trustee or bailiff of a village, the managing board or officer of any public institution, or by a board of water commissioners, or the president of a water or ice company, stating that manure, excrement, garbage, or any other matter is polluting or tending to pollute the water of any stream, pond, spring, or water course used by such city, town, village, institution, or company as a source of water supply, the board shall appoint a time and place within the county where the nuisance or pollution is alleged to exist, for hearing, and after notice thereof to parties interested and a hearing, if in its judgment the public health so requires, shall, by an order served upon the party, company, or premises so polluted, prohibit the deposit, keeping, or discharge of any such cause of pollution, and shall order him to desist therefrom and to remove any such cause of pollution; but the board shall not prohibit the cultivation or use of soil in the ordinary methods of agriculture if no human excrement is used therefor.

Said board shall not prohibit the use of any structure which was in existence at the time of the passage of this act upon a complaint made by the board of water commissioners of any city, town, or village, or by any water or ice company, unless such board of water commissioners or company files with the State board a vote of its city council, selectmen, trustees, or bailiffs, or company, respectively, that such city, town, village, or company will, at its own expense, make such change in said structure or its location as said board shall deem expedient. Such vote shall be binding on such city, town, village, or company. All damages caused by such change shall be paid by such city, town, village, or company, and if the parties can not agree thereon such city, town, village, or company shall tender to the parties sustaining damages such a sum of money as in their judgment is a reasonable compensation for the damages sustained. Whoever is aggrieved by an order under the provisions of the preceding section, or with the sum so tendered as damages, may appeal therefrom in the manner provided in Vermont statutes, sec. 3314 to 3317, inclusive, relating to highways. But the notice therein provided for shall be served on the party or parties who are petitioners in fact under section 6 of this act, and also upon the State board of

health. If the appeal be only from the compensation for damages, the order of the board shall be complied with during the pendency of such appeal unless otherwise authorized by said board.

SEC. 7. The court of chancery shall have jurisdiction and power, upon application thereto by the State board of health or any party interested, to enforce its orders, or the orders, rules, and regulations of said board of health, and to restrain the use or occupation of the premises or such portion thereof as said board may specify, on which said material is deposited or kept or such other cause of pollution exists, until the orders, rules, and regulations of said board have been complied with.

SEC. 8. Said board of health may by itself, its servants and agents, enter any building, structure, or premises for the purpose of ascertaining whether sources of pollution or danger to the water supply there exist and whether the rules, regulations, and orders aforesaid are obeyed.

SEC. 9. Whoever violates any rule, regulation, or order made under the provisions of section 2 or section 6 of this act shall be punished for each offense by a fine of not more than five hundred dollars to the use of the State, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 10. No sewage, drainage, refuse, or polluting matter of such kind and amount as either by itself or in connection with other matter will corrupt or impair the quality of the water of any pond or stream used as a source of ice or water supply by a city, town, village, public institution, or water company for domestic use, or render it injurious to health, shall be discharged into any such streams, ponds, or upon their banks.

SEC. 12.^a The court of chancery, upon the application of a mayor of a city, the selectmen of a town, the trustees or bailiffs of an incorporated village, the managing board or officer of a public institution, or a water or ice company interested, shall have jurisdiction, in equity to enjoin the violation of the provisions of section 10.

SEC. 13. Whoever wilfully deposits excrement or foul or decaying matter in water which is used for the purpose of domestic water supply or on the shore thereof within five rods of the water shall be punished by a fine of not more than fifty dollars or by imprisonment for not more than thirty days; and a constable of a town or police officer of a city or village in which such water is wholly or partially situated may act within the limits of his city or town, and any executive officer or agent of a water board, board of water commissioners, public institution, or water company furnishing water or ice for domestic purposes, acting upon the premises of such board, institution, or company,

^a Section 11 repealed.

and not more than five rods from the water, may without a warrant arrest any person found in the act of violating the provisions of this section and detain him until complaint may be made against him therefor. But the provisions of this section shall not interfere with the sewerage of a city, town, village, or public institution, or prevent the enriching of land for agriculture by the owner or occupant thereof.

SEC. 14. Each member of the State board of health shall receive four dollars per day and actual expenses while in the discharge of the duties imposed by this act. The State auditor is directed to draw his order on the State treasurer every six months for such sums as are necessary to meet the expenses of said board under the provisions of this act.

Approved December 12, 1902.

GENERAL RULES.

The foregoing compendium of common and statute law may be summarized and stated in a few general rules, which will perhaps be useful to property owners and also to officers charged with the duty of protecting health and property rights in waters.

In the nature of the case these rules can be only general, and many exigencies will appear in which more particular instructions must be obtained from the consultation of text-books and decisions or from the advice of counsel.

I. RIGHTS AND DUTIES OF RIPARIAN OWNERS.

Every riparian owner has the right—

1. To use the waters of streams, navigable or otherwise, which flow across or along his property for the ordinary purposes incidental to domestic life and agriculture, including grazing.

2. To use such waters for water power and for all kinds of manufacturing purposes which do not sensibly diminish the quantity which flows on for the use of lower proprietors nor change the quality of the waters to any appreciable extent, nor interfere with the use of the stream, if navigable by the public.

3. To have such waters flow to him from the premises of higher proprietors not unreasonably diminished nor diverted nor rendered impure by the farming or domestic uses to which the waters are subjected by higher proprietors.

4. To have such waters flow to him not sensibly changed in quality by any manufacturing or other uses to which they may have been put by higher proprietors.

5. To have such waters flow to him in their natural bed, unpolluted by any deposits of filth or any other substance in the bed or channel

previously traversed by them. But 3, 4, and 5 do not apply to riparian owners in those States in which the doctrine of prior appropriation is the law. (See pp. 21-23.)

Conversely, it is the duty of every riparian owner—

1. To so guard his use of the waters of streams which flow across or along his property for domestic and agricultural purposes as not unreasonably to divert nor diminish nor render impure such waters.

2. To refrain from every use in manufacturing which will divert or sensibly diminish the quantity of the waters which flow onward to the lower proprietors or render them appreciably different in quality.

3. To refrain from depositing any filth or other substance in the bed of such streams in such a manner or to such an extent as will cause the waters to flow to the lower proprietors out of their natural bed or will in anywise pollute them or render them impure.

Where the doctrine of prior appropriation is in force the appropriator must confine his use of the appropriated water to the use for which he has appropriated it and take only so much as is reasonably necessary to accomplish that purpose. He may not pollute the stream wantonly, nor by using it for purposes not included in his appropriation. Subject to these restrictions, the prior appropriator has the right to divert from the stream and use as much of the water as is necessary to accomplish the purpose for which it was appropriated.

II. RIGHTS AND DUTIES OF MUNICIPAL CORPORATIONS.

Considered as corporate entities, municipal corporations have such rights and powers only as are conferred upon them by statute, either expressly or by necessary implication.

When, under due authority, they become the owners of lakes, reservoirs, and natural streams, they have the same rights to pure water, and are charged with the same duties as are other riparian proprietors.

If authorized to construct a system of sewers draining into a stream, such authority does not exempt them (except in the State of Indiana) from the duty not to pollute the stream to the damage of lower proprietors.

The rights of property owners, specified in 3, 4, and 5 above are property rights and can not be taken away from owners for public use except upon payment therefor of an amount determined by constitutional condemnation proceedings authorized by statute.

Therefore, until municipal corporations have, by such proceedings, acquired the rights of all lower proprietors and paid for them, they are required in all cases to refrain from the pollution of streams to the same extent as private owners.

III. RIGHTS AND DUTIES OF THE PUBLIC.

By "the public" is meant that indefinite number of individuals, whether larger or smaller, who occupy as a common habitation a neighborhood, village, town, State, or country. Rights and duties which affect inhabitants of the neighborhood, village, town, State, or country as a whole, or a considerable but indefinite number of them, are called "public" rights and duties.

The public, in this sense, aside from the right to use navigable waters for commerce, has the right to enjoy the natural waters and the air which passes over them, so far as life and health are affected by these elements, in a condition so near that in which nature left them that their use will not destroy nor threaten life nor injure health.

And, reciprocally, the public, and each member of it, is charged with the duty not to pollute the natural waters upon which the community depends for life and health in any manner that will render the continued use of the waters, or of the air which passes over them, destructive of or injurious to the life or health of the community.

PUBLIC RIGHTS AND DUTIES ENFORCED BY STATUTE.

The rights and duties attempted to be expressed under III have received some recognition by the courts apart from statutory enactments. They have been enforced chiefly, however, through legislation. These rights and duties have received full recognition, and an active effort has been made to provide an efficient sanction for their enforcement by the legislatures of all the States included in Class II and Class III, as hereinbefore stated. These classes include thirty-eight of the States and Territories.

These statutes, not being in derogation of common-law rights, have been construed as remedial statutes and not unconstitutional, although in some cases they may seem to interfere with prescriptive rights. No one can acquire by prescription a right to do an act which menaces public health or destroys public comfort.

PROGRESS OF LEGISLATION.

It will have been noticed that public opinion, as expressed in public laws, is steadily progressing in the direction of a full, complete, and comprehensive enforcement of all the rights and duties of riparian owners, of municipal corporations, and of the public, as summarized above. Each advance in statutory regulation is an advance in that direction, and more especially in the direction of regulating and enforcing public rights and municipal rights and duties.

Private owners, from time immemorial, have been active in protecting their riparian rights as against other private owners. But the effect of pollution upon public health has not, until a comparatively recent period, been brought prominently into notice. The pollution of streams by cities and private persons has, accordingly, not received the attention which it deserved. This state of affairs is now rapidly passing away. Courts have shown themselves fully alive to the existence and validity of public rights in that respect, and the legislatures in Class III, comprising the States of Connecticut, Massachusetts, New Hampshire, New York, New Jersey, Minnesota, Vermont, and Pennsylvania, which has come into this class by legislation enacted in 1905, have made enactments calculated so to control such pollution as eventually to prevent all danger to public health.

INDEX.

	Page.		Page.
A.			
Acquackanonk Water Co. v. Watson, cited on mine contamination	15	Butcher's Ice and Coal Co. v. Philadelphia, decision in	26
reference to	18	Butler v. Village of White Plains, decision in	29-30
Alabama, common-law cases in	9, 25, 29	C.	
statute laws of	33-34	Cairns, Lord, cited on mine contamination	16
Altoona, Good v., decision in	26	California, common-law cases in	9, 22, 23, 25
Andrews, Chief Justice, opinion of, quoted on sewage pollution	27-28	doctrine of prior appropriation in	22, 23
Angel, Pennsylvania Railroad Co. v., opinion in, quoted on interference with private property	18	statute laws of	46-47
Appropriation, prior, doctrine of, in arid and mining States	21-23	Cases on discharge of sewage	24-31
Arid and mining States, riparian rights in	21-23	on public nuisances	23
Arizona, common-law case in	21	on rights of public	23
doctrine of prior appropriation in	21	municipalities	24, 25-31
Arkansas, common-law case in	9	riparian owners	9-23
statute laws of	34	Cemetery, maintenance of, near streams, etc., prohibition of and penalty for	39, 58, 74-75, 132
Ashes, deposition of, in streams, etc., prohibition of and penalty for	57	Chadwick, Magor v., cited on mine contamination	15
Attorney-General v. Leeds, opinion in, quoted on previous pollution ..	17	Chelmsford, Lord, opinion of, quoted on previous pollution	17
Attorney-General v. Steward, opinion in, quoted on previous pollution ..	16	Chemicals, deposition of, in streams, etc., prohibition of and penalty for ..	72
B.		Chicago, sewage from, suit concerning disposal of	20-21
Baldwin, Judge, opinion of, quoted on sewage pollution	28-29	City, Harris v., decision in	26
Bankier, Young v., cited on mine contamination	15	City of Danbury, Morgan v., opinion in, quoted on sewage pollution ..	28-29
Barnyard refuse, contamination by, prohibition of and penalty for	37, 46, 65, 66, 67-68, 70	City of Gloversville, Sammons v., decision in	29
Bathing in stream, etc., used for water supply, prohibition of and penalty for	46, 57, 64, 66-67, 74, 81, 84	Clowes v. Staffordshire Waterworks, cited on right to give damages	15
Bathing establishments, law regulating ..	131-132	Coal mines, contamination from. <i>See</i> Mines.	
Beach v. Sterling Iron and Zinc Co., decision in	11-20	Coal tar, etc., contamination by, prohibition of and penalty for ..	46-47, 54, 61
reference to	31	Colorado, common-law cases in	9, 21, 23
Birmingham, Mayor, etc., of, v. Land, opinion in	29	doctrine of prior appropriation in	21, 23
Blizzard v. The Borough of Danville, decision in	27	statute laws of	48
Boards of health. <i>See</i> Health, boards of.		Columbus, The, etc., Co. v. Tucker, decision in, cited	14
Boiling Spring Co., Holsman v. <i>See</i> Holsman v. Boiling Spring Co.		Columbus Co. v. Taylor, cited on natural use	16
Bones, deposition of, in streams, etc., prohibition of and penalty for	57	Commissioners on stream pollution, New Jersey, powers, etc., of ..	88-89, 106-121
Borough of Danville, The, Blizzard v., decision in	27	Common law. <i>See</i> Law, common.	
Brinsop Coal Co., Pennington v., cited on mine contamination	15	Connecticut, common-law cases in ..	9, 25, 27-29
		statute laws of	74-76
		Contamination of water. <i>See</i> Water, pollution of.	
		Council, city or village, powers of	37, 43, 49
		Crossley v. Lightowler, opinion in, quoted on previous pollution	17

	Page.		Page.
D.			
Damages, right to sue for	8	Harris v. City, decision in	26
Danbury, Morgan v., opinion in	28-29	Health, boards of, powers of	34,
Danville, Borough of, Blizard v., decision in	27	42-43, 47, 50, 58, 59, 68, 74, 77-79, 82, 83, 84, 85, 90, 91-92, 121-125, 129-130, 132, 137-141	18
Decisions. See Cases.		Higgins v. The Water Co., cited	18
Delaware, statute laws of	35	Hodgkinson v. Ennor, cited on mine con- tamination	15
Diversion of water supply, prohibition of and penalty for	53	Holsman v. Boiling Spring Co., cited on mine contaminator	14
Dixon, Judge, opinion of, quoted on inter- ference with private property ..	18	opinion in, quoted on protection of ripa- rian right	17
Dodge, Judge, opinion of, quoted on sewage pollution	31	reference to	18
Domestic purposes, right of reasonable use of water for	8	Hughes v. Fond du Lac, opinion in, quoted on rights of municipal corpora- tion	31
E.			
England, common-law cases in... 10, 15-16, 17, 25		I.	
Ennor, Hodgkinson v., cited on mine con- tamination	15	Ice, cutting of, restriction of	83, 84
Excrement, contamination by, prohibition of and penalty for	58,	Ice pond, driving on, restriction of	81
62, 63, 65, 66-67, 69, 70, 80, 81, 89-90, 140		Idaho, common-law cases in	21
Explosives, deposition of, in streams, etc., restriction of	36, 72, 73	doctrine of prior appropriation in	21
F.			
Factory refuse, contamination by, prohibi- tion of and penalty for	37,	statute laws of	35
38, 45, 50, 53, 54, 61, 66-67, 89-90		Illinois, common-law cases in	25
discharge of, in streams, etc., when al- lowed	126-128	statute laws of	48-49
Farming, right of reasonable use of water for	8	Illinois et al., Missouri v., case of	20-21
Fish, etc., poisoning of, prohibition of and penalty for	36,	Indiana, common-law cases in	9, 25, 31
38, 40, 45, 54, 55, 58, 72, 73		statute laws of	49-51
Fletcher v. Rylands, cited on mine contam- ination	16	Indictment as remedy for injury	8
Florida, statute laws of	35	Injunction as remedy for injury	8, 18, 76, 80
Fond du Lac, Hughes v., opinion in, quoted on rights of municipal corpora- tion	31	cases bearing on	15-16, 18, 29-31
G.			
Garbage, etc., burning of	57, 69	Iowa, common-law cases in	9, 25
Gardner v. Newburgh, decision in, quota- tion from	14	statute laws of	36
Garrison, Judge, opinion of, quoted on sew- erage commission	121	J.	
Gas tar, etc., contamination by, prohibition of	39, 40, 61, 63	Jurisdictions of act and its results, different.	9, 10
Georgia, common-law cases in	9, 25	K.	
statute laws of	35	Kansas, common-law cases in	26
Gloversville, Sammons v., decision in ..	29	statute laws of	36
Goldsmid v. Tunbridge Wells Commis- sioners, opinion in, quoted on effect of nuisance	19-20	Kent, Chancellor, opinion of, quoted on riparian rights	14
Good v. Altoona, decision in	26	Kentucky, statute laws of	36
Great Britain, common-law cases in. 10, 15-16, 17, 25		L.	
Grey, Attorney-General, v. Paterson, discus- sion of	30-31	Lancaster City, Owens v., decision in	26, 27
opinion in, quoted on sewage disposal ..	30	Land, Mayor, etc., of Birmingham v., opin- ion in, quoted on sewage pollu- tion	29
H.			
Hagen, Valparaiso v., decision in	25, 26, 31	Law, common, decisions at	7-81
Harper v. Milwaukee, opinion in, quoted on rights of municipal corporation ..	31	decisions at, classification of	7-8
		principles of	7-81
		classification of	7-8
		remedies at	8
		Laws, statute, classes of	32
		lack of uniformity in	32
		restrictions of, general	45-73
		partial	33-45
		severe	73-141
		text of, by classes and by States	33-141
		See also under State names.	
		Leeds, Attorney-General v., opinion in, quoted on previous pollution ..	17
		Lightowler, Crossley v., opinion in, quoted on previous pollution	17
		Lister, Meigs v., opinion in, quoted on pre- vious pollution	16-17
		Lords, House of, decision of	15
		Louisiana, statute laws of	36

	Page.		Page.
Lowell, Middlesex Co. v., decision in.....	29	New Mexico, common-law cases in.....	22
Lumbering waste, deposition of, in streams, etc., when allowed.....	83	doctrine of prior appropriation in.....	22
M.		statute laws of.....	56-57
McClellan, Chief Justice, opinion of, quoted on sewage pollution.....	29	New York, common-law cases in.....	26, 29-30
Macnaghten, Lord, opinion of, quoted on mine contamination.....	15-16	statute laws of.....	121-132
Magor v. Chadwick, cited on mine contami- nation.....	15	Newburgh, Gardner v., decision in, quota- tion from.....	14
Maine, common-law case in.....	9	Nolan v. New Britain, opinion in, quoted on sewage pollution.....	27-28
statute laws of.....	51-52	North Carolina, statute laws of.....	58-59
Maryland, common-law cases in.....	9	North Dakota, common-law cases in.....	22
statute laws of.....	52-53	doctrine of prior appropriation in.....	22
Massachusetts, common-law cases in.....	9, 26, 29	statute laws of.....	39
statute laws of.....	77-81	Nuisance, commission of, near waterworks, prohibition of and penalty for..	34, 74
Mayor, etc., of Birmingham v. Land, opinion in, quoted on sewage pollution..	29	public, from water pollution.....	23, 27
Meigs v. Lister, opinion in, quoted on pre- vious pollution.....	16-17	O.	
Merrifield v. Worcester, cited on natural use.	16	Obstructions to navigation, deposition of, in streams, etc., prohibition of....	36, 38
decision in.....	26, 29	Ohio, common-law cases in.....	10, 14, 16
Michigan, statute laws of.....	36-38	statute laws of.....	60-62
Middlesex Co. v. Lowell, decision in.....	29	Oil, etc., contamination by, prohibition of and penalty for.....	48, 54, 61, 66-67
Milling refuse, contamination by, prohibi- tion of and penalty for.....	44,	Oklahoma, statute laws of.....	39-40
45, 85, 86, 137		Oregon, common-law cases in.....	22, 23
Milwaukee, Harper v., opinion in, quoted on rights of municipal corpora- tion.....	31	doctrine of prior appropriation in.....	22, 23
Mines, contamination of streams by, deci- sions on.....	10-20	statute laws of.....	62-63
Mining refuse, pollution by.....	9, 10-20, 55, 66	Owens v. Lancaster City, decision in.....	26, 27
Minnesota, common-law case in.....	10	Owners, riparian, rights of....	8-23, 30-31, 141-142
statute laws of.....	81-82	below tide water, rights of.....	30
Mississippi, common-law case in.....	10	Oysters, etc., deposition of, in streams etc., prohibition of and penalty for..	52
statute laws of.....	38	P.	
Missouri, common-law case in.....	10	Paper, deposition of, in streams, etc., prohi- bition of and penalty for.....	57
statute laws of.....	53-54	Parliament, powers of.....	18
Missouri v. Illinois et al., case of.....	20-21	Passaic Valley Sewerage Commissioners, Van Cleve v., decision in, refer- ence to.....	121
Montana, common-law cases in.....	21	Paterson, Grey, Attorney-General, v. See Grey, Attorney-General, v. Fater- son.	
doctrine of prior appropriation in.....	21	Pennington v. Brinsop Coal Co., cited on mine contamination.....	15
Morgan v. City of Danbury, opinion in, quoted on sewage pollution....	28-29	Pennsylvania, common-law cases in.....	10,
Municipalities, as riparian owners.....	24-142	11, 14, 17, 18, 26, 27-28	
rights of.....	8,	statute laws of.....	132-136
24-31, 34, 38, 39, 55, 61, 81, 90, 94, 112- 113, 124, 126, 127, 134, 141, 142-143		Pennsylvania Coal Co., Sanderson v. See Sanderson v. Pennsylvania Coal Co.	
N.		Pennsylvania Railroad Co. v. Angel, opin- ion in, quoted on interference with private property.....	18
Nason, Professor, testimony of, on mine water.....	19	Philadelphia, Butcher's Ice and Coal Co. v., decision in.....	26
Natural use. See Use, natural.		Pitney, Vice-Chancellor, opinion of.....	11-20
Nebraska, statute laws of.....	38-39	Poison, deposition of, in streams, etc., prohi- bition of and penalty for....	35,
Nevada, common-law cases in.....	21	36, 40, 44, 51, 54, 55, 58, 64, 70, 83	
doctrine of prior appropriation in.....	21	Polluting articles, deposition of, in streams, etc., statutory restrictions of..	32-141
statute laws of.....	54-55	<i>For special articles not universally prohi- bited, see under their names.</i>	
New Britain, Nolan v., opinion in, quoted on sewage pollution.....	27-28	Pollution, right of, impossibility of pre- scribing.....	9
New Hampshire, common-law case in.....	10, 26		
statute laws of.....	82-86		
New Jersey, commissioners on stream pollu- tion in.....	88-89, 106-121		
common-law cases in.....	10, 11-20, 26, 30-31		
sewage commission in.....	92-105		
statute laws of.....	86-121		

	Page.		Page.
Pollution of water. <i>See</i> Water, pollution of.		States, laws of, classification of	32
Prior appropriation. <i>See</i> Appropriation.		laws of, lack of uniformity in	32
Privy vaults, laws concerning	39,	text of	33-141
46, 48, 49, 53, 60, 66-67, 69, 70, 87		<i>See also under</i> State names.	
Property, private, interference with, provi- sion of Constitution concerning	18	Statutory restrictions. <i>See</i> Restrictions.	
Public, as riparian owner	23	Sterling Iron and Zinc Co., <i>Beach v.</i> <i>See</i> <i>Beach v. Sterling Iron and Zinc</i> <i>Co.</i>	
rights of	8, 23, 143	Steward, Attorney-General <i>v.</i> , opinion in, quoted on previous pollution...	16
R.			
Refuse. <i>See</i> Factory refuse; Milling refuse; Mining refuse.		Streams, banks of, deposit'ion of offensive matter on, prohibition of and penalty for	39,
Remedies at common law for water pollu- tion	8	43, 46, 58, 66-67, 80, 81, 140	
Restrictions, statutory, classification of	32	use of, as sewers, rights of municipali- ties in	24-31, 38, 39
general, by States	45-73	Suit, private, as remedy for injury	8
partial, by States	33-45	Supreme Court of the United States, com- mon-law case in	20-21
severe, by States	73-111	T.	
Rhode Island, common-law cases in	10	Taylor, Columbus Co. <i>v.</i> , cited on natural use	16
statute laws of	40-43	Tennessee, statute laws of	64
"Rights of municipal corporations to drain sewers," etc., cited	29	Texas, cases bearing on prior appropriation in	22
Rights, prescriptive, cases bearing on, cited	16, 27-28	statute laws of	64
discussion of	16, 141-143	Tin cans, deposit'ion of, in streams, etc., prohibition of and penalty for ..	57
Riparian owners. <i>See</i> Owners, riparian.		Tipping, St. Helen's Smelting Co. <i>v.</i> , cited on previous pollution	17
Rylands, Fletcher <i>v.</i> , cited on mine con- tamination	16	Tucker, Columbus, etc., Co. <i>v.</i> , decision in, cited	14
S.			
St. Helen's Smelting Co. <i>v.</i> Tipping, cited on previous pollution	17	Tunbridge Wells Commissioners, Goldsmid <i>v.</i> , opinion in, quoted on effect of nuisance	19-20
Sammons <i>v.</i> City of Gloversville, decision in ..	29	Turner, Lord Justice, opinion of, quoted on effect of nuisance	19-20
Sanderson <i>v.</i> Pennsylvania Coal Co., de- cision in	10-11	U.	
discussion of	14	Use, natural, discussion of	16
reference to	14, 15, 17	reasonable, right of	8, 22
Sawdust, etc., deposit'ion of, in streams, etc., prohibition of and penalty for	44, 45, 54, 55, 71, 72, 73, 85, 86, 137	reasonableness of, determinat'ion of	8
Sewage, definition of	28	Utah, statute laws of	65
discharge of, cases on	24-31	V.	
decisions concerning	17, 25, 26-31	Valparaiso <i>v.</i> Hagen, decis'ion in	25, 26, 31
limitation of statutory authority for	24	Van Cleve <i>v.</i> Passaic Valley Sewerage Com- missioners, decision in, refer- ence to	121
restrictions on	42, 52, 58, 62, 66, 75, 81, 89-90, 94, 112-113, 126, 134, 140	Vermont, common-law cases in	10
rights of municipalities	24-31, 38, 39, 55, 81, 90, 94, 112-113, 124, 126, 127, 134, 141, 142-143	statute laws of	137-141
Sewerage commission, New Jersey, powers, etc., of	92-105	Village of White Plains, Butler <i>v.</i> , decision in	29-30
Sheep washing, contamination by, pro- hibition of and penalty for	65	Virginia, statute laws of	65-67
Slaughterhouse, maintenance of, near streams, etc., prohibition of and penalty for	39, 43, 44, 67-68, 70	W.	
South Carolina, common-law case in	10	Washington, common-law cases in	22
South Dakota, statute laws of	63	doctrine of prior appropriat'ion in	22
Stable, etc., maintenance of, near streams, etc., prohibition of and penalty for	39, 46, 65, 67-68	statute laws of	67-69
Staffordshire Waterworks, Clowes <i>v.</i> , cited on right to give damages	15	Water, appropriat'ion of, limitation of ripa- rian owner's right of	8, 142
States, control of water pollution confined to	32	total, prohibition of	8
		ownership of, qualificat'ion of	8
		pollution of, by drainage from mines ..	10-20
		causing public nuisance	9, 23

	Page.
Water, pollution of, from sewage	24-31
pollution of, jurisdiction over.....	32
liability of municipality for.....	24-31
liability of riparian owner for.....	8, 142
relation of prior appropriation to.....	22-23
statutory restrictions on.....	32-141
prior appropriation of, doctrine of.....	21-23
reasonable use of, determination of....	8
rights of public in.....	23
rights of riparian owners to	7, 8, 141-142
limitations on.....	8, 21, 142
rule of law concerning.....	8
supply of, inspection of	122
use of, for farming and domestic pur- poses	8, 141
for other than farming or domestic purposes, limitations on....	8, 141-142
riparian owner's right to.....	7, 8, 141
Water Co., The, <i>Higgins v.</i> , cited.....	18
Water companies, laws concerning	59, 83-84

	Page.
<i>Watson, Acquackanonk Water Co. v. See</i> <i>Acquackanonk Water Co. v.</i> <i>Watson.</i>	
<i>Waukesha, Winchell v.</i> , opinion in, quoted on sewage pollution.....	31
West Virginia, statute laws of.....	69
White Plains, Village of, <i>Butler v.</i> , deci- sion in.....	29-30
<i>Winchell v. Waukesha</i> , opinion in, quoted on sewage pollution.....	31
Wisconsin, common-law cases in.....	10, 31
statute laws of.....	43-45
Worcester, <i>Merrifield v. See Merrifield v.</i> Worcester.	
Wyoming, common-law cases in.....	10, 22
doctrine of prior appropriation in.....	22
statute laws of.....	70-73
Y.	
<i>Young v. Bankier</i> , cited on mine contami- nation.....	15

PUBLICATIONS OF UNITED STATES GEOLOGICAL SURVEY.

[Water-Supply Paper No. 152.]

The serial publications of the United States Geological Survey consist of (1) Annual Reports, (2) Monographs, (3) Professional Papers, (4) Bulletins, (5) Mineral Resources, (6) Water-Supply and Irrigation Papers, (7) Topographic Atlas of United States—folios and separate sheets thereof, (8) Geologic Atlas of United States—folios thereof. The classes numbered 2, 7, and 8 are sold at cost of publication; the others are distributed free. A circular giving complete lists may be had on application.

Most of the above publications may be obtained or consulted in the following ways:

1. A limited number are delivered to the Director of the Survey, from whom they may be obtained, free of charge (except classes 2, 7, and 8), on application.

2. A certain number are allotted to every member of Congress, from whom they may be obtained, free of charge, on application.

3. Other copies are deposited with the Superintendent of Documents, Washington, D. C., from whom they may be had at practically cost.

4. Copies of all Government publications are furnished to the principal public libraries in the large cities throughout the United States, where they may be consulted by those interested.

The Professional Papers, Bulletins, and Water-Supply Papers treat of a variety of subjects, and the total number issued is large. They have therefore been classified into the following series: A, Economic geology; B, Descriptive geology; C, Systematic geology and paleontology; D, Petrography and mineralogy; E, Chemistry and physics; F, Geography; G, Miscellaneous; H, Forestry; I, Irrigation; J, Water storage; K, Pumping water; L, Quality of water; M, General hydrographic investigations; N, Water power; O, Underground waters; P, Hydrographic progress reports. This paper is the twelfth in Series L, the complete lists of which follow. (PP=Professional Paper, B=Bulletin, WS=Water-Supply Paper.)

SERIES L—QUALITY OF WATER.

- WS 8. Sewage irrigation, by G. W. Rafter. 1897. 100 pp., 4 pls. (Out of stock.)
WS 22. Sewage irrigation, Pt. II, by G. W. Rafter. 1899. 100 pp., 7 pls. (Out of stock.)
WS 72. Sewage pollution near New York City, by M. O. Leighton. 1902. 75 pp., 8 pls.
WS 76. Flow of rivers near New York City, by H. A. Pressey. 1903. 108 pp., 13 pls.
WS 79. Normal and polluted waters in northeastern United States, by M. O. Leighton. 1903. 192 pp., 15 pls.
WS 103. Review of the laws forbidding pollution of inland waters in the United States, by E. B. Goodell. 1904. 120 pp.
WS 108. Quality of water in the Susquehanna River drainage basin, by M. O. Leighton, with an introductory chapter on physiographic features, by G. B. Höllister. 1904. 76 pp., 4 pls.
WS 113. Strawboard and oil wastes, by R. L. Sackett and Isaiah Bowman. 1905. 52 pp., 4 pls.
WS 121. Preliminary report on the pollution of Lake Champlain, by M. O. Leighton. 1905. 119 pp., 13 pls.
WS 144. The normal distribution of chlorine in the natural waters of New York and New England, by D. D. Jackson. 1905. 31 pp., 5 pls.
WS 151. Field assay of water, by M. O. Leighton. 1905. 77 pp., 4 pls.
WS 152. A review of the laws forbidding pollution of inland waters in the United States, second edition, by E. B. Goodell. 1905. 149 pp.

Correspondence should be addressed to

THE DIRECTOR,

UNITED STATES GEOLOGICAL SURVEY,

WASHINGTON, D. C.

OCTOBER, 1905.

LIBRARY CATALOGUE SLIPS.

[Mount each slip upon a separate card, placing the subject at the top of the second slip. The name of the series should not be repeated on the series card, but the additional numbers should be added, as received, to the first entry.]

Goodell, Edwin B[urpee] 1850-

Author. . . . A review of the laws forbidding pollution of inland waters in the United States. 2d ed. By Edwin B. Goodell. Washington, Gov't print. off., 1905.

149, iii p. 23^{cm}. (U. S. Geological survey. Water-supply and irrigation paper no. 152)

Subject series: L, Quality of water, 12.

First ed. published as Water-supply and irrigation paper no. 103.

1. Water, Pollution of. 2. Water—Laws and legislation.

Goodell, Edwin B[urpee] 1850-

Subject. . . . A review of the laws forbidding pollution of inland waters in the United States. 2d ed. By Edwin B. Goodell. Washington, Gov't print. off., 1905.

149, iii p. 23^{cm}. (U. S. Geological survey. Water-supply and irrigation paper no. 152)

Subject series: L, Quality of water, 12.

First ed. published as Water-supply and irrigation paper no. 103.

1. Water, Pollution of. 2. Water—Laws and legislation.

U. S. Geological survey.

Series. Water-supply and irrigation papers.
no. 152. Goodell, E. B. A review of the laws forbidding pollution of inland waters. 2d ed. 1905.

U. S. Dept. of the Interior.

see also

Reference. U. S. Geological survey.

