fore, that the orders of the Circuit Court of Appeals in affirming the judgments of the District Court were the proper ones.

The judgments are affirmed.

STATE OF WISCONSIN ET AL. *v.* STATE OF ILLINOIS AND SANITARY DISTRICT OF CHICAGO ET AL.

STATE OF MICHIGAN *v.* SAME.

STATE OF NEW YORK *v.* SAME.

Nos. 7, 11, and 12 Original. Argued April 23, 24, 1928.—Decided January 14, 1929.

1. A suit between States bordering on the Great Lakes, in which the plaintiffs sought to enjoin the defendant State and its administrative agency from diverting the lake water through a sanitary canal into another watershed under a permit from the Secretary of War, alleging that the diversion, by lowering the level of the lakes and waters connecting them, inflicted great damage upon public and private riparian property in the plaintiff States and to their water-borne commerce; that it was contrary to legislation of Congress, and, if permitted thereby, was unconstitutional in that it exceeded the power of Congress to regulate commerce, preferred the ports of one State over those of other States, deprived the plaintiffs and their citizens of property without due process of law, and invaded the sovereign rights of the plaintiffs as members of the Union,—*held* a case within the original jurisdiction of this Court. P. 409.
2. Under § 10 of the Act of 1899, 26 Stat. 455, obstructions to the navigable capacity of the waters of the United States are prohibited if not affirmatively authorized by Congress; but obstructions of the kinds specified in the second and third clauses of the section are so authorized when approved by the Chief of Engineers and the Secretary of War, without further action by Congress. P. 411.
3. The authority thus conferred on executive officers is not an unconstitutional delegation as applied to determining the amount of water that may be diverted from a lake without impairing navigability. P. 414.

4. Authority for diverting water from Lake Michigan through the Chicago Sanitary Canal is not to be found in such action as Congress has taken relative to a proposed waterway between that lake and the Illinois and Mississippi Rivers, nor in its appropriations for widening and deepening the Chicago River. P. 416.
5. The Sanitary District of Chicago, an agency of the State of Illinois, operating a canal partly in the Chicago River and connected with streams leading to the Mississippi River through which the great volumes of sewage emanating from Chicago and its environs are carried to the Mississippi watershed by means of water abstracted from Lake Michigan, having been enjoined from diverting such water in excess of the amounts allowed by an existing permit from the Secretary of War or any that might be issued by him according to law, (*Sanitary District* v. *United States*, 266 U. S. 405), applied for and received from the Secretary a new permit, under the Act of March 3, 1899. The new permit was temporary and revocable and subject to the condition, among others, that a specified measure of diligence be displayed by the District in providing other means of sewage disposal, which in course of time would obviate excessive drafts on the lake water for that purpose. In a suit against the Sanitary District and the State of Illinois by other States bordering on the Great Lakes and connecting waters, in which it appeared that the continued diversions at Chicago had lowered the water level, to the damage of the plaintiffs and their citizens, *held:*

(1) Under the limited authority conferred upon him by the Act of March 3, 1899, the Secretary of War could not permit the continued withdrawal of lake water merely to aid the Sanitary District in disposing of sewage. P. 417.

(2) Support for the permit rests upon the need of preserving the navigability of the Port of Chicago, which would become unusable if the sewage were to accumulate pending provision of means other than the waterway for disposing of it, and upon maintaining navigation in the Chicago River, a part of that Port, for which a comparatively insignificant water flow may be required. P. 418.

(3) Save what may be needed for the Chicago River, the plaintiffs are entitled to have the diversions stopped by injunction, the decree, however, to be so framed as to accord a reasonable time within which the Sanitary District may provide other means of sewage disposal, reducing the diversion as the new means become operative from time to time, until the sewage shall be en-

tirely disposed of thereby, whereupon the injunction shall become final and complete. Pp. 418–420.

(4) The cause should be re-referred to the master to take testimony on the practical measures needed and the time required for their completion, and to report his conclusions for the formulation of such a decree. P. 421.

(5) States bordering on the Mississippi River and seeking as interveners to maintain the diversions in question because of their alleged beneficial effect upon the navigability of that stream, *held* to have no rightful interests in the matter. P. 420.

The first of these bills, filed July 14, 1922, by the State of Wisconsin, was amended October 5, 1925, the States of Minnesota, Ohio, and Pennsylvania becoming co-plaintiffs. The amended bill sought an injunction restraining the State of Illinois and the Sanitary District of Chicago from causing any water to be taken from Lake Michigan in such manner as permanently to divert the same from the lake. There was a further prayer, that if the Sanitary and Ship Canal should be used as a navigable waterway of the United States and be subject to the same control on the part of the United States as other navigable waterways, the defendants should be restrained from permanently diverting any water from Lake Michigan in excess of the amount which the Court should determine to be reasonably required for navigation in and through said Canal and the connecting waters to the Illinois and Mississippi Rivers, without injury to the navigable capacity of the Great Lakes and their connecting waters. It was also prayed that the defendants be restrained from dumping or draining into the canal any sewage or waste in such quantity and manner as excessively to pollute and render the canal, the Chicago, Des Plaines, and Illinois Rivers, unsanitary and injurious to the people of the plaintiff States navigating said waterways.

To the amended bill the State of Illinois filed a demurrer and the Sanitary District filed its answer, which in-

cluded a motion to dismiss. The States of Missouri, Kentucky, Tennessee, and Louisiana, by leave of Court, became intervening co-defendants and moved to dismiss the bill. The demurrer was overruled and the motions to dismiss were denied, without prejudice. 270 U. S. 634. The intervening defendants and the State of Illinois filed their respective answers. The States of Mississippi and Arkansas were permitted to intervene as defendants, and adopted the answers filed by the other interveners.

The State of Michigan, on March 8, 1926, filed its bill in this Court against the State of Illinois and the Sanitary District, for the same relief; and the defendants filed their answers on June 1, 1926.

On October 18, 1926, the State of New York filed its bill in this Court against the State of Illinois and the Sanitary District for the same relief; and on April 18, 1927, it was ordered that the answer filed by the defendants in the Michigan suit should be accepted and treated as their answer to the bill of New York, other than the third paragraph. 274 U. S. 712. On May 31, 1927, this paragraph was stricken out, without prejudice. 274 U. S. 488.

On June 7, 1926, the first cause was referred to Charles E. Hughes, Esq., as Special Master, to take the evidence and report the same to this Court with his findings of fact, conclusions of law, and recommendations for a decree, the parties in the Michigan case being granted leave to participate. 271 U. S. 650. Similar leave was granted on November 23, 1926, to the parties in the New York case. 273 U. S. 642.

After hearings, the master made his report, in which he concluded:

(1) That a justiciable controversy was presented; (2) that Illinois and the Sanitary District had no authority to make or continue the diversion in question without the consent of the United States; (3) that Congress had

power to regulate the diversion, i. e., to determine whether and to what extent it should be permitted; (4) that Congress had not directly authorized it; (5) that Congress, by the Act of March 3, 1899, had conferred authority upon the Secretary of War to regulate the diversion, provided he act not arbitrarily but in reasonable relation to the purpose of his delegated authority; (6) that the permit of March 3, 1925 (described in the opinion of the Court) was valid and effective according to its terms, the entire control of the diversion remaining with Congress. He recommended therefore that the bill be dismissed without prejudice to the rights of the plaintiffs to institute suit to prevent a diversion of water from Lake Michigan in case such diversion were made or attempted without authority of law.

The case came before the Court upon exceptions taken by the plaintiffs to the master's report.

Mr. Nathan L. Miller, with whom *Messrs. Albert Ottinger,* Attorney General of New York, *Albert J. Danaher,* Assistant Attorney General, and *Randall J. LeBoeuf, Jr.,* were on the brief, for plaintiffs in No. 12 Original.

The State of New York has the right for itself and in behalf of its citizens to insist that the waters of the Great Lakes-St. Lawrence Waterway flow down to it without diminution by the defendants, under the common law and under the law of riparian rights as it exists in the State of Illinois and in the State of New York.

The acts of the defendants constitute an illegal use of the waters of a natural watercourse, actionable under the law of Illinois or the law or New York. New York asks the Court to apply the same rule that the Illinois courts would apply in a similar matter properly before them.

The Great Lakes-St. Lawrence Waterway being, in fact, the boundary between the Dominion of Canada and the United States of America, the principles of international

law are particularly appropriate. The treaties recognize the importance of unobstructed navigation over the waterway. A duty imposed upon a riparian State, either by international law or treaty, to maintain the navigability of an international waterway "implies an obligation also to check within places subject to the control of such State commission of any acts which, unless restricted, would prove injurious to navigation generally." Hyde, Internat. L., § 183. This obligation would seem to render improper the tolerance of any diversion productive of such an effect even though it should occur at a point where the river ceased to be navigable and lay wholly within the domain of the acquiescent territorial sovereign. An international stream must be considered as a unity rather than from the viewpoint of the selfish needs of a particular State seeking to divert its waters. "Where a river traverses or serves as the boundary of territories of several States, the existence of the river interest, as such, becomes the more apparent, because of the common concern of all in its welfare." *Op. Cit., Ib.* This principle seems peculiarly appropriate to the controversy before the Court. Cf. Farnham, Waters and Water Rights, Vol. 1, § 6. This principle has the support of the decisions.

The Ordinance of July 13, 1787, (Art. IV) for the Government of the territory northwest of the river Ohio assures to all the States interested in the waters covered by it that no one State may obstruct their navigable capacity.

The rule that a State may not divert the waters of a natural watercourse to the injury of a downstream State or its citizens has been applied by this Court in interstate controversies where even the great consideration of navigation was lacking.

The State of New York is the owner of the lands under the waters of Lakes Erie and Ontario and the Niagara

and St. Lawrence Rivers within its limits. It has a property interest in the running water naturally flowing to such lands and its shores on the lakes and rivers of the Great Lakes-St. Lawrence Waterway. When such running water is withheld and permanently diverted into the Mississippi Watershed, the property of the State of New York is taken, and it is entitled to an injunction. Such a withholding of the running water as the acts of the defendants have caused, violates the rights of the State and its citizens guaranteed by the Constitution.

Neither Congress nor the Secretary of War has been delegated power by the States to permit this diversion for sewage and hydro-electric power development purposes to the detriment of the State of New York, and its citizens, and to the substantial injury of interstate commerce.

Reference is made to the possible impairment of navigation should Chicago be permitted to discharge its sewage into Lake Michigan. No testimony was given on this point by either side. Furthermore, any injury which might result from such a cause to the free movement of commerce would be caused to a greater degree by the discharge of the sewage into the restricted Des Plaines and Illinois rivers. Also, mention is made of the possible benefit the diversion might have upon navigation of the Mississippi River during periods of low water, but on this point the testimony was so unsatisfactory and indefinite that the Master stated it could not support a finding. These two possible benefits to commerce and navigation through the diversion are so utterly trivial in comparison with the injury which has been done by the diversion to the commerce passing over the Great Lakes-St. Lawrence Waterway, that they must be disregarded. The mere supposition that if Congress had acted, it might have considered these details; or the belief that the Secretary of War might have given them consideration, when

his permit of March 3, 1925, and his letter accompanying it showed plainly that the purpose of the diversion was to aid in solving Chicago's sewage disposal problem; are too speculative to permit any serious comparison between them and the proved damage to the commerce of the Great Lakes-St. Lawrence Waterway.

The controversy, therefore, resolves itself into a determination whether or not the Special Master's proposition is sound, that if navigation is affected, although injuriously, the Secretary of War may permit a diversion for the benefit of Chicago's sewage disposal and water power development. It is respectfully submitted that the States have not surrendered to the Federal Government the right to permit a diversion from a natural watercourse for the local purposes of a municipality and to the serious injury of a great commerce, merely because, through that injury, navigation is affected.

The cases in which this Court deals with the discretion vested in Congress to determine what constitutes an obstruction of a navigable waterway, relate to what might be described as the normal intendment of the term "obstruction." All of them, to some extent, involve the question of whether or not a bridge, or a pier, or a dam was so constructed as to impair or restrict the free navigation of a natural waterway. All dealt with an obstruction of the navigable capacity of a natural watercourse within the limits of the stream itself; and the language of the Court as to the broad discretion vested in Congress was with direct reference to this type of obstruction.

This power of the Federal Government is a trust power for the benefit of navigation. Certainly when all authority is derived from the States, Congress cannot exercise a higher degree of control than they had. For example, both New York and Illinois own lands under the Great Lakes-St. Lawrence Waterway. Yet the courts have determined that neither State may part with such

lands under water to such an extent that the right of present, or the opportunity to improve future, navigation is impaired. Grants may be made of lands for the construction of docks and wharves in aid of navigation. *In re Long Sault Development Co.,* 212 N. Y. 1, s. c., 242 U. S. 272.

If the trust in which the State holds the lands under water " is governmental and can not be alienated," surely the powers of the Federal Government, which has no property right in the beds or waters of navigable streams, must also and far more clearly be governmental and inalienable.

No question of discretion, however, is really involved in the transfer of these waters to the Mississippi watershed. If Congress should authorize this, or if the permit of the Secretary of War of March 3, 1925, should be held to lawfully permit such a transfer, it would amount to a complete abdication of the governmental control and the trust vested in the Federal Government to preserve, and, if it sees fit, to improve the navigation of the Great Lakes-St. Lawrence Waterway in the interest of the interstate and foreign commerce thereon.

The title of New York and its citizens in the waters, shores and bed of the Great Lakes-St. Lawrence Waterway admittedly is subject to the servitude that the Waterway may be improved by Congress for the benefit of navigation. In some situations, improvements might cause some local or consequential injury to particular property. Beyond this servitude, the State and its citizens have the right to expect and demand the natural and undiminished flow of the watercourse. There is no greater power in Congress, arising from the Commerce Clause, to dispose of the waters of the Great Lakes for the real or fancied benefit of some single section of the Nation, than to dispose of the lands under their navigable waters. Cf. *Pollards' Lessee* v. *Hagan,* 3 How. 212.

Entirely apart from the injury to the navigable waters over which commerce moves, there is the separate consideration of the damage to the commerce itself. Through its injunctive power, the Court has forbidden the commission of acts which might hinder the free movement of commerce among the States. Particularly striking, however, and of great force in the decision of the present controversy, is the case of *Pennsylvania and Ohio* v. *West Virginia,* 262 U. S. 553.

Even if Congress had the power under the Commerce Clause to deprive the States of their sovereign and proprietary rights in aid of a sanitation and water power project, no such power has been delegated by it to the Secretary of War, and the permit of March 3, 1925, can not be construed as having that effect.

Messrs. William M. Potter, Attorney General of Michigan, and *Wilber M. Brucker,* Assistant Attorney General, with whom *Mr. Arthur E. Kidder,* Assistant Attorney General, was on the brief, for plaintiff in No. 11 Original.

Congress may not legislate to affect navigation adversely, nor exercise its power over "commerce" for the purposes of sanitation or other non-navigation purposes. Inasmuch as this diversion creates an obstruction in fact, it constitutes an obstruction in law to navigable capacity.

Congress has not acted to "affirmatively authorize" such obstructions unless § 10 of the Act of March 3, 1899, can be so interpreted. Statutes purporting to affirmatively authorize obstructions to navigation should be strictly construed.

Section 10 should receive a construction which gives effect to its plain and unmistakable prohibition against obstructions to navigable capacity. The general construction of the section is to prohibit the creation of obstructions and even to regulate various acts and things not

amounting to an obstruction. Its history shows the plain intention of Congress to increase its prohibition against obstructions to navigable capacity, so as to forbid such obstructions in any navigable waters of the United States, except by affirmative act of Congress.

By the use of the language "affirmatively authorized," Congress contemplated retention of control over obstructions to navigable capacity and not a delegation of power to the Secretary of War; a positive prohibition is not an affirmative authorization. Under § 10 an affirmative act of Congress is necessary as a condition precedent to the existence of any power in the Secretary of War to authorize obstructions to navigable capacity.

Obstructions to navigable capacity of interstate waters without authority from Congress have always been unlawful. Where Congress has not authorized such an obstruction, this Court has assumed jurisdiction to enjoin.

It would be an unconstitutional application of the section to construe it as delegating authority to the Secretary of War to permit the diversion for purposes of sanitation or to "affect navigation adversely."

The language of the section is not susceptible of construction by reference to the so-called rules in aid of construction used by the Special Master. The rule of ambiguity is not applicable, the statute being plain and unambiguous.

The rule of construction based upon the practice of the War Department is not applicable because the practice has not been uniform, but has been constantly in doubt from the beginning, even to the extent exercised.

The decision of this Court in *Sanitary District* v. *United States,* 266 U. S. 405, does not construe § 10 as delegating power to the Secretary of War to affirmatively authorize an obstruction to the navigable capacity of the Great Lakes.

The fact that Congress did not act to disapprove the Secretary of War's permit of March 3, 1925, does not constitute an "affirmative act of Congress," nor a delegation of power by implication; legislative power cannot be implied so as to be exercised by another department of government.

Affirmative authorization cannot be implied from § 10 by supplying and reading into it the word "unreasonable" so as to modify the express prohibition against obstructions to navigable capacity.

Section 10 is not in and of itself an affirmative act of Congress delegating authority to the Secretary of War in cases under the second and third clauses of that section. This statute operates prospectively. *Maine Water Co.* v. *Knickerbocker Co.*, 99 Me. 473, distinguished.

Section 10 should not receive a construction delegating discretionary power to the Secretary of War to authorize obstructions to navigable capacity, because such power necessarily includes the power of eminent domain which cannot be delegated unless it affirmatively appears from action by Congress.

The ordinance of 1787 prohibits interference with the navigable capacity of the Great Lakes; Congress did not intend § 10 to modify or repeal the prohibition of this compact.

To construe § 10 as giving the Secretary of War full authority to authorize this diversion without an affirmative act of Congress is not justified in light of international relationship with Canada, including treaties and kindred acts of Congress.

Canada has a right to its portion of international waterways. The Canadian Boundary Waters Treaty of 1909 did not contemplate authorization to make abstractions affecting international waters. The Treaty bears the same construction as should be given to § 10.

The Niagara Falls Act does not contemplate extensive delegated powers to the Secretary of War.

A general consideration of American-Canadian relationships does not justify such a construction of § 10 as to authorize obstructions in international waters.

To construe § 10 as delegating power to the Secretary to permit obstructions to navigable capacity, would render that section void as an unconstitutional delegation of legislative power.

The permit of March 3, 1925, does not justify the abstraction of these waters as against the State of Michigan. Being but a revocable license, this permit can not justify the invasion of property rights.

The diversion takes plaintiffs' property without just compensation, in violation of the Fifth and Fourteenth Amendments of the Federal Constitution. The exercise of power by Congress over navigation is subject to the limitation of the Fifth Amendment. There must be just compensation.

Sovereign States own all of the land and waters within their boundaries as against any other State. The State of Michigan has also proprietary rights as a riparian owner. It has the authority to determine for itself such rules of property as it shall deem expedient with respect to waters within its boundaries, both navigable and non-navigable, and the ownership of the lands forming their beds and banks.

It has established the rule that the State is the proprietary owner of the waters of the Great Lakes within its boundaries and of the lands forming their beds and banks. In Michigan the title to riparian property outside the meander line on the Great Lakes is held in trust by the State for the use of its citizens. The State also has a right of dockage upon the Great Lakes and connecting waters, as riparian owner and also as representative of its people.

The State is entitled to have all the waters coming naturally to it, yielding only if at all to the demand of

public, commercial necessity as asserted by appropriate Congressional action.

Taking is a legal conception. A physical taking from possession and ejection of the rightful owner are not essential to it. If water is so dammed up or set back upon or over land so as to destroy its use, there is a taking. If a riparian owner is deprived of the use and ordinary flow of water in its natural height by artificial lowering of levels so as to convert what was water into land area, there is a taking.

This diversion is not an "incidental damage," nor is it *damnum absque injuria.* In each of the cases cited by the Special Master, the work was for a constitutional purpose, authorized by an Act of Congress and done by or for the Federal Government. In each the work caused an "incidental damage."

Messrs. R. T. Jackson, Special Assistant Attorney General of Wisconsin, and *Newton D. Baker,* Special Assistant Attorney General of Ohio, with whom *Messrs. John W. Reynolds,* Attorney General of Wisconsin, *Herman L. Ekern,* Special Assistant Attorney General of Wisconsin, *Herbert H. Naujoks,* Assistant Attorney General of Wisconsin, *G. A. Youngquist,* Attorney General of Minnesota, *Edward C. Turner,* Attorney General of Ohio, and *T. J. Baldridge,* Attorney General of Pennsylvania, were on the brief, for plaintiffs in No. 7 Original.

The damages suffered by plaintiffs are:

Damage to navigation and navigation interests; damage from decay and loss of support to docks, wharves, and piers; damage to large investments in commercial summer resorts, private summer cottages, and homes in the shoreline summer resort region of Wisconsin; damage to fishing grounds, spawning beds, hunting grounds, and open marshes, which were the habitat of valuable wild life; damage to buildings in the retail and wholesale sections of Milwaukee by causing pile foundations to decay and

give away; damage to the industrial and domestic private and municipal water supplies along the lakes, necessitating reconstruction at great expense, and increased cost of pumping; damage also to the proprietary and quasi-sovereign rights of these States as owners of parks and fish hatcheries on the lake shores and as consumers of lake-borne coal for public buildings and institutions.

Illinois has appropriated a substantial portion of the public waters which belonged to plaintiffs in their sovereign capacities, and has laid bare submerged lands belonging to them in their quasi-sovereign capacities. It has appropriated their property and through extra-territorial legislation has taken the property of their citizens without compensation, and thus has invaded the territorial and quasi-sovereign rights of said States.

The Sanitary District threatens to cause a substantial increase in these damages.

The diversion and the demand therefor have been and are solely for sanitary and power purposes. It is injurious to navigation on the Drainage Canal and the Chicago River. If the Illinois waterway is ever completed, any diversion in excess of 1,000 second feet will not be for the benefit of navigation on that waterway. The diversion is not in the interests of navigation on the Illinois River.

It has no relation and is of no value to navigation on the Mississippi River.

The question of compensation works on the Great Lakes is not involved in this case, and their effectiveness is not established.

The plaintiffs present a justiciable controversy and have the requisite interest to entitle them to invoke the jurisdiction of the Court.

Illinois had no right as against the plaintiffs to divert the waters of Lake Michigan in the manner and for the purposes shown, without the consent of the United States.

Sanitary District v. *United States,* 266 U. S. 405; *Missouri* v. *Illinois,* 180 U. S. 208; s. c. 200 U. S. 496; *Beidler v. Sanitary District,* 211 Ill. 628; *Illinois Central R. R. Co.* v. *Illinois,* 146 U. S. 387; *Shively* v. *Bowlby,* 152 U. S. 1; *Port of Seattle* v. *Oregon,* 255 U. S. 56; *Ohio* v. *Cleveland, etc. R. R. Co.,* 94 Oh. St. 61; *In re Crawford County District,* 182 Wis. 404; *Kansas* v. *Colorado,* 185 U. S. 125; *Kansas* v. *Colorado,* 206 U. S. 46; *Wyoming* v. *Colorado,* 259 U. S. 419.

The diversion constitutes the taking of plaintiffs' property without due process of law and without just compensation in violation of the Fifth Amendment. The States have sovereign and proprietary rights over the navigable waters and the lands underlying them, within their boundaries, subject to the powers surrendered to the National Government. *Port of Seattle* v. *Oregon & Washington R. R. Co.,* 255 U. S. 56; *Shively* v. *Bowlby,* 152 U. S. 1; *United States* v. *Holt State Bank,* 270 U. S. 49. The power of the general Government is such power as has been surrendered to it by the States. The rights of the States are all the rights which have not been surrendered to the general Government.

The interest of the complaining States is a full proprietary interest as upon a public trust. The nature and extent of this proprietorship and the duty imposed upon the State as trustee has been frequently examined and declared by this Court. *Kansas* v. *Colorado,* 206 U. S. 46; *Hudson County Water Co.* v. *McCarter,* 209 U. S. 349; *North Dakota* v. *Minnesota,* 263 U. S. 361.

Until now, no one has ever suggested that, as a means adapted to the exercise of its power of regulation, Congress has the power to declare a stretch of dry land thirty miles long, extending over the Continental Divide, to be a navigable stream and make its declaration good by affirmatively authorizing the destruction of a natural navigable water in order to transfer its quality of navigability

to the artificial structure. The Fifth Amendment is clearly a limitation upon the power of Congress under § 8 or Article I of the Constitution.

Riparian property has, implicit in its location, such a relation to the stream that it must bear the normal consequences of those improvements in the stream which are made in order to render it more serviceable for the great purposes of national commerce. This servitude derives from the location of the land and is natural and obvious. But if the land bordering upon the stream be injured by an impairment of navigability, which does not arise from an effort to improve the stream and does not in fact improve it, but is for another purpose, as for instance to provide sanitary appliances for a city or to create an artificial waterway, the damage constitutes a taking because there is no servitude in the riparian proprietors along navigable waters to endure a damage to their property for the benefit of the sanitation of a remote city or for the creation of an artificial waterway, however useful. See *Fulton Light, etc. Co.* v. *State,* 200 N. Y. 400; *Ex parte Jennings,* 6 Cow. 518; *Canal Fund Comm'rs* v. *Kempshall,* 26 Wend. 404; *Cooper* v. *Williams,* 5 Ohio 391; *Buckingham* v. *Smith,* 10 Ohio 288; *In re Dancy Drainage District,* 129 Wis. 129; *In re City of New York,* 168 N. Y. 134; *Smith* v. *Rochester,* 92 N. Y. 464; *United States* v. *Great Falls Mfg. Co.,* 112 U. S. 645; *Pine* v. *New York,* 103 Fed. 337 (affirmed, 112 Fed. 98; reversed on other grounds, 185 U. S. 93); *McChord* v. *High,* 40 Ia. 336; *Barrett* v. *Metcalf,* 12 Tex. Civ. App. 247.

The distinction suggested controls the decisions of this Court. It has consistently regarded navigable streams in their natural condition as the basis for the determination of the rights both of individual riparian proprietors and the cases of conflicting sovereignties. *United States* v. *Rio Grande Co.,* 174 U. S. 690; *United States* v. *Lynah,*

188 U. S. 445; *United States* v. *Cress,* 243 U. S. 316; *Sanguinetti* v. *United States,* 264 U. S. 146.

Clearly, if the United States has the power to create such an artificial waterway, the power is subject to the limitations of the Fifth Amendment and the damage caused to a great industrial civilization which has built itself securely about the Great Lakes could not be called incidental to the improvement of navigable waters of the United States.

Congress could not authorize the diversion from the Great Lakes-St. Lawrence watershed to the Mississippi watershed. *Hudson County Water Co.* v. *McCarter,* 209 U. S. 349; *Wyoming* v. *Colorado,* 259 U. S. 419. It may regulate navigable waters where they are, but not carry them by artificial channels to other places to be regulated. This limitation grows stronger with each interest built up around navigable waters, in their natural condition and location, until it becomes irresistible in such a case as that at bar. The only question at issue in *Sanitary District of Chicago* v. *United States,* 266 U. S. 405, was whether the United States had the power to veto the abstraction of Lake Michigan water to the prejudice of the navigable capacity of the Great Lakes.

Authorization of the diversion would constitute a preference of the ports of one State over those of another in violation of Article I, § 9, Clause 6 of the Constitution.

The power of Congress does not extend to the destruction of navigation or to the creation of obstructions to navigable capacity. This case represents nothing but the assertion of a naked right to obstruct or destroy navigation for an unrelated purpose. The distinction was well pointed out in *Woodruff* v. *Bloomfield Gravel Mining Co.,* 18 Fed. 753. The power is limited to the control of the navigable waters for the purpose of improving and fostering navigation. *Kansas* v. *Colorado,* 185 U. S. 125. If, however, Congress did have the power to authorize

the obstruction or destruction of navigation and navigable capacity as an abstract right, it could not exercise that power in the face of the Fifth Amendment, without compensation.

If it be assumed that Congress would have the power to divert water for purposes of navigation, Congress has no power to authorize the present diversion for purposes of sanitation and power development. *Buckingham* v. *Smith,* 10 Ohio 288; *In re Dancy Drainage District,* 129 Wis. 129; *Smith* v. *Rochester,* 92 N. Y. 464; *Walker* v. *Board of Public Works,* 16 Ohio 440; *United States* v. *Great Falls Mfg. Co.,* 112 U. S. 645; *In re City of New York,* 168 N. Y. 134. *Miller* v. *Mayer,* 109 U. S. 385, distinguished.

The power of Congress with respect to the appropriation of these waters for waterpower and sewage disposal is limited to prohibiting any appropriation which will destroy or substantially injure any of the navigable waters entrusted to its care, *Kansas* v. *Colorado,* 185 U. S. 125; *United States* v. *Rio Grande Irrigation Co.,* 174 U. S. 690. The power to veto does not imply the power to create or authorize.

It is said that the discharge of this sewage into these waters without treatment might, and probably would, create such a pestilential condition as to constitute an obstruction to navigation thereon. Therefore, it is concluded that Congress may prevent or authorize the removal of this nuisance and obstruction to navigation by removing the navigable waters themselves. In short, Chicago, having created, or threatened to create, an illegal nuisance or obstruction to the navigable waters of the United States, may, if she will only consent to refrain from this violation of law, dispose of her sewage at the expense of the plaintiff States. *New York* v. *New Jersey,* 256 U. S. 296, distinguished.

Congress has not given permission.

The Secretary of War had no authority under the Act of March 3, 1899, to permit the diversion. There has been no practical construction of § 10 of that Act sustaining the construction adopted by the Special Master.

There has been no judicial construction of § 10 sustaining such a power in the Secretary of War. Discussing *Cummings* v. *Chicago,* 188 U. S. 410; *Maine Water Co.* v. *Knickerbocker Co.,* 99 Me. 473; *Southern Pacific Co.* v. *Dredging Co.,* 260 U. S. 205; *The Plymouth,* 275 Fed. 483; *The Douglass,* 7 Prob. Div. 157; *Sanitary District* v. *United States,* 266 U. S. 405.

See *Hubbard* v. *Fort,* 188 Fed. 987; Koonce, of War Dept., Lecture before School of Engineers at Fort Humphrey; 27 Op. Atty. Gen. 327.

The Sanitary District has voided the permit of March 3, 1925, by violation of its terms. In any event the permit does not constitute a defense to this bill.

Construed in the light of recognized rules, the permit only purports to authorize the Sanitary District to abstract only so much of the water of the Great Lakes as will not injure their navigable capacity, but not exceeding 8,500 c. s. f. in any event. It requires the assent of the States affected, not merely Illinois.

We must distinguish between a permissive consent or waiver of the Secretary of War, and an affirmative act of the Federal Government itself. His permit was not authority to infringe property rights. Cf. *United States* v. *Chandler Co.,* 229 U. S. 53; *Scranton* v. *Wheeler,* 179 U. S. 141; *Cobb* v. *Commissioners,* 202 Ill. 427; *In re Crawford County District,* 182 Wis. 404; *Attorney General* v. *Bay Boom Co.,* 172 Wis. 363; *Hubbard* v. *Fort,* 188 Fed. 987; *Wilson* v. *Hudson County Water Co.,* 76 N. J. Eq. 543; *Commonwealth* v. *Pennsylvania R. R. Co.,* 72 Pa. Sup. Ct. 353; *Thlinket Packing Co.* v. *Harrison Co.,* 5 Alaska 471; *Columbia Salmon Co.* v. *Berg,* 5 Alaska 538; *New York* v. *New Jersey,* 256 U. S. 296.

Messrs. Cyrus Dietz, James Hamilton Lewis and *James M. Beck,* with whom *Messrs. Oscar E. Carlstrom,* Attorney General of Illinois, *Maclay Hoyne,* Attorney for the Sanitary District of Chicago, *Hugh S. Johnson, George F. Barrett, Louis J. Behan,* and *Edmund D. Adcock* were on the brief, for defendants, the State of Illinois and the Sanitary District of Chicago.

Between the finding of the master that defendants' diversion is one of a combination of causes contributing to injury in a substantial but undetermined amount, and plaintiffs' prediction thereon of " destruction of their navigation " and of " immense and incalculable loss," there is a wide difference which must be emphasized in any consideration of law, fact, equity and remedy in this suit.

The history of this canal and of federal, congressional and administrative action in respect thereof, while found by the master not to constitute direct congressional authorization of this diversion, nevertheless establishes that, in its relation to the national system of internal navigation, it is and ever has been a navigation project.

Congress has fostered, aided and encouraged the creation of defendants' canal and diversion, and has used the result of it.

At every critical point in its history, Congress has protected defendants' canal and diversion from interference.

No legislative or executive instrumentality of the Federal Government charged with responsibility for the regulation of navigation and commerce has ever recommended or even considered the cessation of defendants' diversion or its radical reduction. The sole purpose of such instrumentalities has been to restrain increase of diversion and to avoid ultimate commitment to any permanently increased amount of diversion pending resolution of the present period of uncertainty and development of the sanitary and navigation problems involved.

While a compelling motive of defendant Sanitary District in making the very great outlay necessary to construct the canal was disposal of sewage, said defendant was also persuaded to the method adopted by the hope of opening a great waterway to the Gulf. Defendant State of Illinois had and has had no other motive than the latter.

Defendants' canal, with its diversion and other works, aids navigation in each of the following respects:

(a) It makes possible an adequate water outlet of the Mississippi Basin to the Great Lakes.

(b) Improves present navigation on the Illinois and Mississippi Rivers, and is the only reasonably practicable method of making early and adequate navigation thereon possible.

(c) The diversion is the only presently practicable means of preventing conditions at the greatest internal center of interstate commerce of the United States, which, through pestilence on land, an unspeakably noisome condition in the Chicago River and Harbor and the lake offshore, and a lethal pollution of the waters of the whole southern end of Lake Michigan, would stand as such an obstruction to commerce and navigation as would require the immediate intervention of federal power.

Use of the diversion for water power is an incidental and harmless afterthought which does not influence the diversion or the amount of it.

The present inadequacy of federal and other navigation works in waters connecting defendants' works with the Gulf of Mexico, does not detract from the advisability of Congress' preserving the former, nor does it warrant plaintiffs' insistence on impracticable methods of lockage and other novel provisions for navigation on the Lakes-to-Gulf Waterway suggested by them.

Defendant Sanitary District has not violated the conditions of all the various permits issued to it since 1903, and

even if it had, violation of earlier permits has no effect on the validity of the existing permit; and whether violation of conditions of the latter should cause its revocation is matter of concern to the Secretary who imposed such conditions and not to plaintiffs.

It is shown that compensating works would cure all the ills complained of more effectively than cessation of diversion. Their consideration is therefore involved in this case, first, because relief from these ills and nothing more is the sole supportable prayer of plaintiffs; second, because in such circumstances the cost of them is one measure of damages; and third, because the fact of their practicability should have a persuasive if not a compelling bearing on the question of remedy.

Continuation of the diversion will create no new damage and afford no new precedent. The injunction sought would cause untold damage to defendants and to navigation, and subject the lives and health of the inhabitants of the Sanitary District to serious danger. Plaintiffs themselves recognized its impracticability in oral argument before the master.

The States have no right to sue, and the Court has no jurisdiction to entertain their suit, because the rights sought to be vindicated are merely the rights of the people of these States to navigate national waters; and, since these rights derive from their citizenship in the United States and not from citizenship in these States, plaintiffs could not bring suit on the rights of their citizens without violating the Eleventh Amendment. *New Hampshire* v. *Louisiana,* 108 U. S. 76; *Wisconsin* v. *Pelican Ins. Co.,* 127 U. S. 265; *Louisiana* v. *Texas,* 176 U. S. 1; *Massachusetts* v. *Mellon,* 262 U. S. 447.

The suit is, in effect, one to vindicate the freedom of interstate commerce, and no State has the right to sue for such purpose, *Louisiana* v. *Texas, supra; Oklahoma* v. *Atchison Ry.,* 222 U. S. 289; *Oklahoma* v. *Gulf, etc.*

Ry., 220 U. S. 290, and especially here, when the statute confines its vindication to suit by the Attorney General of the United States. *Minnesota* v. *Northern Securities Co.*, 194 U. S. 46; *Southern Pacific* v. *Dredging Co.*, 260 U. S. 205; *Geddes* v. *Anaconda Co.*, 254 U. S. 590; *General Investment Co.* v. *Lake Shore, etc. Ry. Co.*, 260 U. S. 261; *Haycraft* v. *United States*, 22 Wall. 81.

Plaintiffs, showing no special injury different from that of the public at large, are debarred from suing by traditional principles of equity; they must rely on suits by the Attorney General, *Georgetown* v. *Alexandria Canal Co.*, 12 Pet. 91; *Irwin* v. *Dixon*, 9 How. 10; *Mississippi, etc. Ry.* v. *Ward*, 2 Black 485; *Gilman* v. *Philadelphia*, 3 Wall. 713.

The suits are, in effect, to coerce by decree the legislative discretion of Congress and the administrative discretion of the War Department, taking the Court into the province of both of the two great co-ordinate branches of Government. In a word, what is here sought is decretal regulation of commerce and a review of a valid administrative determination. *Marbury* v. *Madison*, 1 Cranch 137; *Georgia* v. *Stanton*, 6 Wall. 50; *New Orleans* v. *Payne*, 147 U. S. 261; *Southern Pacific Co.* v. *Dredging Co.*, 260 U. S. 205; *Passaic Bridge Cases*, 3 Wall., Appendix, 782; *Missouri* v. *Illinois*, 200 U. S.. 496.

Congress has delegated to the Secretary of War power to authorize this diversion. When so authorized the diversion is lawful and the Secretary's act is immune from judicial review. This Court has interpreted the statute in consonance with defendants' contention. Administrative interpretation of the statute has consistently been in consonance with defendants' contention. The language and history of the statute support defendants' contention.

The determination of the Secretary of War that the diversion is not unlawful is not reviewable. *Marbury* v.

Madison, 1 Cranch 137; *Gaines* v. *Thompson,* 7 Wall. 347; *United States* v. *California Land Co.,* 148 U. S. 31.

The Court has recognized a distinction between acts in exercise of discretionary powers and acts in respect of purely ministerial duties. The rule as enunciated in *Marbury* v. *Madison, supra,* is that courts may adjudicate in matters relative to the latter, but never in matters pertaining strictly to the former, and particularly is this true when the discretionary function is in process of being exercised. *Kendall* v. *United States,* 12 Pet. 524; *Decatur* v. *Paulding,* 14 Pet. 497; *United States* v. *Lamont,* 155 U. S. 303; *United States* v. *Black,* 128 U. S. 40; *Noble* v. *Union River Logging R. R. Co.,* 147 U. S. 165; *United States* v. *Schurz,* 102 U. S. 378; *Mississippi* v. *Johnson,* 4 Wall. 475; *United States* v. *Windom,* 137 U. S. 636; *Cunningham* v. *Macon R. R. Co.,* 109 U. S. 446.

The power granted the Secretary of War is valid. *Sanitary District* v. *United States,* 266 U. S. 405; *Buttfield* v. *Stranahan,* 192 U. S. 470; *West* v. *Hitchcock,* 205 U. S. 80; *Oceanic Steam Navigation Co.* v. *Stranahan,* 214 U. S. 320; *Zakoniate* v. *Wolfe,* 226 U. S. 272; *Louisville Bridge Co.* v. *United States,* 242 U. S. 409; *Inter-Mountain Rate Cases,* 234 U. S. 476; *First Nat'l Bank* v. *Union Trust Co.,* 224 U. S. 416. See *Selective Draft Law Cases,* 245 U. S. 366.

A court of equity will intervene in a matter pertaining to the exercise of a discretionary power only to determine whether there was power in the officer or fraud in the party, or whether there was clear, unreasonable, and arbitrary abuse of discretionary power exercised. *Ekiu* v. *United States,* 142 U. S. 651; *Chae Chan Pin* v. *United States,* 130 U. S. 581; *United States* v. *Ju Toy,* 198 U. S. 253; *Fok Yung Yo* v. *United States,* 185 U. S. 296; *Silberschein* v. *United States,* 266 U. S. 221; *United States* v. *California Land Co.,* 148 U. S. 31; *Foley* v. *Harrison,* 15

How. 433; *Johnson* v. *Towsley,* 13 Wall. 72; *Smelting Co.* v. *Kemp,* 104 U. S. 636; *Shepley* v. *Cowan,* 91 U. S. 330; *Moore* v. *Robbins,* 96 U. S. 530; *Quinby* v. *Conlan,* 104 U. S. 420; *Steel* v. *Smelting Co.,* 106 U. S. 447; *Lee* v. *Johnson,* 116 U. S. 48; *Wright* v. *Roseberry,* 121 U. S. 488.

Particularly, where the courts are asked to interfere with lawful administrative determinations regulating commerce, they have refused because such regulation requires uniformity of decision in order that there may be strict uniformity of rule. *Texas, etc. R. R. Co.* v. *Abilene Cotton Oil Co.,* 204 U. S. 426.

There is a particular indication in this case that Congress intended to make the decision of the Secretary of War final and to provide against any revision. In the revision of § 7 of the Act of 1890, by § 10 of the Act of 1899, the omission of the words "in such manner as shall obstruct or impair navigation" is clearly intended to remove any doubt that the Secretary's determination is final.

See *Miller* v. *Mayor,* 109 U. S. 385; *Southern Pacific Co.* v. *Dredging Co.,* 260 U. S. 205; *Union Bridge Co.* v. *United States,* 204 U. S. 364; *The Douglass,* 7 Prob. Div. 157; *Frost* v. *Railroad Co.,* 97 Me. 76; *Maine Water Co.* v. *Knickerbocker Steam Co.,* 99 Me. 473; *The Plymouth,* 225 Fed. 483; *Louisville Bridge Co.* v. *United States,* 242 U. S. 409.

Regulation of navigation comprises something more than provision for the flotation of ships. Diversion is necessary and desirable for the flotation of commerce. It is also necessary and desirable for the sanitation of commerce. For whatever reason it was necessary or desirable for navigation, the Secretary had a right under the statute to consider the reason and decide upon it.

Congress has power to authorize the diversion. The diversion does not constitute a taking of private property.

Plaintiffs have no property in the steamship lanes along the international boundary. *Crandall* v. *Nevada,* 6 Wall. 44; *Slaughter House Cases,* 16 Wall. 36; *Frost* v. *Washington Ry.,* 97 Me. 76; *Gilman* v. *Philadelphia,* 3 Wall. 713; *Gibson* v. *United States,* 166 U. S. 269.

The doctrines of international law as applied by this Court to the relations between States, and not the common law doctrine of riparian rights, is the governing law of this case, and under those doctrines, plaintiffs have no property right to have all the water in the lakes flow to them without the slightest impairment in quantity.

The rules of private property are inapplicable to controveries between States. *Georgia* v. *Tennessee Copper Co.,* 206 U. S. 230; *Kansas* v. *Colorado,* 206 U. S. 46; *Hudson Water Co.* v. *McCarter,* 209 U. S. 349; *Rickey Co.* v. *Miller & Sax,* 218 U. S. 208; *Bean* v. *Morris,* 221 U. S. 485.

The doctrines governing suits between States are those of international law as modified by the decisions of this Court which adapt them to the relations of the quasi-sovereign States of the Union under the Constitution. *Missouri* v. *Illinois,* 200 U. S. 496; *North Dakota* v. *Minnesota,* 263 U. S. 365; *Kansas* v. *Colorado,* 185 U. S. 125, s. c. 206 U. S. 46.

At international law, an upper riparian State is under no servitude to a lower State to permit the water to flow down unimpaired in quantity. 21 Op. Atty. Gen. 274; Treaty of May 21, 1906, with Mexico, Arts. IV, V; *Minnesota Canal Co.* v. *Pratt,* 101 Minn. 197; Sen. Doc. 104, 56th Cong., 2d Sess.; *United States* v. *Rio Grande Dam Co.,* 9 N. M. 292; Sen. Doc. 154, 57th Cong., 2d Sess.

As between States of the Union, the Court will enforce the doctrine of comity (see *Kansas* v. *Colorado,* 185 U. S. 125; s. c., 206 U. S. 46) as to the waters of an interstate stream. Comity means an equitable division of burdens and benefits in the water and not a right in the lower State

to all the water. *Corrigan Transportation Co.* v. *Sanitary District,* 137 Fed. 851.

The slight incidental injury to incorporeal rights disclosed by the findings does not constitute a taking of property.

If it could be said that there was property or a taking, no injunction could be granted, because there is such *laches* and acquiescence that a court of equity would not be moved to act, and the claimants should be relegated to their suits for damages, if there are any. *New York* v. *Pine,* 185 U. S. 93; *United States* v. *Lynah,* 188 U. S. 445; *Northern Pacific R. R.* v. *Smith,* 171 U. S. 260; *Los Angeles* v. *Water Co.,* 177 U. S. 558; *Sullivan* v. *Portland, etc. R. R. Co.,* 94 U. S. 806; *Bowman* v. *Wathen,* 1 How. 189; *Piatt* v. *Vattier,* 9 Pet. 405; *Manigault* v. *Springs,* 199 U. S. 473.

It seems almost absurd to say that hindrance to the progress of steamships in the lakes constitutes appropriation of any property in connection with the claim of injury to shipping. The only other finding of injury that is in this case is the one relating to the contribution of defendants' diversion to the claimed injury in connection with fishing and hunting grounds, the availability and convenience of beaches at summer resorts and public parks.

No exceptions were filed to findings, which characterize the effects of the diversion as an "injury" only without even a suggestion that there is any appropriation or taking.

The injury mentioned in the findings of the master as to fishing and hunting grounds and availability and convenience of beaches and summer resorts and public parks, can relate only to lands which are subject to the servitude of navigation under the Commerce Clause. The fact that the diversion is from one watershed to another does not affect the servitude. The power of Congress is not limited to a particular system of waterways or by the

division between watersheds. *Stockton* v. *Baltimore, etc. R. R. Co.,* 32 Fed. 9; *Gilman* v. *Philadelphia,* 3 Wall. 713; *Gibbons* v. *Ogden,* 9 Wheat. 1; *South Carolina* v. *Georgia,* 93 U. S. 4; *Hudson County Co.* v. *McCarter,* 209 U. S. 349; *Missouri* v. *Illinois,* 200 U. S. 496; *Economy Light Co.* v. *United States,* 256 U. S. 113; *Sanitary District* v. *United States,* 266 U. S. 405.

An act of a State may be unlawful either as an unreasonable exercise of sovereignty wanting in the comity due to sister States, or as a violation of a law of the United States. But failure in this regard would not constitute a taking of property.

A State's property right in the water is not such as to sustain a suit. *Hudson Co.* v. *McCarter,* 209 U. S. 349.

Running water is not subject to ownership. *Geer* v. *Connecticut,* 161 U. S. 519.

So far as the *jus regium* applies to the public right of navigation, it is gone from the State to the United States. *Illinois Central Ry.* v. *Chicago,* 146 U. S. 387; *United States* v. *Chandler-Dunbar Co.,* 229 U. S. 53.

So far as these States themselves are concerned then, their property is not taken by our diversion; first, because in withholding what would otherwise flow to them we are taking nothing; and second, because neither the corpus of the water nor the alleged right to have it flow to them is, of itself, property within the meaning of the Fifth Amendment.

As for the alleged impairment of public parks, and of private property, on the lakes, inasmuch as no duty to let the water flow exists in the relation of the States as equal sovereigns, our failure to let it flow is not a taking so far as the plaintiff States are concerned, and we think, also, so far as their citizens are concerned.

It is only if what we have done be regarded (as the master has found) as an act under the authority of the Federal Government, that the Fifth Amendment may be

considered at all, and here plaintiffs are between the horns of a dilemma. If our act is not under such authority, the argument about the Fifth Amendment vanishes. If our act is under federal authority, their whole case falls and the incidental argument about taking of property is covered by *Sanguinetti* v. *United States,* 264 U. S. 146, and there is no taking involved.

There is no restriction on the power of Congress to divert water from one watershed to another. *Missouri* v. *Illinois,* 200 U. S. 496; *Wyoming* v. *Colorado,* 259 U. S. 419.

Article I, § 9, Clause 6 of the Constitution does not inhibit this diversion because this diversion does not give preference to the ports of any State.

There is no restriction on the power of Congress to regulate navigation inherent in the fact that a particular regulation may destroy navigable capacity and, if there were, it has no application here because this diversion does not destroy navigation anywhere.

The diversion is not for the purpose of sanitation only. It is also for the purposes of navigation and, even if we examine its purpose of sanitation alone, we shall find that authorization thereof for that purpose was and is a regulation necessary and reasonably related to the protection of both navigation and interstate commerce on land. The Secretary of War was justified, under the authority delegated to him, in considering the beneficial effect upon interstate commerce of preventing the pollution of the drinking water supply of Chicago. *Bartlett* v. *Lockwood,* 160 U. S. 357; *Hoke* v. *United States,* 227 U. S. 308; *New England Co.* v. *United States,* 144 Fed. 932; *Kaukauna Power Co.* v. *Green Bay,* 142 U. S. 254.

The ordinance of 1787 does not restrict the power of Congress to authorize this diversion. *Willamette Bridge Co.* v. *Hatch,* 125 U. S. 1; *Withers* v. *Buckley,* 20 How. 84; *Economy Light Co.* v. *United States,* 256 U. S. 120; *In re Southern Wisconsin Power Co.,* 140 Wis. 245.

Congress has confined vindication of the Act of March 3, 1899, to suit by the Attorney General of the United States at the instance of the Secretary of War and certain of his subordinates.

The United States (or the Secretary of War) and the City of Chicago are necessary and indispensable parties to this suit and the case cannot properly proceed without them. *California* v. *Southern Pacific Co.*, 157 U. S. 229; *Minnesota* v. *Northern Securities Co.*, 184 U. S. 199.

Defendants do not abandon, and understand that they do not lose the opportunity, if the occasion arises, later to press certain defenses which are not argued here because they are not now material to support the findings and conclusions of the Special Master.

The questions raised by the complaint are administrative, legislative and political, and are for this reason beyond decretal regulation. Injunction is an inappropriate remedy.

Mr. Daniel N. Kirby, with whom *Messrs. Percy Saint,* Attorney General of Louisiana, *North T. Gentry,* Attorney General of Missouri, *H. W. Applegate,* Attorney General of Arkansas, *Rush H. Knox,* Attorney General of Mississippi, *Frank E. Daugherty,* Attorney General of Kentucky, *L. D. Smith,* Attorney General of Tennessee, and *Cornelius Lynde* were on the brief, for the intervening defendants, Mississippi River States.

Due to the economic situation of the Mississippi Valley, a diversion tending to improve and maintain navigation on that river, is a matter of recognized national importance.

Plaintiffs' arguments rest on assertions contradicting the findings of the Special Master. But the findings, being all supported by evidence, are conclusive. This includes the finding that compensating works could be built at relatively slight expense.

The urgent contentions for plaintiffs, that the permit of March 3, 1925, was issued solely for the benefit of sanitation and water power, and had no substantial relation to navigability, cannot avail to overcome the findings of the Special Master that the permit does benefit navigability in several substantial respects, and that the permit therefore rests on an adequate constitutional basis under the Commerce Clause.

There is, however, an additional and important basis having a direct relation to navigation, not mentioned by the Special Master, but shown by the record, upon which the action of the Secretary of War in issuing the permit may also rest, viz., the duties to navigate the Mississippi that are expressly imposed on the Secretary of War by §§ 201 and 500, of the Transportation Act of 1920, and by the Inland Waterways Corporation Act of June 3, 1924 (43 Stat. 360).

The Secretary of War must have authority, as a precedent to the grant of any permit, to determine whether in fact a particular alteration of navigable capacity benefits navigation as a whole. And such administrative determination is not to be set aside by a court except because of a clear and indisputable abuse of official discretion. And, on the facts in the case at bar, the alteration of navigable capacity authorized by the permit of March 3, 1925, must have been found by the Secretary to materially benefit navigation in important particulars.

The awarding of the permit raises a presumption that the work authorized improves the navigable capacity of the waterway.

The only question before this Court, on any of the interpretations of § 10 urged by plaintiffs, is whether there has, in this case, been shown to be such an abuse of administrative authority as to require this Court to set it aside. Plaintiffs do not clearly meet this question.

The Special Master's construction of § 10 of the Act of 1899 was correct.

The decision of this Court in *Sanitary District* v. *United States,* 266 U. S. 405, has determined the controlling issues of law involved in the merits of this controversy.

The admitted economic rivalry at the bottom of this controversy is itself sufficient to justify the present exercise of the congressional power to regulate commerce.

Mr. Chief Justice Taft delivered the opinion of the Court.

These are amended bills by the States of Wisconsin, Minnesota, Michigan, Ohio, Pennsylvania and New York, praying for an injunction against the State of Illinois and the Sanitary District of Chicago from continuing to withdraw 8,500 cubic feet of water a second from Lake Michigan at Chicago.

The Court referred the cause to Charles Evans Hughes as a Special Master, with authority to take the evidence, and to report the same to the Court with his findings of fact, conclusions of law and recommendations for a decree, all to be subject to approval or other disposal by the Court. The Master gave full hearings and filed and submitted his report November 23, 1927, to which the complainants duly lodged exceptions, which have been elaborately argued.

When the first of these bills was filed, there was pending in this Court an appeal by the Sanitary District of Chicago from a decree granted at the suit of the United States by the United States District Court for the Northern District of Illinois, against a diversion from the Lake in excess of 250,000 cubic feet per minute, or 4,167 cubic feet per second. This amount had been permitted by the Secretary of War. In January, 1925, this Court affirmed the

decree, without prejudice to the granting of a further permit by the Secretary of War according to law. 266 U. S. 405. On March 3, 1925, the Secretary of War after that decree enlarged the permit for a diversion not to exceed an annual average of 8,500 cubic feet per second, upon certain conditions hereafter to be noted.

The amended bills herein averred that the Chicago diversion had lowered the levels of Lakes Michigan, Huron, Erie and Ontario, their connecting waterways, and of the St. Lawrence River above tide-water, not less than six inches, to the serious injury of the complainant States, their citizens and property owners; that the acts of the defendants had never been authorized by Congress but were violations of the rights of the complainant States and their people; that the withdrawals of the water from Lake Michigan were for the purpose of taking care of the sewage of Chicago and were not justified by any control Congress had attempted to exercise or could exercise in interstate commerce over the waters of Lake Michigan; and that the withdrawals were in palpable violation of the Act of Congress of March 3, 1899. The bills prayed that the defendants be enjoined from permanently diverting water from Lake Michigan or from dumping or draining sewage into its waterways which would render them unsanitary or obstruct the people of the complainant States in navigating them.

The State of Illinois filed a demurrer to the bills and the Sanitary District of Chicago an answer, which included a motion to dismiss. The States of Missouri, Kentucky, Tennessee and Louisiana, by leave of Court, became intervening co-defendants, on the same side as Illinois, and moved to dismiss the bills. The demurrer of Illinois was overruled and the motions to dismiss were denied, without prejudice. Thereupon the intervening defendants and the defendants, the Sanitary District and the State of Illinois, filed their respective answers. The States of

Mississippi and Arkansas were also permitted to intervene as defendants, and adopted the answers of the other interveners. The answers of the defendants denied the injuries alleged, and averred that authority was given for the diversion under the acts of the Legislature of Illinois and under acts of Congress and permits of the Secretary of War authorized by Congress in the regulation of interstate commerce. All the answers stressed the point that the diversion of water from Lake Michigan improved the navigation of the Mississippi River and was an aid to the commerce of the Mississippi Valley and sought the preservation of this aid. They also set up the defense of laches, acquiescence and estoppel, on the ground that the purposes of the canal and the diversion were known to the people and the officials of the complainant States, and that no protest or complaint had been made in their behalf prior to the filing of the original bills herein.

The Master has made a comprehensive review of the evidence before him in regard to the history of the canal, the extent and effect of the diversion, the action of the State and Federal Governments, the plans for the disposal of the sewage and waste of Chicago and the other territory within the Sanitary District, as well as the character and feasibility of works proposed as a means of compensating for the lowering of lake levels. From this review we shall take what will assist us in the consideration of the issues deemed necessary to be considered on the exceptions to the report.

We shall first consider in brief the parts taken by Congress and the State of Illinois and their respective agencies in the construction of the Sanitary District Canal and the creation of the Lake Michigan diversion.

By the Act of March 30, 1822, c. 14; 3 Stat. 659, Congress authorized Illinois to survey and mark, through the public lands of the United States, the route of a canal connecting the Illinois River with Lake Michigan, and

granted certain lands in aid of the project. A further land grant was made in 1827. The canal was completed in 1848. The canal crossed the continental divide between the Chicago and Des Plaines Rivers, on a summit level eight feet above the Lake, and then paralleled the Des Plaines River and the Upper Illinois River to La Salle, Illinois, where it entered the latter stream. The summit of the canal was supplied with water by pumps located in a plant on the Chicago River. Originally, only enough water was pumped to answer the needs of navigation in the canal, but thereafter, in 1861, the Legislature provided for improvement in the canal by excavation and a larger flow of water from Lake Michigan.

Before 1865, the Chicago River, being a sluggish stream in its lower reaches, had become so offensive because of receiving the sewage of the rapidly growing city, that for its immediate relief the municipal authorities and the canal commissioners agreed to pump water from the river in excess of the needs of navigation. By 1872 the summit level of the canal had been lowered, and it was hoped that this would result in a permanent flow of lake water through the South Branch of the Chicago River, sufficient to keep it in good condition, but the plan failed, and the canal again became grossly polluted.

In 1881, the Illinois Legislature passed a resolution authorizing the installation of pumps at the northern terminus of the canal, with a capacity of not less than 1,000 cubic feet a second, to draw water from Lake Michigan through the Chicago River and the canal. Pumps were installed and pumping was begun in 1883. For a few years this afforded sufficient dilution in the canal because of the high stage of Lake Michigan, but in 1886 the lake level began to fall, and continued to fall until 1891 when it was two feet lower than when the pumps were installed. Their capacity was thus reduced to a little more than 600 cubic feet a second. The nuisance

along the canal continued to grow. The Drainage and Water Supply Commission of the State recommended, as the most economical method for meeting the requirement, a discharge into the Des Plaines River through a canal across the continental divide, providing a waterway of such dimensions as would furnish ample dilution. The Commission pointed out that the proposed canal would, from its necessary dimensions and its regular discharge, produce a magnificient waterway between Chicago and the Mississippi River, suitable for navigation of boats having as much as 2,000 tons burden, and would give also large water power of great commercial value to the State.

The Sanitary District was organized under the Illinois Act of 1889. It was completed in 1890. It embraced an area of 185 square miles. By later acts it was increased to approximately 438 square miles, extending from the Illinois State line on the south and east to the northern boundary of Cook County on the north, with about 34 miles of frontage on Lake Michigan, embracing the metropolitan area of Chicago, consisting of a total of fifty-four cities, towns and villages.

The main drainage canal was begun in 1892, and was opened in January, 1900. Since that time the flow of the Chicago River has been reversed—that is, it has been made to flow away from Lake Michigan toward the Mississippi. As originally constructed the canal ended in a non-navigable tail-race. There was no lock at the southwestern end. But by the Act of May 14, 1903, the Illinois Legislature gave the Sanitary District the power to construct dams, water wheels, and other works appropriate to render available the power arising from the water passing through the main channel and any auxiliary channels thereafter constructed.

In 1908, the Constitution of Illinois was amended to authorize the legislature to provide for the construction of

a deep waterway or canal, from the water-power plant of the Sanitary District of Chicago, at or near Lockport, to a point on the Illinois River at or near Utica, and to provide that this power might be leased for the benefit of the State treasury. Meantime, all the sewage in the drainage district, including Evanston, was turned into the main channel, and the water directly abstracted from Lake Michigan by the Sanitary District was increased from 2,541 cubic feet a second in 1900 to 5,751 in 1909, to 7,228 in 1916, to 6,888 cubic feet a second in 1926, not including pumpage.

The Sanitary District authorities have expended in the construction of works for sewage and the deep waterway canal $109,021,613 including interest on bonds.

In 1888, Congress directed the Secretary of War to make surveys for a channel improvement in the Illinois and Des Plaines Rivers. In 1892, Congress appropriated $72,000 to complete the improvement of the harbor at Chicago, and again $25,000 in 1894. Three engineers appointed by the Secretary of War reported to him that a diversion of 10,000 cubic feet a second through the Sanitary and Ship Canal would lower the levels of the Lakes, except Lake Superior. In 1896, Congress appropriated money for dredging the Chicago River. The Sanitary District in that year asked for a permit from the Secretary of War to enlarge the cross section of the Chicago River, and announced that the work had progressed so far that this must be done to make available the artificial channel under construction from Robey Street, Chicago, to Lockport, twenty-eight miles distant. The Secretary of War granted the permit, but said that this authority was not to be interpreted as an approval of the plans of the Sanitary District of Chicago to introduce a current into the Chicago River; that the United States should not be put to any expense, and that the authority was to expire by limitation in two years. Other permits relating to the same

subject were issued by the same officer in 1897, 1898, and twice in 1899. The Act of Congress of 1899 amplified the provisions of an earlier Act of 1890 looking to the regulation, prevention, and removal by Federal authority of obstructions to navigation and alteration of capacity of the navigable waters of the United States by enacting Sections 9 and 10 thereof.

Other permits were allowed by the Secretary of War—one on December 5, 1901, allowing a diversion of 250,000 cubic feet per minute throughout the full 24 hours of each day. And in another instance on January 17, 1903, a diversion of 350,000 cubic feet per minute until March 31, 1903, was permitted, in order to carry off the accumulations of sewage deposit lining the shores along the city, with the provision that after that, the flow should be reduced to 250,000 cubic feet per minute as required by the permit of December, 1901. The Board of Engineers in 1905 reported to Congress that the effect upon the level of Lake Michigan of withdrawing 10,000 cubic feet per second for an indefinite period had been the subject of elaborate investigation and that the conclusion reached was that the final effect would be to lower the level of the Lake six inches.

An application for the flow of more water through the Calumet Sag Channel was declined by the Chief of Engineers, and was refused by the Secretary of War in March, 1907, and as the Sanitary District apparently intended to proceed with the work for which a permit had been refused, the United States brought suit in 1908 to prevent its construction and prevent the increase of the flow. Another application was refused by the Secretary of War in January, 1913, and there seems to have been another denied later.

A second bill to enjoin the Sanitary District from a diversion of more than 250,000 cubic feet per minute or its

equivalent 4,167 cubic feet a second of water from Lake Michigan was filed and was consolidated with the earlier suit, and after a long delay of six or seven years an oral opinion was given by Judge Landis of the United States District Court for the Northern District of Illinois in favor of the Government. A decree not having been entered before Judge Landis resigned, a decree was entered by Judge Carpenter in the case which was affirmed by this Court in January, 1925. *Sanitary District of Chicago* v. *United States,* 266 U. S. 405.

This Court's decree provided that the defendant, the Sanitary District of Chicago, its agents, and all other persons acting or claiming or assuming to act under its authority, should be enjoined from diverting or abstracting any waters from Lake Michigan over and above or in excess of 250,000 cubic feet per minute, to go into effect in sixty days, without prejudice to any permit that might be issued by the Secretary of War according to law.

Immediately after this decision, the Sanitary District applied to the Secretary of War for permission to divert 10,000 cubic feet a second. The exigency was set out in the petition. The Secretary of War then issued a permit on March 3, 1925, which recited that the instrument did not give any property rights either in real estate or material, or any exclusive privileges; and that it did not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State or local laws or regulations, or obviate the necessity of obtaining the State's assent to the work authorized. It certified that upon the recommendation of the Chief of Engineers, the Secretary of War, under Section 10 of the Act of 1899, authorized the Sanitary District to divert from Lake Michigan an amount of water not to exceed an annual average of 8,500 cubic feet per second, the instantaneous maximum not to exceed 11,000 cubic feet per second, upon certain conditions.

The conditions of the permit require the City of Chicago to take immediate steps to carry out sewage treatment by artificial processes, so that before the expiration of the permit they should provide the equivalent of 100% treatment of the sewage of 1,200,000 people, or one-third of the population of the city, and that this should be done under supervision of the U. S. District Engineer at Chicago, the permit to be revoked if the conditions were not complied with, and the permit to cease unless renewed on December 31, 1929. In granting the permit, the Secretary of War expressed the opinion that steps should be taken to complete the entire work of providing for disposal of all the sewage in ten years. Colonel Schultz, U. S. District Engineer at Chicago, reported that the conditions of the March 3, 1925, permit have been complied with, and the Master confirms this in his report.

In providing for the improvement of the channel of the Illinois River in the Act of January 21, 1927, c. 47; 44 Stat. 1013, Congress declared that nothing in the Act should be construed as authority for any diversion from Lake Michigan.

The Master's findings on the subject of injury to the complainants are in effect as follows:

The diversion which has taken place through the Chicago Drainage Canal has been substantially equivalent to a diversion of about 8,500 cubic feet a second for a period of time sufficient to cause, and it has caused, the lowering of the mean levels of the Lakes and the connecting waterways, as follows: Lakes Michigan and Huron approximately 6 inches; Lakes Erie and Ontario approximately 5 inches; and of the connecting rivers, bays and harbors to the same extent respectively. A diversion of an additional 1,500 cubic feet per second, or a total diversion of 10,000 cubic feet a second would cause an additional lowering in Lakes Michigan and Huron of about one inch, and in Lakes Erie and Ontario a little less than one inch, with

a corresponding additional lowering in the connecting waterways. The Master also finds that if the diversion at Chicago were ended, assuming that other diversions remained the same, the mean levels of the lakes and rivers affected by the Chicago drainage would be raised in the course of several years (about 5 years in the case of Lakes Michigan and Huron, and about one year in the case of Lakes Erie and Ontario) to the same extent as they had been lowered, respectively, by that diversion.

The Master finds that the damage due to the diversion at Chicago relates to navigation and commercial interests, to structures, to the convenience of summer resorts, to fishing and hunting grounds, to public parks and other enterprises, and to riparian property generally, but does not report that injury to agriculture is established. He says that the Great Lakes and their connecting channels form a natural highway for transportation, having a water surface of over 95,000 square miles, and a shore line of 8,300 miles, extending from Duluth-Superior, and from Chicago and Gary, to Montreal, at the head of deep-draft ocean navigation on the St. Lawrence; that there are approximately 400 harbors on the Great Lakes and connecting channels, of which about 100 have been improved by the Federal Government; that the latter improvements consist in the excavation and maintenance of channels from deep water in the lakes to the harbor entrances; that inner or local harbors are located inside of the Federal channels, and the depths in the inner harbors have been obtained and are maintained at local expense; that inner harbors are necessary to afford practical navigation; that extensive and expensive loading, unloading and other terminal facilities have been constructed in these various ports within the territory of the complainant States, on the Great Lakes, at local expense.

The Master's report says that the water-borne traffic on the Great Lakes for the year 1923 consisted of 81,466,902,000 ton-miles of water haul, and that consideration of

individual loaded boats and of their respective dimensions shows that, if water had been available for an additional six inches of draft, the fleet could have handled for the year 3,346,000 tons more than was actually transported, or to put the matter in another light, the season's business could have been done with the elimination from service of about 30 freighters of the 2,000–3,000-ton class, and that the lost tonnage of the total through business of the Lakes for 1923, incident to a 6-inch deficiency of draft, exceeded 4,000,000 tons, and that the average water-haul rate for the year was 88 cents per ton.

The great losses to which the complainant States and their citizens and their property owners have been subjected by the reductions of levels in the various Lakes and Rivers except Lake Superior are made apparent by these figures.

The pleadings question the jurisdiction of this Court and the sufficiency of the facts set forth in the bills to constitute a cause of action. These issues, although raised, are not pressed by the defendants and we concur with the Master in his conclusion that they are met completely by our previous decisions. *Missouri* v. *Illinois,* 180 U. S. 208; s. c. 200 U. S. 496; *Hans* v. *Louisiana,* 134 U. S. 1; *Sanitary District of Chicago* v. *United States,* 266 U. S. 405; *Kansas* v. *Colorado,* 185 U. S. 125; s. c. 206 U. S. 46; *New York* v. *New Jersey,* 256 U. S. 296; *Wyoming* v. *Colorado,* 259 U. S. 419; *North Dakota* v. *Minnesota,* 263 U. S. 365; *Pennsylvania* v. *West Virginia,* 262 U. S. 553, 623; 263 U. S. 350; *Georgia* v. *Tennessee Copper Co.,* 206 U. S. 230, 237.

The controversies have taken a very wide range. The exact issue is whether the State of Illinois and the Sanitary District of Chicago by diverting 8,500 cubic feet from the waters of Lake Michigan have so injured the riparian and other rights of the complainant States bordering the Great Lakes and connecting streams by lowering their levels as

to justify an injunction to stop this diversion and thus restore the normal levels. Defendants assert that such a diversion is the result of Congressional action in the regulation of interstate commerce, that the injury, if any, resulting is *damnum absque injuria* to the complaining States. Those States reply that the regulation of interstate commerce under the Constitution does not authorize the transfer by Congress of any of the navigable capacity of the Great Lake System of Waters to the Mississippi basin, that is from one great watershed to another; second, that the transfer is contrary to the provision of the Constitution forbidding the preference of the ports of one State over those of another; and, third, that the injuries to the complainant States deprive them and their citizens and property owners of property without due process of law and of the natural advantages of their position, contrary to their sovereign rights as members of the Union. If one of these issues is decided in favor of the complaining States, it ends the case in their favor and the diversion must be enjoined. But in the view which we take respecting what actually has been done by Congress some of these objections need not be considered or passed upon.

The complainants, even apart from their constitutional objections, contend that Congress has not by statute or otherwise authorized the Lake Michigan diversion, that it is therefore illegal and that injuries by it to the complainant States and their people should be forbidden by decree of this Court. The diversion of 8,500 cubic feet a second is now maintained under a permit of the Secretary of War of March 3, 1925, acting under Section 10 of the Act of 1899, which it is contended by the complainants vests no such authority in him. They claim that the diversion is based on a purpose not to regulate navigation of the Lake, but merely to get rid of the sewage of Chicago, that this is a State purpose, not a Federal function, and should be enjoined to save the rights of complainants. If the view

urged by the complainants is right, the necessity for the use of the 8,500 cubic feet a second to save the health of the inhabitants of the Sanitary District will then present the problem of the power and discretion of a court of equity to moderate the strict and immediate rights of the parties complainant to a gradual one which will effect justice as rapidly as the situation permits. The framing of the decree will then require the careful consideration of the Court.

The complainants contend that Congress has given no authority for the diversion from Lake Michigan, even if it has power so to do by way of regulating interstate commerce. The defendants rely for this authority on the permit of the Secretary of War issued by him March 3, 1925, to the Sanitary District shortly after the decree of this Court in the *Sanitary District* v. *United States,* 266 U. S. 405. That decree forbade the diversion of the waters from Lake Michigan in excess of 4,167 cubic feet a second, but was made expressly without prejudice to any permit issued by the Secretary of War according to law. The complainants contend that the permit which allows a diversion of 8,500 cubic feet a second is not in regulation of interstate commerce, is not according to law and should be declared invalid.

The defendants base their claim of Congressional authority on § 10 of the Act of March 3, 1899, c. 425; 30 Stat. 1121, 1151—

"That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on

plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of War prior to beginning the same."

The policy carried out in the Act of March 3, 1899, had been begun in the Act of September 19, 1890, c. 907; 26 Stat. 426, 454, 455. Sections 9 and 10 were the rearranged result of the provisions of Sections 7 and 10 of the Act of 1890. A new classification was made in Sections 9 and 10 of the Act of 1899, and substituted for Section 10 of the Act of 1890. The latter provided that the creation of any obstruction to navigable capacity was prohibited, unless " affirmatively authorized by law " and this was changed so as to read " affirmatively authorized by Congress." The change in the words of the first clause of Section 10 was intended to make mere State authorization inadequate. *Sanitary District* v. *United States,* 266 U. S. 405, 429; *United States* v. *Bellingham Bay Boom Co.,* 176 U. S. 211. It was not intended to override the authority of the State to put its veto upon the placing of obstructing structures in navigable waters within a State and both State and Federal approval were made necessary in such case. *Cummings* v. *Chicago,* 188 U. S. 410. The words " affirmatively authorized by Congress " should be construed in the light of the administrative exigencies which prompted the delegation of authority in the succeeding clauses. Congress, having stated in Section 9 as to what particular structures its specific consent should be required, intended to leave to the Secretary of War, acting on the recommendation of the Chief of Engineers, the

determination of what should be approved and authorized in the classes of cases described in the second and third clauses of Section 10. If the section were construed to require a special authorization by Congress whenever in any aspect it might be considered that there was an obstruction to navigable capacity, none of the undertakings specifically provided for in the second and third clauses of Section 10 could safely be undertaken without a special authorization of Congress. We do not think this was intended. The Supreme Court of Maine in *Maine Water Co.* v. *Knickerbocker Steam Towage Co.*, 99 Me. 473, took the same general view in construction of the same section. It held that the broad words of the first clause of that section were not intended to limit the second and third clauses and that Congress's purpose was a direct prohibition of what was forbidden by them except when affirmatively approved by the Chief of Engineers and the Secretary of War. We concur in this view.

The true intent of the Act of Congress was that unreasonable obstructions to navigation and navigable capacity were to be prohibited, and in the cases described in the second and third clauses of Section 10, the Secretary of War, acting on the recommendation of the Chief of Engineers, was authorized to determine what in the particular cases constituted an unreasonable obstruction.

This construction of Section 10 is sustained by the uniform practice of the War Department for nearly thirty years. Nothing is more convincing in interpretation of a doubtful or ambiguous statute. *United States* v. *Minnesota*, 270 U. S. 181, 205; *Swendig* v. *Washington Water Power Co.*, 265 U. S. 322, 331; *Kern River Co.* v. *United States*, 257 U. S. 147, 154; *United States* v. *Burlington & Missouri River R. R.*, 98 U. S. 334, 341; *United States* v. *Hammers*, 221 U. S. 220, 228; *Logan* v. *Davis*, 233 U. S. 613, 627.

The practice is shown by the opinion of the Acting Attorney General, transmitted to the Secretary of War,

34 Op. Atty. Gen. 410, 416. The Secretary of War acted on this view on May 8, 1899, about two months after the passage of the Act. This was followed by the permits subsequently granted down to March 3, 1925. The fact that the Secretary of War acted on this view was made known to Congress by many reports.

But it is said the construction thus favored would constitute it a delegation by Congress of legislative power and invalid. We do not think so. The determination of the amount that could be safely taken from the Lake is one that is shown by the evidence to be a peculiarly expert question. It is such a question as this that is naturally within the executive function that can be deputed by Congress. *Southern Pacific Co.* v. *Olympian Dredging Co.,* 260 U. S. 205, 208; *Sanitary District* v. *United States,* 266 U. S. 405, 428; *Field* v. *Clark,* 143 U. S. 649, 693; *Buttfield* v. *Stranahan,* 192 U. S. 470, 496; *Union Bridge Co.* v. *United States,* 204 U. S. 364, 386; *Monongahela Bridge Co.* v. *United States,* 216 U. S. 177, 192; *Louisville Bridge Co.* v. *United States,* 242 U. S. 409, 424; *J. W. Hampton, Jr. & Co.* v. *United States,* 276 U. S. 394, 407.

The construction of Section 10 of the Act of March 3, 1899, was settled by this Court in the decision of the first Chicago Drainage Canal case in 266 U. S. 405, 429. The decision there reached and the decree entered can not be sustained, except on the theory that the Court decided first that Congress had exercised the power to prevent injury to the navigability of Lake Michigan and the other lakes and rivers in the Great Lakes watershed, and second that it could properly and validly confer the administrative function of passing on the issue of unlawful injury or otherwise on the Secretary of War, and that it had done so. To give any other interpretation would necessarily be at variance with our previous decision.

It is further argued by complainants that while the power of Congress extends to the protection and improvement of navigation, it does not extend to its destruction or to the creation of obstructions to navigable capacity. This Court has said that while Congress in the exercise of its power may adopt any means having some positive relation to the control of navigation and not otherwise inconsistent with the Constitution, *United States* v. *Chandler-Dunbar Co.,* 229 U. S. 53, 62, it may not arbitrarily destroy or impair the rights of riparian owners by legislation which has no real or substantial relation to the control of navigation or appropriateness to that end. *United States* v. *River Rouge Improvement Co.,* 269 U. S. 411, 419; *Port of Seattle* v. *Oregon & Washington R. R.,* 255 U. S. 56, 63.

So complainants urge that the diversion here is for purposes of sanitation and development of power only, and therefore that it lies outside the power confided by Congress to the Secretary of War. The Master says:

"There is no doubt that the diversion is primarily for the purposes of sanitation. Whatever may be said as to the service of the diverted water in relation to a waterway to the Mississippi, or as to the possible benefit of its contribution to the navigation of that river at low water stages, it remains true that the disposition of Chicago's sewage has been the dominant factor in the promotion, maintenance and development of the enterprise by the State of Illinois and the Sanitary District. The purpose of utilizing the flow through the drainage canal to develop power is also undoubtedly present, although subordinated to the exigency of sanitation. So far as the diverted water is used for the development of power, the use is merely incidental. This Court, in *Sanitary District* v. *United States,* 266 U. S. 405, 424, in describing the channel, looked upon its interest to the Sanitary District 'primarily as a

means to dispose of the sewage of Chicago , although it was also ' an object of attention to the United States as opening water communication between the Great Lakes and the Mississippi and the Gulf.' "

The Master then considered whether there was any express authorization of the diversion now permitted, except under Sections 9 and 10 of the Act of March 3, 1899, already referred to. On this subject he said:

" Consideration by Congress of the advisability of the proposed waterway from Lake Michigan to the Illinois and Mississippi Rivers, demands by Congress for surveys, plans and estimates, the establishment of project depths, and appropriations for specified purposes, did not in my opinion constitute direct authority for the diversion in question, however that diversion, or the diversion of some quantity of water from Lake Michigan, might fit into an ultimate plan."

This conclusion of the Master is fully supported by reference to the already cited Rivers and Harbors Appropriation Act of 1927 declaring that nothing therein should authorize any Lake Michigan diversion.

The Master also says that appropriations for widening and deepening the Chicago River, and the coöperation with the Sanitary District for several years in that improvement, merely committed Congress to the work as thus actually prescribed, but did not go further, whatever the advantages of that work in connection with the purposes of the Sanitary District's Canal.

He then proceeds:

" There is nothing in any of the acts of Congress upon which the defendants rely specifying any particular quantity of water which could be diverted and it could hardly be considered a reasonable contention that the acts of Congress justified any diversion of water from Lake Michigan that the State of Illinois and the Sanitary District might see fit to make. It is manifest that it was

the view of the War Department that Congress had not acted directly and whatever the Department did was subject to such action as Congress might take."

He continues:

"This understanding that Congress has not yet acted directly so as to authorize the diversion in question has continued. It was in this view that the United States prosecuted its suit to decree in this Court to enjoin the defendants from taking more water from Lake Michigan than the Secretary of War had allowed."

In this conclusion, which the Court confirms, we are therefore remitted solely to the effect and operation of the permit of 1925 as authority for the maintenance of the diversion.

The normal power of the Secretary of War under Section 10 of the Act of March 3, 1899, is to maintain the navigable capacity of Lake Michigan and not to restrict it or destroy it by diversions. This is what the Secretaries of War and the Chiefs of Engineers were trying to do in the interval between 1896 and 1907 and 1913 when the applications for 10,000 cubic feet a second were denied by the successive Secretaries and in 1908 a suit was brought by the United States to enjoin a flow beyond 4,167 cubic feet a second. Then pending the suit, the Sanitary District disobeyed the restriction of the Secretary of War's permit and increased the diversion to 8,500 cubic feet in order to dispose of the sewage of that District. Had an injunction then issued and been enforced, the Port of Chicago almost immediately would have become practically unusable because of the deposit of sewage without a sufficient flow of water through the Canal to dilute the sewage and carry it away. In the nature of things it was not practicable to stop the deposit without substituting some other means of disposal. This situation gave rise to an exigency which the Secretary, in the interest of navigation and its protection, met by issuing a temporary

permit intended to sanction for the time being a sufficient diversion to avoid interference with navigation in the Port of Chicago. See *New York* v. *New Jersey*, 256 U. S. 296, 307, 308. The elimination and prevention of this interference was the sole justification for expanding the prior permit, the limitations of which had been disregarded by the Sanitary District. Merely to aid the District in disposing of its sewage was not a justification, considering the limited scope of the Secretary's authority. He could not make mere local sanitation a basis for a continuing diversion. Accordingly he made the permit of March 3, 1925, both temporary and conditional—temporary in that it was limited in duration and revocable at will, and conditional in that it was made to depend on the adoption and carrying out by the District of other plans for disposing of the sewage.

It will be perceived that the interference which was the basis of the Secretary's permit, and which the latter was intended to eliminate, resulted directly from the failure of the Sanitary District to take care of its sewage in some way other than by promoting or continuing the existing diversion. It may be that some flow from the Lake is necessary to keep up navigation in the Chicago River, which really is part of the Port of Chicago, but that amount is negligible as compared with 8,500 second feet now being diverted. Hence, beyond that negligible quantity, the validity of the Secretary's permit derives its support entirely from a situation produced by the Sanitary District in violation of the complainants' rights; and but for that support complainants might properly press for an immediate shutting down by injunction of the diversion, save any small part needed to maintain navigation in the river. In these circumstances we think they are entitled to a decree which will be effective in bringing that violation and the unwarranted part of the diversion to an end. But in keeping with the principles

on which courts of equity condition their relief, and by way of avoiding any unnecessary hazard to the health of the people of that section, our decree should be so framed as to accord to the Sanitary District a reasonably practicable time within which to provide some other means of disposing of the sewage, reducing the diversion as the artificial disposition of the sewage increases from time to time, until it is entirely disposed of thereby, when there shall be a final, permanent operative and effective injunction.

It is very apparent from the report of the Master and from the state legislation that the Legislature of Illinois and the Sanitary District have for a long period been strongly insistent upon such a use of the waters of Lake Michigan as would dispose of the sewage of the District and incidentally furnish a navigable water route from Lake Michigan to the Mississippi basin; and that not until 1903 was the attention of the public, and especially of the District authorities, drawn to the fact that a diversion like that now used would lower the Lake levels with injurious consequences to the Great Lakes navigation and to the complainant States. The Secretary of War and the Chief of Engineers in 1907 refused a permit by which there would be more than 4,167 feet a second diverted. Advised that the District authorities proposed to ignore that limitation, the United States brought suit against the authorities of the District to enjoin any diversion in excess of that quantity, as fixed in an earlier permit. Another application for enlargement was made to Secretary of War Stimson in 1913 and was rejected. For several years, including the inexcusable delays made possible by the failure of the Federal Court in Chicago to render a decision in the suit brought by the United States, the District authorities have been maintaining the diversion of 8,500 cubic feet per second or more on the plea of preserving the health of the District. Putting this plea

forward has tended materially to hamper and obstruct the remedy to which the complainants are entitled in vindication of their rights, riparian and other.

The intervening States on the same side with Illinois, in seeking a recognition of asserted rights in the navigation of the Mississippi, have answered denying the rights of the complainants to an injunction. They really seek affirmatively to preserve the diversion from Lake Michigan in the interest of such navigation and interstate commerce though they have made no express prayer therefor. In our view of the permit of March 3, 1925, and in the absence of direct authority from Congress for a waterway from Lake Michigan to the Mississippi, they show no rightful interest in the maintenance of the diversion. Their motions to dismiss the bills are overruled and so far as their answer may suggest affirmative relief, it is denied.

In increasing the diversion from 4,167 cubic feet a second to 8,500, the Sanitary District defied the authority of the National Government resting in the Secretary of War. And in so far as the prior diversion was not for the purposes of maintaining navigation in the Chicago River it was without any legal basis, because made for an inadmissible purpose. It therefore is the duty of this Court by an appropriate decree to compel the reduction of the diversion to a point where it rests on a legal basis and thus to restore the navigable capacity of Lake Michigan to its proper level. The Sanitary District authorities, relying on the argument with reference to the health of its people, have much too long delayed the needed substitution of suitable sewage plants as a means of avoiding the diversion in the future. Therefore they can not now complain if an immediately heavy burden is placed upon the District because of their attitude and course. The situation requires the District to devise proper methods for providing sufficient money and to construct and put in operation with all reasonable expedition adequate plants for the dis-

position of the sewage through other means than the Lake diversion.

Though the restoration of just rights to the complainants will be gradual instead of immediate it must be continuous and as speedy as practicable, and must include everything that is essential to an effective project.

The Court expresses its obligation to the Master for his useful, fair, and comprehensive report.

To determine the practical measures needed to effect the object just stated and the period required for their completion there will be need for the examination of experts; and the appropriate provisions of the necessary decree will require careful consideration. For this reason, the case will be again referred to the Master for a further examination into the questions indicated. He will be authorized and directed to hear witnesses presented by each of the parties, and to call witnesses of his own selection, should he deem it necessary to do so, and then with all convenient speed to make report of his conclusions and of a form of decree.

It is so ordered.

EXCHANGE TRUST COMPANY *v.* DRAINAGE DISTRICT NO. 7, POINSETT COUNTY, ARKANSAS, ET AL.

ERROR TO THE SUPREME COURT OF ARKANSAS.

No. 114. Argued January 9, 1929.—Decided January 21, 1929.

1. Irregularties in proceedings for the annexation of new lands to a special improvement district and for assessment of benefits may be cured by an act of the legislature confirming a reassessment. P. 424.
2. A settler under the homestead law who invited and secured an annexation of his land to a state drainage district and afterwards obtained his equitable title through a final entry of the