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BEACH POLLUTION CASE

IN THE

Supreme Court of the United States

OCTOBER TERM, 1930.

No. 17, Original.

STATE OF NEW JERSEY,

Plaintiff,

vs.

THE CITY OF NEW YORK,

Defendant.

PLAINTIFF'S BRIEF BEFORE THE SPECIAL MASTER.

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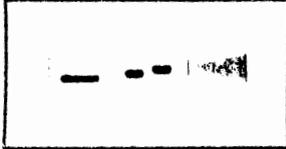
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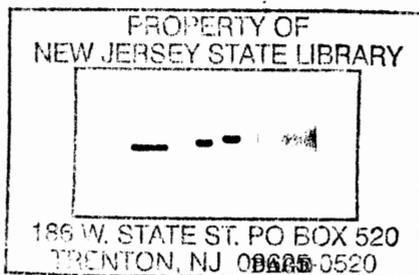
PROPERTY OF NEW JERSEY STATE LIBRARY
February 4, 1931.
186 W. STATE ST. PO BOX 520 TRENTON, NJ 08625 0520



PROPERTY OF
NEW JERSEY STATE LIBRARY



186 W. STATE ST. PO BOX 520
TRENTON, NJ 08625-0520



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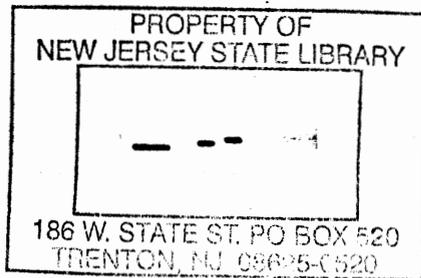
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STATE OF NEW JERSEY,
Plaintiff,

vs.

THE CITY OF NEW YORK,
Defendant.

**PLAINTIFF'S BRIEF BEFORE THE SPECIAL
MASTER.**

I.

Statement of the Case.

This is an original action brought pursuant to a resolution of the legislature of plaintiff, entitled "A Joint Resolution concerning the dumping and disposal of garbage and refuse at sea, and to abate the nuisance caused thereby," approved April 16, 1929, instructing the Attorney General to investigate, and, with the approval of the Governor, take such action as he deemed necessary to protect plaintiff and its inhabitants, and its and their property, from damage by the dumping and disposal of garbage and refuse at sea, and to abate conditions caused thereby (*Chap. J. R. No. 16, P. L. 1929, p. 824; Exhibit 68; R. 378*).

Allegations of Complaint.

The complaint, filed May 13, 1929, alleges that plaintiff is one of the states of the Union exercising the powers and duties of sovereignty, for the purpose, *inter alia*, of protecting and preserving the rights of its citizens in the acquisition, possession and protection of property and the pursuit of and obtaining safety and happiness (p. 5); that this suit was instituted by direction of the legislature and with the approval of the Governor for the use and benefit of plaintiff as the owner of property and also as *parens patriae* for the use and benefit of its citizens. A map was attached to the complaint giving geographical and other information referred to therein; that defendant is a body politic and corporate under the laws of New York State, exercising the powers of local administration and government as a political subdivision of that state; that the jurisdiction of this court depends on Article III, Section 2 of the Constitution of the United States; that plaintiff state from Atlantic Highlands to Cape May, a distance of more than 100 miles, on the easterly side, borders on the Atlantic Ocean, and that the portion of ocean frontage particularly affected by the acts complained of extends from Atlantic Highlands to Beach Haven, a distance of more than fifty miles, and is occupied by a continuous succession of adjoining municipalities which by reason of their favorable beaches are adapted to, and used chiefly for (p. 6), providing a livelihood for the inhabitants of these municipalities through the business of maintaining summer resorts to which great numbers of people gather from all parts of the United States in the pursuit of rest, recreation and pleasure; that plaintiff owns the lands on the shore and under the waters of the Atlantic Ocean below high-water mark throughout the Atlantic Ocean beach front and that the use of said beaches and the waters adjacent thereto are common to all of the people of the state; that the seashore in question is famous as a summer resort and has been improved by piers and wharfs used for public recreation, commerce and fisheries, and by

pavilions and bathing beaches and other conveniences used for the health, recreation and pleasure of plaintiff's citizens, and others who resort thereto for such purposes; that the territory along the seashore, and for some miles landward, is improved by hotels, pleasure resorts, country clubs and private residences and estates, provided and maintained at great expense by and for the benefit of summer visitors and residents; that the ocean waters adjacent to the shore are largely used for surf bathing, boating, fishing and other purposes; that more than a hundred million dollars have been invested on the beach section particularly affected by the acts complained of in hotels, bathing pavilions, landing and pleasure piers, boardwalks, shore boulevards and other facilities for pleasure, recreation and profit, and that several thousand persons are employed to maintain and operate the same; that this coastal section lies between the metropolitan areas of New York City (p. 7) and Philadelphia and is within convenient distance for daily travel by railroad or motor vehicles from either area; that many thousands of persons live along said seashore during the summer months and commute daily to their places of business; that said seashore is visited daily during the summer months by thousands of excursionists and during holidays and week-ends by other thousands of visitors; that the growth, prosperity and substantial property values of the communities in question have resulted entirely from enterprises dependent upon the popularity and suitability of said waters, beaches and shore front facilities for fishing, boating, bathing, and other seashore recreation and pursuit, and the continuance of these advantages depends upon the ability of plaintiff, its municipalities and citizens, to keep the waters of the shore pure and wholesome, and the beaches, highways and short-front property free from pollution, contamination and unsightly or unhealthy conditions; that along the beach section in question are located more than 100 fish pounds constructed and operated by citizens under licenses issued by plaintiff, in which approximately \$700,000 have been invested; that during the year 1928 said pounds yielded approximately

20,000,000 pounds of fish, having the value of nearly \$1,000,000; that approximately 500 men are constantly employed in that industry.

The complaint further alleges that defendant has a population of more than 6,000,000 people, which is increasing at an annual rate of approximately 136,000; that defendant disposes of its garbage and other refuse (p. 8) by loading it on barges which are towed out and dumped into the navigable waters of the United States off the coast of plaintiff; that the amount of garbage and refuse thus disposed of increases with the population and commerce of defendant and that many barge loads are now thus disposed of daily; consisting of all manner of domestic and industrial waste of a substantial nature, including boxes, crates, tin cans, bottles (empty, or containing drugs, medicines or chemicals), papers, rags, discarded household and toilet articles, dead domestic animals, mattresses, decayed or unmarketable fruits, vegetables, meats and fowls, the sweepings and refuse of the public streets and markets, vitals and other vegetable and animal fragments from residences, hotels and restaurants, much of which garbage and refuse is in a putrid and decayed condition; that a considerable portion of said garbage and refuse floats upon or beneath the surface of the sea in huge masses or islands which obstruct and impede the navigation of fishing boats and other craft until it is driven by winds and tides on plaintiff's beaches and cast in heaps and wind-rows thereon, and under, over and about the piers, wharves, pavilions, adjacent boulevards, and upon private property, where it decays and pollutes the sea and land unless and until removed and disposed of by the municipalities or the citizens; that the removal and disposition of such garbage and refuse from the beaches, boulevards and other public places requires an expenditure by the municipalities of more than \$100,000 per annum, in addition to large sums incurred by the citizens to clean (p. 9) and repair their private properties of the filth and damage inflicted thereby; that the garbage and refuse so commingled with the waters

of the shore and cast upon the beaches and property of plaintiff and its citizens is poisonous and otherwise injurious to human beings and to fish and other forms of marine life; that it obstructs and impedes navigation of waters of the United States, clogs, tears, injures and destroys fish nets and renders the water noxious and offensive and unfit for fishing, boating or bathing; that the dumping of said garbage and refuse by the defendant creates a public nuisance which seriously impairs the usefulness, wholesomeness and safety of said waters, beaches and shore-front facilities, and of the property of the plaintiff, its municipalities and citizens, and thereby greatly damages such property and seriously menaces the health, safety and welfare of the plaintiff and its citizens; that said acts of defendant are repeated and continued from day to day, and unless restrained will be repeated and continued in perpetuity, to the manifest and irreparable injury to the health, safety, comfort, property and welfare of plaintiff and its citizens and others lawfully within its borders, and the plaintiff is without any adequate remedy at law in the premises.

The complaint further alleges that the acts of defendant take the property of plaintiff and its citizens without due process of law in violation of Article XIV, Section 1; regulate and destroy the commerce of plaintiff and its citizens in violation of Article I, Section 8, paragraph 3 of the Constitution of the United States (p. 10); deprive plaintiff and its citizens of the natural advantages of its position along the seashore, contrary to the sovereign rights of plaintiff as a member of the Union, and violates an act of Congress, approved June 30, 1926, being Chapter 9, Section 407 of the United States Code, and other laws of the United States; and are otherwise detrimental to the interest of plaintiff and its citizens (p. 11).

The prayer of the complaint is for injunction to perpetually restrain and enjoin defendant, its contractors, officers, agents and employees from dumping or procuring or suffering to be dumped any garbage or refuse or other

noxious, offensive or injurious matter into the ocean or other waters of the United States, off the coast of plaintiff (p. 11), and from otherwise defiling and polluting said waters and beaches or procuring them to be defiled or polluted (p. 12).

The Answer.

The answer of defendant is confined to a denial of every allegation of the complaint, except that it admits paragraph 2 of the complaint, page 6, describing defendant; that plaintiff is one of the states of the Union, having its capital and seat of government at the City of Trenton; and it admits that part of paragraph 11, page 8, which alleges that defendant has a population of more than 6,000,000 people (p. 4).

The Reply.

Formal joinder of issue was made by plaintiff.

Jurisdiction.

The jurisdiction of the court in this case depends upon Article III, Section 2 of the Constitution of the United States, and Section 341, Title 28, U. S. C. A. (p. 171), and has been sustained in numerous cases, including:

Missouri v. Illinois, 180 U. S. 208.

New York v. New Jersey, 256 U. S. 296.

Georgia v. Tennessee Copper Co., 206 U. S. 230.

Wisconsin v. City of Duluth and the Northern Pacific Railroad Co., 96 U. S. 379.

II.

Summary of the Argument.

(1) PLAINTIFF HAS AN INTEREST AS OWNER OF THE SHORE, BETWEEN HIGH AND LOW WATER MARKS, AND OF THE BED AND WATERS OF THE MARGINAL SEA ADJACENT THERETO, WITHIN ITS TERRITORIAL LIMITS.

(2) PLAINTIFF HAS AN INTEREST AS PARENS PATRIAE TO PROTECT THE PROPERTY, HEALTH AND PROSPERITY OF ITS INHABITANTS.

(3) DEFENDANT HAS NO LEGAL RIGHT TO DUMP GARBAGE AND REFUSE AT SEA.

(4) DUMPING OF GARBAGE AND REFUSE AT SEA BY DEFENDANT CREATES A PUBLIC NUISANCE UPON THE PROPERTY AND WITHIN THE TERRITORIAL LIMITS OF PLAINTIFF.

(5) DUMPING OF GARBAGE AND REFUSE AT SEA BY DEFENDANT CONSTITUTES A TRESPASS UPON THE PROPERTY OF PLAINTIFF.

(6) INJUNCTION IS THE ONLY ADEQUATE AND PROPER REMEDY IN THE PREMISES.

(1)

Plaintiff has an interest as owner of the shore, between high and low water marks, and of the bed and waters of the marginal sea adjacent thereto, within its territorial limits.

The complaint alleges:

“4. From Atlantic Highlands southerly to Cape May, a distance of more than 100 miles, the easterly side of the State of New Jersey borders on the Atlantic Ocean. The portion of this Ocean frontage particularly affected by the acts of the defendant

hereinafter complained of extends from Atlantic Highlands to Beach Haven, a distance of more than fifty miles, and is occupied by a continuous succession of adjoining municipalities, which, by reason of their broad and gently sloping beaches are adapted to, and their inhabitants are engaged in and rely for their livelihood chiefly upon, the business of maintaining summer resorts, where great numbers of people of all classes and conditions congregate from various parts of the United States in the pursuit of rest, recreation and pleasure.

5. The plaintiff possesses the sovereign ownership of lands along the shore and under the waters of the Atlantic Ocean below high water mark throughout its beach front within its territorial limits, and the use of said beaches and the waters adjacent thereto are common to all the people of the State."

Defendant denies these allegations (Answer, par. 3, p. 4).

While the court will take judicial notice of the boundaries and territorial limits of the plaintiff, it will be convenient to give a brief description of its geographic situation. A section of the boundary between the states of New York and New Jersey is pertinent to some of the questions which will be later considered.

According to a treaty made between the two states, ratified by the legislature of New York, February 5, 1834, and by the legislature of New Jersey, February 26, 1834, and by Act of Congress, June 28, 1834, the boundary line was fixed in the middle of the Hudson River, thence down the middle of New York Bay; thence through the middle of Kill von Kull; thence through the middle of Arthur Kill to Raritan Bay; thence through the middle of Raritan Bay to the main sea (*Revised Statutes of New Jersey* 822; *4 N. J. Comp. Stat.* 5359).

In 1888 commissioners of the two states located and marked out by proper buoys this boundary line through Raritan Bay. As a result of the report of the commis-

sioners the present boundary line was confirmed by the legislatures of the two states as follows (p. 86) :

“First. From the ‘Great Beds light-house’ in Raritan bay, north, twenty degrees and sixteen minutes west, true, to a point in the middle of the waters of Arthur Kill or Staten Island sound, equidistant between the southwesterly corner of the dwelling-house of David C. Butler, at Ward’s Point, on Staten Island, in the state of New York, and the southeasterly corner of the brick building on the lands of Cortlandt L. Parker, at the intersection of the westerly line of Water street with the northerly line of Lewis street, in Perth Amboy, in the state of New Jersey;

Second. From ‘Great Beds light-house’ south, sixty-four degrees and twenty-one minutes east, true, in line with the center of Waackaak or Wilson’s beacon in Monmouth county, New Jersey, to a point at the intersection of said line with a line connecting ‘Morgan number two’ triangulation point, United States coast and geodetic survey, in Middlesex county, New Jersey, with the granite and iron beacon marked on the accompanying map as ‘Romer stone beacon,’ situated on the ‘Dry Romer shoal’; and thence on a line bearing north, seventy-seven degrees and nine minutes east, true, connecting ‘Morgan number two’ triangulation point, United States coast and geodetic survey, in Middlesex county, New Jersey, with said Romer stone beacon (the line passing through said beacon and continuing in the same direction), to a point at its intersection with a line drawn between the ‘Hook beacon,’ on Sandy Hook, New Jersey, and the triangulation point of the United States geodetic survey, known as the Oriental hotel, on Coney Island, New York; then southeasterly, at right angles with the last-mentioned line, to the main sea.”

N. J. Pamphlet Laws, 1888, Chapter LV, pp. 85, 86; 4 Comp. Stat. 5366.

This boundary line is shown on the map annexed to the complaint by a broken line composed of dashes, separated

by two dots, which line runs through the words "Raritan Bay" on said map.

From that boundary line southerly the State of New Jersey borders on the Atlantic Ocean for a distance of about 100 miles to Cape May, which is the easterly cape marking the entrance to Delaware Bay.

Owing to the configuration of the shore line, the extent of the beach front affected by the subject matter of this suit is about fifty miles, between Sandy Hook and Beach Haven, embracing twenty-nine separate municipalities, as follows:

Highlands	Bay Head
Sea Bright	Mantoloking
Monmouth Beach	Lavallette
Long Branch	Seaside Park
Deal	Barnegat City
Allenhurst	High Point
Asbury Park	Surf City
Ocean Grove	Beach Arlington
Bradley Beach	Beach Haven
Avon-by-the-Sea	Long Beach
Belmar	Manasquan
Spring Lake	Neptune City—Avon-by-the-Sea
Sea Girt	Township of Berkeley
Brielle	Seaside Heights
Point Pleasant	

all of which, as later shown, are seashore resorts inhabited and frequented solely on account of the attraction of the sea and the beach for fishing, boating, bathing and other commercial and recreational purposes.

Plaintiff claims title to the shore, between high and low water marks and to the bed and the water of the marginal sea adjacent thereto within its territorial limits, according to the rule of the common law and the law of nations.

The accepted authority on the English common law is Sir Matthew Hale, whose various treatises thereon are printed in *Moore and Hall's "History and Law of the Foreshore and Sea Shore"* (3rd ed.), from which the following extracts are taken:

Hale's First Treatise:

(p. 347) "Wee have before stated it that *prima facie* the private interest of the ports of this kingdome, both in reference to the franchis itself and also in respect of the propriety of the soyle that lyes under the water of the sea, even to the ordinary extent of the flux of the sea, and the soyl not only below the low water marke, but between the high water and low water marke, doth belonge to the Kinge, and are part of the waste demesnes of his Crown. And this holds regularly true, not only in the vast ocean, but even in navigable rivers, creekes, and ports wher the sea flowes and reflowes: and with this agrees 22 *Ass.* 93, 5 *Rep. Constable's case.*"

(p. 358) "*Recessus maris* is usually taken for an unusual retyringe of the sea, from the usuall low water mark: Now that these do by the law regularly belonge to the Kinge appears:

1. Bycause the sea, at lest so much thereof as adjoines nearer to our coast then to any other foren coast: as it is within the Kinges jurisdiction, which amongst other evidences therof appears by the booke 6 *R. 2, protection 46, wher* Belknap affirms the sea to bee of the ligeance of the Kinge as of his Crown of England, to likewise it is the Kinges in propriety as his roiall waste, and therfor hee hath those *bona caduca* or *vacantia*, as *floatsam*, etc., partly in respect of the right of property which hee hath in the soyle underneath the water; * * * and no more evident right can there bee of ownership or propriety then to bee master of comon right of such profits as any way the sea adjoininge yeelds."

(p. 367) "2. As touchinge the right of the sea shore and *jus alluvionis et maritima sive fluvialia incrementa*: I conceive that by the comon positive law of this Kingedome they belonge to the Kinge as a part of his prerogative: my reasons are these as well in propriety as jurisdictions.

1. The narrow seas, or at lest so much thereof as adjoines to the English shore, is within the Kinges jurisdiction or roialty, 6 *R. 2, protect. 46, etc.*: and likewise in right of propriety; for although the

This subject is discussed by Angell in his "*Treatise on right of property in Tide Waters and in the soils and shores thereof*" as follows:

(p. 19) "By the common law, the waters of the sea and the shores of the same are as much subject to public use as they are by the civil law; but the essential difference above referred to between the two, relates to what is just mentioned as the doctrine of the civilians, viz.: that such waters are the *property* of no one. The policy of the common law is to assign to every thing capable of occupancy and susceptible of ownership a legal and certain proprietor, and accordingly makes those things which from their nature cannot be exclusively occupied and enjoyed, the property of the *sovereign*.

The *king*, in England, is regarded as the *universal occupant*, and the presumption is, that all property was originally in the crown. Hence it is said, that all lands are holden mediately or immediately from the crown, and that the king has the *absolutum et directum dominium*—a fiction of law adopted, not for the aggrandizement of the throne, but for the benefit of the subject."

* * * * *

(p. 20) "To the king of England is, therefore, not only assigned the sovereign dominion of the sea adjoining the coasts, and over the arms of the sea, but in him is also vested the right of property in the soil thereof. *Proprietas tam soli quam aquae*. It was resolved in the case of the Royal Fishery of the river Banne, in Ireland, that the sea is not only under the dominion of the king (as is said 6 Rich. 2 Fitz. Protect. 46—the sea is of the legiance of the king as of his Crown of England), but it is also his proper inheritance, and therefore the king shall have the *land* which is gained from the sea (Dyer, 15)."

Chancellor Kent has the following to say on this subject:

"It is a settled principle in the English law, that the right of soil of owners of land bounded by the sea, or on navigable rivers, where the tide ebbs and

flows, extends to high water mark; and the shore below common, but not extraordinary high water mark, belongs to the state as trustee for the public; and in England the crown, and in this country the people, have the absolute proprietary interest in the same, though it may, by grant or prescription, become private property. The public have at common law a right to navigate over every part of a common navigable river, and on the large lakes; and in England even the crown has no right to interfere with the channels of public navigable rivers. They are public highways at common law. The sovereign is trustee for the public, and the use of navigable waters is inalienable. But the shores of navigable waters, and the soil under them, belong *to the state* in which they are situated, as sovereign" (3 *Kent's Com.*, 427).

Other authorities are *Gould on Waters*, Secs. 2-4, and *Farnham on Waters and Water Rights*, Sec. 2.

The title which the King held to lands between high and low water mark and to the bed of the sea and to the water thereof within the marginal sea, was in trust for the benefit of his subjects, who were entitled to use such lands and waters for the common purposes of navigation, fishing, bathing and sustenance. The rights of navigation, fishing and bathing will be later considered under their proper headings. Suffice it for the present to state that they were rights of the subjects of the Crown under the common law of England at the time of the establishment of the American Colonies.

The Colony of New Jersey was established pursuant to a grant of March 12, 1664, from Charles the Second to the Duke of York, which included among others, the lands from the west side of Connecticut to the east side of Delaware Bay, to be held in free and common socage for an annual rental of two beaver skins on demand. In addition to the lands themselves the grant included the powers of government, to be administered "according to such laws, orders, ordinances, directions and instruments" as the grantee should establish, "so always as the said

statutes, ordinances and proceedings be not contrary to, but as nearly as conveniently may be, agreeable to the laws, statutes and government of the realm of England" (*Grants and Concessions of New Jersey, Leaming & Spicer*, pp. 3, 4, 5).

The powers of government, however, were surrendered to Queen Ann by deed of April 15, 1702, and accepted by Her Royal Highness April 17, 1702 (*Grants and Concessions &c., supra*, pp. 609, 617).

So that the Colony of New Jersey up to the time of the Revolution was subject to and governed by the common law of England, and at that time title to shore (or beach) of the oceans between high and low water marks, and to the waters and bed of the marginal sea adjacent to the shore was at common law vested in the Crown of England, in trust for the benefit and use of the people.

21 *Am. & Eng. Ency* (2nd ed.), p. 430.

When the Definitive Treaty of Peace was made with Great Britain in 1783, the proprietary rights of the Crown were ceded to the states respectively by Article I thereof in the following words:

"His Britannic Majesty acknowledges the said United States, viz.: New Hampshire, Massachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia, to be free, sovereign and independent States; that he treats with them as such, and for himself, his heirs and successors, relinquishes all claims to the Government, propriety and territorial rights of the same, and every part thereof" (*Malloy's Treaties, Conventions, etc.*, Vol. 1, p. 587).

THE NEW JERSEY RULE.

When plaintiff became a sovereign state, it had the right to determine for itself whether it would adopt and follow the English common law rule with respect to

riparian rights and territorial and jurisdictional control over the marginal seas of the Atlantic Ocean, or adopt and follow some other rule, and this court has held that every state has full jurisdiction over the lands within its borders, including the beds of streams and other waters and that no state can legislate for or impose its own policy upon another.

Kansas v. Colorado, 206 U. S. 46, 93, 94, 95, 97.

And this equality of right of a state to follow its own rule without imposition or interference from another source is repeated and discussed by Mr. Justice Van Devanter in *Wyoming v. Colorado*, 259 U. S. 419, 465.

The first Constitution of New Jersey, adopted July 2, 1776, provided in Article XXII, as follows:

“That the common law of England, as well as so much of the statute law, as have been heretofore practiced in this colony, shall still remain in force, until they shall be altered by a future law of the legislature; * * *” (1 *Comp. Stat.*, XXXII).

The present Constitution of New Jersey, adopted June 29, 1844, provides in Article X, paragraph 1, as follows:

“The common law and statute laws now in force, not repugnant to this constitution, shall remain in force until they expire by their own limitation, or be altered or repealed by the legislature; * * *” (1 *Comp. Stat.*, XLVII).

The case of *Hardin v. Jordan* (140 U. S. 371) was decided by this court in 1891 in an opinion delivered by Mr. Justice Bradley. It involved the titles of shore owners to lands under water in Lake Michigan, a few miles south of Chicago. The opinion contains an extended and learned discussion of the law pertaining to the question of the ownership and control of lands below low water mark in navigable waters, and the Great Lakes are classed with

the oceans for that purpose. The following are pertinent extracts from the opinion:

(p. 381) "With regard to grants of the government for lands bordering on tide-water, it has been distinctly settled that they only extend to high-water mark, and that the title to the shore and lands under water in front of lands so granted inures to the State within which they are situated, if a State has been organized and established there. Such title to the shore and lands under water is regarded as incidental to the sovereignty of the State—a portion of the royalties belonging thereto and held in trust for the public purposes of navigation and fishery—and cannot be retained or granted out to individuals by the United States. *Pollard v. Hagan*, 44 U. S. 3 How. 212; *Goodtitle v. Kibbe*, 50 U. S. 9 How. 471; *Weber v. Board of Harbor Comrs.*, 85 U. S. 18 Wall. 57. Such title being in the State, the lands are subject to state regulation and control, under the condition, however, of not interfering with the regulations which may be made by Congress with regard to public navigation and commerce."

* * * * *

(p. 382) "This right of the States to regulate and control the shores of tide-waters, and the land under them, is the same as that which is exercised by the crown of England. * * * but it depends on the law of each State to what waters and to what extent this prerogative of the State over the lands under water shall be exercised."

This rule is supported by the following additional authorities:

Gould on Waters, Sec. 32, p. 72.

Farnham on Waters and Water Rights, Sec. 9, p. 47; Sec. 10a, p. 51; Sec. 11, p. 53; Sec. 37a, p. 177.

Martin v. Waddell, 16 Peters 367, 407.

St. Anthony Falls Water Co. v. Board of Water Commissioners, 168 U. S. 349, 358.

Morris v. United States, 174 U. S. 196.

Illinois Cen. R. R. Co. v. Illinois, 146 U. S. 387.

Lewis, Eminent Domain (2nd ed.), 76b, p. 114.

Angell on Tide Waters, states:

(p. 37) "The rights of the crown devolved on the states by the revolution, and by the treaty of peace were confirmed to them in their sovereign capacity. Hence it is apparent, that, originally, not only the jurisdiction of the British sovereign extended over the territory acquired by the colonists from the native occupants, but also the same *jus proprietatis*, or right of property, in all the tide waters included by such territory, existed in the crown, to the same extent as in the tide waters of the realm, and were held like the latter (as laid down in the preceding chapter) subject to the public use; and, consequently, the soil thereof could not be exclusively appropriated by any common individual or corporation."

* * * * *

(p. 44) "In the case of the *Inhabitants of Arundel v. M'Culloch*, in that state, the court declare it as unquestionable, that all tide waters belonged to the sovereign, or in other words, to the public; and that no individual can appropriate them to his own use, or confine or obstruct them; and that it was upon this principle that legislative acts had been passed authorizing the building of bridges. Parker, C. J., in *Commonwealth v. Charlestown*, asserts the law to be (unless so far as it has been altered by statute) 'that all arms of the sea, coves, creeks, &c., where the tide ebbs and flows, are the property of the sovereign, unless appropriated by some subject, by virtue of a grant, or by prescriptive right, which is founded on the supposition of a grant.' It has ever to this day, in fact, been considered, that when the revolution took place, the people of the several original states became themselves sovereign, and that, in that character, they held the absolute right to all their tide waters, and the soil under the same, for their own common use."

The decisions of the highest courts of New Jersey hold that the common law respecting title, territory and jurisdiction over tidal waters prevails in this state and that the state succeeded to the title of the Crown of England to all tidal waters within its territorial limits.

This rule applies to all of the marginal sea and to the 285,055 lineal feet, or about fifty-four miles of shore or beach still held by plaintiff between Sea Bright and Beach Haven, both inclusive. The remainder between those places has been granted, 13,270 lineal feet to municipalities and 64,818 lineal feet to private parties (Exhibit 345) and will be considered under Point (2).

In *Arnold v. Mundy* (6 N. J. Law 1) the Supreme Court of New Jersey considered an action of trespass for taking oysters planted by the plaintiff in the tidal sections of Raritan Bay. The following are appropriate extracts from the opinion delivered by Chief Justice Kirkpatrick, sitting in the circuit at the trial of the case (1821) :

(p. 14) "Then as to the right of the proprietors to convey. And upon this I am of opinion, that by the law of nature, which is the only true foundation of all the social rights, that by the civil law, which formerly governed almost all the civilized world, and which is still the foundation of the polity of almost every nation in Europe; that by the common law of England, of which our ancestors boasted, and to which it were well if ourselves paid a more sacred regard; I say I am of opinion, that, by all these, the navigable rivers, where the tide ebbs and flows, the ports, the bays, the coasts of the sea, including both the water and the land under the water, for the purposes of passing and repassing, navigation, fishing, fowling, sustenance, and all the other uses of the water and its products (a few things which belonged to the king in his private right, and for his own use only excepted) are common to all the people, and that each has a right to use them according to his pleasure, subject only to the laws which regulate that use; that the property indeed vests in the sovereign, but it vests in him for the sake of order and protection, and not for his own use, but for the use of the citizen; in

the same sense in which he holds all the public property and the domains of the crown, that the proceeds thereof may be collected into the public treasury, and applied to the public benefit and the public defence, and that he may have the direct, immediate, uncontrolled enjoyment of them.”

* * * * *

(p. 15) “I am of opinion that when Charles II took possession of this country, by his right of discovery, he took possession of it in his sovereign capacity; that he had the same right in it, and the same power over it, as he had in and over his other dominions, and no more; that this right consisted in granting the soil to private persons, for the purposes of settlement and colonization, of establishing a government, of supporting a governor, of conveying to him all those things appurtenant to the sovereignty, commonly called royalties, for the benefit of the colonists who came over here clothed with all the essential rights and privileges secured to the subject by the British constitution; but that he could not, nor never did, so grant them as to convert them into private property; that those royalties, therefore, of which those rivers, ports, bays and coasts were part, by the grant of King Charles, passed to the duke of York, as the governor of the province, exercising the royal authority, for the public benefit, and not as the proprietor of the soil, and for his own use; that they passed from the duke of York to his grantees, and upon the surrender of the government, and as appurtenant thereto, and inseparable therefrom, reverted to the crown of England.”

Later the case came before the Supreme Court *in banc* on the *postea* from the court below and the following are the appropriate extracts of the opinion of that court delivered by same chief justice:

(p. 94) “And I am further of opinion, that, upon the Revolution, all these royal rights became vested in *the people* of New Jersey, as the sovereign of the country, and are now in their hands; and that they, having, themselves, both the legal title and the

usufruct, may make such disposition of them, and such regulation concerning them, as they may think fit; that this power of disposition and regulation must be exercised by them in their sovereign capacity; that the legislature is their rightful representative in this respect, and, therefore, that the legislature, in the exercise of this power, may lawfully erect ports, harbors, basins, docks and wharves on the coasts of the sea and in the arms thereof, and in the navigable rivers; that they may bank off those waters and reclaim the land upon the shores; that they may build dams, locks and bridges for the improvement of the navigation and the ease of passage; that they may clear and improve fishing places, to increase the product of the fishery;
* * *”

That decision was cited with approval by Mr. Chief Justice Taney, in the opinion of this court in *Martin v. Waddell* (16 Peters 367), wherein is to be found a most extended and learned discussion of the common law rights in tidal waters of New Jersey.

In *Gough v. Bell* (22 N. J. L. 411) (1850) the Supreme Court of New Jersey considered a case of trespass which involved the question of ownership of lands below high water mark in the tidal waters of the Hudson River. In the opinion delivered by Chief Justice Green the following proposition is stated:

(p. 455) “1. The ancient rule of the common law is, that the title of owners of land bounded by the sea, or by navigable rivers where the tide ebbs and flows, extends to ordinary high water mark only. The title to the *shore* between ordinary high and low water mark, as well as the title to the soil under the water, belongs, *prima facie*, to the sovereign. *Hale de Jure Maris*, part 1, cap. 4; case of the *River Banne*, *Davies* 152; *Woolrich on Waters*, 20; 3 *Kent Com.* (2d ed.), 427, 431; *Arnold v. Mundy*, 1 Halst. 67; *Martin v. Waddell*, 16 Peters 367; *Pollard's lessee v. Hagan*, 3 Howard 212.

This title, which by the common law of England is vested in the king, upon the revolution, became vested in the people of the state. With this modification, growing out of the form of government, the rule of the common law prevails here, except so far as it has been modified by statute or by local common law. In this state, the rule of the common law, as to the limits of the right, remains unaltered. High water mark constitutes the boundary between the proprietary and the sovereign titles. This point is fully settled by the cases already cited. *Arnold v. Mundy*, 1 Halst. 1; *Martin v. Waddell*, 16 Peters 367.”

* * * * *

(p. 472) “Again, on the seashore, the bays and arms of the sea, and in navigable rivers where the tide ebbs and flows, the title of the riparian owner (meaning by this the owner of land bounded by such waters), unless by royal grant or prescription, extends only to the shore or high water mark. The shore, or space between ordinary high and low water mark, as well as the bed of the river or arm of the sea, is said to be vested in the king, in trust for the common benefit of all his subjects. Whatever opinion may have formerly been entertained, it seems to be now settled, that though held by the king, and subject to be transferred by his grant, since *magna charta* the right of property in the bed or shore of the sea and its arms can only be transferred subject to the *jus publicum*, the common right of navigation, &c. While the soil of the shore is said to be the property of the crown, and has been communicated, in many instances by grant to the subject, yet it can only be in subservience to the public right of the subjects of the realm. The private right of the crown may be disposed of, but the public right of the subject cannot, even if it be within the terms of the grant.”

This decision was affirmed in *Bell v. Gough* (23 N. J. L. 624, 654) by the New Jersey Court of Errors and Appeals, which is the court of last resort in the state.

The rule established in *Arnold v. Mundy* and *Gough v. Bell*, above quoted, has been consistently followed since the decision of the former case in 1821, by the New Jersey courts, and by this court, in all cases affecting the question in New Jersey.

Attorney General v. Stevens, 1 N. J. Eq. 369, 380 (1831).

State v. Jersey City, 25 N. J. L. 525, 527 (1856).

Stevens v. Paterson & Newark R. R. Co., 34 N. J. L. 532, 534, 537 (1870); cited and followed in *Hoboken v. P. R. R. Co.*, 124 U. S. 656, 690.

Amos v. Norcross, 58 N. J. Eq. 256, 257 (1899).

Simpson v. Moorhead, 65 N. J. Eq. 623, 629 (1903).

Moore v. Ventnor Gardens, 149 Atl. Rep. 536 (1930); 105 N. J. Eq. 730.

Corfield v. Coyell, 4 Wash. C. Ct. Rep. 370, 384.

Rundle et al. v. Del. & Raritan Canal Co., 14 How. 79, 90.

Den, Russell v. Jersey Associates, 15 How. 426, 432 (reaffirming the decision in *Martin v. Waddell*, 16 Peters 367).

Property rights within the territorial limits of the plaintiff are to be measured by the rules and decisions of its own courts, and the decisions of its highest court will be followed by this court.

St. Anthony Falls Water Power Co. v. Board of Water Commissioners, 168 U. S. 349.

Hardin v. Jordan, 140 U. S. 371.

Packer v. Bird, 137 U. S. 661.

Barney v. Keokuk, 94 U. S. 324.

St. Louis v. Myers, 113 U. S. 566.

St. Louis v. Rutz, 138 U. S. 226.

Shively v. Bowlby, 152 U. S. 1.

Higuera v. United States, 72 U. S. 827.

Rundle v. D. & R. Canal Co., 18 How. 80.

The Extent of the Marginal Sea.

In addition to the shore (or beach) between high and low water marks, the sovereign in England, and the people of New Jersey, have exclusive territory and jurisdiction (subject to navigation) in the bed and water of a strip or belt of marginal sea, adjacent to the shore of the domain. In England this strip or belt was called the "narrow seas" (*Bacon, Abr., Prerogative* [B3]), and it is referred to in some of the authorities as the "marginal belt" (21 *Am. & Eng. Ency.* 2d ed., p. 430). It is the extent of this marginal belt of the Atlantic Ocean adjacent to plaintiff's shores that we now undertake to ascertain.

In *Gould's Treatise on the Law of Waters* (3d ed.), it is stated:

(pp. 3, 4) "It is somewhat different with respect to those parts of the sea which adjoin the shores of civilized nations. By general consent they have been regarded as capable of appropriation, and of being held by a kind of possession. Maritime countries have claimed from the earliest times more or less extended dominion over these waters, and subjected them to the laws and regulations of the state; and upon grounds of self-protection and mutual advantage to all such countries, the dominion of the land has been acknowledged to carry with it the control of the contiguous seas, and the exclusive right to enjoy whatever of value may be acquired therefrom. The dominion over the territorial seas, as they are called, may, therefore, include rights of jurisdiction or of property, or both. By the modern law of nations, the territorial waters extend only to such distance as is capable of command from the shore, or the presumed range of cannon, which, for the purpose of certainty, is regarded as one marine league, although, for the purpose of self-protection in time of war, and for the prevention of frauds upon its revenue, each nation is accustomed to exercise authority beyond this limit."

Similar authorities are to be found in:

Farnham on Waters and Water Rights, Sec. 3.
Angell on Tide Waters, p. 1.

The territorial jurisdiction of a state into the sea, while always recognized as a fact, was a subject of diversity of opinion among the nations without any recognized rule until 1730 when Bynkershoeck stated what he termed a rational principle (*de domino maris*, Ch. 2).

He fixed the limits of the marginal sea at the distance to which it could be defended from the shore, and thereover the adjacent state had exclusive territory and jurisdiction, upon the grounds:

(1) The security of a maritime state requires the possession of its marginal waters.

* * * * *

(3) The enjoyment of the possession of territorial waters serves to sustain the existence of population on the coast.

Perels, Seerecht, Secs. 24, 37, 74, 76, 88.

It is recognized by the law of nations that:

“The principle that the littoral sea forms part of the territory is justified by the exigencies of the conservation and safety of the state, from the military, *sanitary*, and fiscal view, as well as from the point of view of industrial interests, *especially that of fisheries.*” (Italics ours.)

1 *Moore*, Int. L. Dig. 699.

The extent of the littoral sea thus suggested, and generally accepted by common consent, was the distance of a cannon shot from shore, because that distance was deemed to be the extent that territorial power could be defended from the shore. At that time it was agreed that the range of a cannon was one marine league, or about three nautical miles, which for convenience was considered as three miles.

Angell on Tide Waters, p. 2.

Farnham on Waters and Water Rights, Sec. 3a.

Gould on Waters, Sec. 2, p. 4.

While the principle of the cannon shot is sound, the rule of a "three mile limit" is not a correct interpretation of it, as is well illustrated by the incident of the *Kearsarge* and the *Alabama*, at Cherbourg in 1864. The *Kearsarge* pursued the *Alabama* into that port and then lay outside in wait for her emergence, with the intention of attacking as soon as the "three mile limit" was reached. The French government protested because the armament of the vessels was capable of effective range greater than three miles. While the government of the United States refused to concede a greater territorial jurisdiction to France, owing to the fear that the *Alabama* might escape along the coast, it afterwards entered into negotiations in 1894 for an extension of that limit for the very sound reason that a state might find itself in an awkward predicament if the guns of an attacking vessel were effective at more than three miles and the state could not defend itself at greater range.

The Institute of International Law at a meeting in Paris in 1894 resolved that territorial waters should extend six marine miles (60 to the degree of latitude) from low water mark for all purposes, with power to extend it in times of war.

Hall, International Law (4th Ed.) 161.

The true rule of distance is not *miles* but *cannon range* and as the latter increases with the development of the art of munitions the extent of marginal sea must necessarily increase if the original principle is to be maintained. We already have the "twelve mile limit" for revenue purposes, and that was the distance which Secretary Madison instructed Monroe and Pinckney to ask for in London in 1806.

Am. St. Papers, For. Rel., III, 119, 121.

It is interesting to observe that Thomas Jefferson, as Secretary of State, represented to the British Minister in 1793:

“The President of the United States, thinking that, before it shall be finally decided to what distance from our seashores the territorial protection of the United States shall be exercised it will be proper to enter into friendly conferences and explanations with powers chiefly interested in the navigation of the seas on our coast, and relying that convenient occasions may be taken for these hereafter, finds it necessary in the meantime to fix provisionally on some distance for the present government of these questions.”

Until some agreement should be reached the President instructed the officers under his authority to consider for the present “the distance of one sea league or three geographical miles from the seashore.”

British Counter Case & Papers, Geneva Arb., Am. Reprint, 553.

It was President Washington’s view that our marginal sea should extend to the Gulf Stream as the natural boundary.

J. Q. Adams, Memoirs, I, 375-376,

and that view was expressed by Secretary Madison to Monroe and Pinckney in 1806.

Am. St. Papers, For. Rel., III, 119, 121.
I Kent Com., 30.

The position of the State Department of the United States respecting territory within the marginal sea remained generally fixed on the three mile limit between 1783 and 1881, but on May 28, 1886, Secretary of State Bayard advised the Secretary of the Treasury, *inter alia*:

“We claim also that the sovereign of the shore has the right, on the principle of self defense, to

pursue and punish marauders on the sea to the very extent to which their guns would carry their shot, and that such sovereign has jurisdiction over crimes committed by them through such shot, although at the time of the shooting they were beyond three miles from shore."

160 M. S. Dom. Let., 348.

However, in matters pertaining to revenue and in the treaties between the United States and Mexico our government has maintained the distances of territory at twelve miles and nine miles respectively.

For. Rel., Jan. 22, 1875, I, 649-650.

1 Kent. Com., 30.

Chancellor Kent discusses the subject at considerable length and concludes that while there is some difficulty in describing the precise limits of exclusive dominion of a state over an adjoining sea:

"All that can reasonably be asserted is, that the dominion of the sovereign of the shore over the contiguous sea extends as far as is requisite for his safety, and for some lawful end" (*1 Kent. Com.*, 29).

A more liberal view, commensurate with the increase in cannon range is expressed by Farnham in his work on *Waters and Water Courses* (Vol. 1, p. 11). The courts of New Jersey appear to have assumed, without expressly deciding, that the territorial limits seaward of the shore of New Jersey is three marine leagues (*Arnold v. Mundy*, 6 N. J. L. 1, 9, 35).

It is, however, conceded by all authorities that the marginal sea extends *at least* three miles from shore.

21 Am. & Eng. Ency (2nd ed.), p. 430.

Corfield v. Coryell, 6 Fed. Cases 546, 549.

It next becomes important to determine the base line from which this measurement should be made along the coast of New Jersey.

All the writers recognize the fact that the limit of the marginal sea is not measured from the low water line on the shore but from a line drawn between the *terrae fauces* where headlands project on either side of a given shore, as is the case on the New Jersey shore.

In England the rule of the *terrae fauces*, or the points on opposite shores of a bay or an indentation of the shore was important as determining whether the bay or arm of the sea was within a given county and therefore subject to the jurisdiction of that county, or outside the county and therefore under the jurisdiction of the sovereign alone. The old rule for the purpose of determining the county jurisdiction was that the distance between *terrae fauces* should be not greater than to render it possible for a person to see and discern with the naked eye what was being done on the opposite shore (*Farnham, Waters and Water Rights*, Sec. 1, p. 5; *Angell on Tide Waters*, p. 4; *Hale's, De Jure Maris, supra*).

The same doctrine has been established in this country. Here we thus determine the jurisdiction of states rather than of counties.

Chancellor Kent says:

“Considering the great extent of the line of the American coasts, we have a right to claim, for fiscal and defensive regulations, a liberal extension of maritime jurisdiction; and it would not be unreasonable, as I apprehend, to assume for domestic purposes connected with our safety and welfare, the control of the waters on our coasts, though included within lines stretching from quite distant headlands, as, for instance, from * * * Nantucket to Montauk Point, and from that point to the capes of the Delaware * * *” (1 *Kent. Com.*, 30).

The Attorney General of the United States applied that rule to Delaware Bay regardless of the distance between

the *terrae fauces* (1 *Op. Att. Gen.*, 32), and the same ruling was made respecting Chesapeake Bay, where the distance between the *terrae fauces* was twelve miles.

Stetson v. U. S., No. 3993, Class 1, 2d ct. of Comms. of Alabama claims: *Moore, Int. Arbitrations*, 14, 4332-4341.

1 *Moore, Int. L. Dig.*, 735, 741.

The accepted theory is that the territory of a coastal state extends seaward for a distance of three geographical miles measured from a base line drawn between the two enclosing headlands.

Gould on Waters (3rd ed.), Sec. 4, pp. 9, 10.

The same rule, differently expressed, is stated by Farnham, who cites: *Kent Com.*, pp. 29, 30; *Phillimore, Int. Law*, p. 213, and *State v. Murray*, 84 Me. 135, 24 Atl. 789.

1 *Farnham, Water and Water Courses*, p. 16.

Angell in his work on *Tide Waters* follows the "cannon shot" rule of territorial jurisdiction and accepts the marine league as the measure of the distance thereof. He adopts and follows Chancellor Kent's rule concerning waters between the projecting headlands of Montauk Point and the Delaware Capes.

Angell, Tide Waters, pp. 2, 3, 4.

For the purpose of illustrating this rule as applied to the New Jersey coast we have prepared a composite map, the base of which is United States Coast and Geodetic Survey Sailing Chart No. 1,000, published February, 1927; reissued August, 1929, upon which has been placed the names and locations of the municipalities, the several channel marks and the New Jersey-New York boundary line, shown on the map annexed to the complaint, and the pencil courses and distances and dumping locations drawn by the witness Smack on United States Coast and Geodetic

Survey map No. 1215, admitted in evidence as Plaintiff's Exhibit 205. This composite map is marked Appendix "C" and included in the book of Appendices accompanying this brief.

The record shows definite directions and areas designated by the Supervisor of the Port of New York to which the transportation of garbage and refuse is "permitted" by that department. The earliest record is shown in the report of the Supervisor of the Harbor to the Secretary of War for the year 1918 wherein it is stated, regarding the garbage and refuse:

"The point designated for its disposition was 15 miles southeast of Scotland Lightship" (Exhibit 324, p. 1896).

That designation continued to 1923 (Exhibit 326, p. 1994; Exhibit 327, p. 2016; Exhibit 328, p. 2135; Exhibit 329, p. 1980). In 1925 "owing to frequent complaints from the beach resorts of New Jersey and Long Island of contamination from garbage, the Supervisor arranged with the Department of Street Cleaning to extend the point of deposit to nineteen miles from the lightship. This change was effected June 1, 1924" (Exhibit 330, p. 1979).

Beginning with 1925 and continuing down to 1929 the rule was as follows:

"For city garbage, from June 1, * * *, to November 22, * * *, 19 nautical miles southeast by east (magnetic from Scotland Lightship; from November 22, * * *, to April 30, 1925, 12 nautical miles east-southeast from Scotland Lightship; and from April 30, * * *, until June 24, * * *, 15 nautical miles east-southeast from Scotland Lightship; thereafter 20 nautical miles east-southeast from the lightship" (Exhibit 331, p. 1893).

In 1928 the rule was changed to, and so far as the record shows, still remains, the following:

"For city garbage from April 1, * * *, to October 1, * * *, 20 nautical miles southeast by east from Scotland Lightship; from October 1, * * *,

to April 1, * * *, 12 nautical miles southeast by east magnetic from Scotland Lightship; thereafter 20 nautical miles southeast by east from the lightship.

For the city street sweepings, a considerable percentage of which goes to sea in the garbage scows, the same limits as were assigned for the deposit of the garbage were designated for this class of material during the periods specified" (Exhibit 334, p. 2012; Exhibit 335, p. 2079).

By reference to Appendix "C" it will appear that the dumping grounds so designated, from the beginning to the present time, by the Supervisor of the Port of New York, as well as those where dumping was actually observed by Smack and his associates, are located entirely within the territorial limits of the plaintiff. For this reason we deal with the subject of trespass, as well as nuisance, in this brief.

Conclusions on Point (1).

It is therefore respectfully submitted that the plaintiff is the owner of the shore, between high and low water mark, and of the bed and waters of the marginal sea adjacent thereto, within its territorial limits; that its territorial limits extend for a distance of at least three miles seaward measured from a straight line drawn between Montauk Point and Cape May; and that the location at which defendant dumps its garbage and refuse is within the territorial limits of the plaintiff.

(2)

Plaintiff has an interest as *parens patriae* to protect the property, health and prosperity of its inhabitants.

The complaint alleges :

“1. The plaintiff is a State of the Union having its Capital and seat of government at the City of Trenton, Mercer County, New Jersey, and exercises through its Legislature the powers and duties of sovereignty within its territorial limits under and by virtue of its constitution, including the power and duty to protect and preserve to its citizens certain natural and unalienable rights, including the acquisition, possession and protection of property and of pursuing and obtaining safety and happiness. This suit is instituted by direction of the Legislature of the plaintiff and with the approval of the Governor thereof, for the use and benefit of the plaintiff as the owner of the property hereinafter mentioned and also as *parens patriae* for the use and benefit of its citizens. Annexed hereto as Exhibit ‘A’ and made a part hereof is a map showing certain geographical and other information referred to in this bill of complaint” (pp. 5, 6).

Defendant denies these allegations, except that it admits that plaintiff is one of the states of the United States of America, having its capital and seat of government at the City of Trenton in said state (*Ans.*, par. 1, p. 3).

The rights of enjoying and defending life and liberty, acquiring, possessing, and protecting property, and of pursuing and obtaining safety and happiness are guaranteed to the citizens of plaintiff by the constitution (*N. J. Const.*, Art. I, par. 1). The right (nay, the duty) to protect them in those rights is one of the attributes and obligations of sovereignty under our system of government (*Fontain v. Ravenel*, 58 U. S. 369, 393; *Angell on Tide Waters*, p. 23).

With respect to the municipalities which own 13,270 lineal feet, and the citizens which own 64,818 lineal feet, of shore front under state grants between Sea Bright and Beach Haven, both inclusive (Exhibit 345), and with respect to the interests of the inhabitants of the twenty-nine municipalities involved and other inhabitants of plaintiff who frequent the sea and the beaches for purposes of fishing, boating, bathing and various forms of recreation, or who are engaged in enterprises for the entertainment of visitors, plaintiff has an interest in the subject matter of this suit in its character of *parens patriae*, as the guardian and protector of the property, health and welfare of its inhabitants.

In *Hampton v. Watson* (89 S. E. 81; 119 Va. 95; L. R. A. 1916 F. 189), the Virginia Supreme Court of Appeals, where the same common law rule applies as in New Jersey, in an opinion delivered by Mr. Justice Harrison held as follows:

“From the early English decisions to the present time, and repeatedly by this court, it has been held that the tidal, navigable salt waters, and the beds thereof, belong to the commonwealth, in a sovereign capacity, for the benefit of all the public, and cannot be disposed of to the detriment of the public interest. *Taylor v. Com.*, 102 Va. 768, 102 Am. St. Rep. 865, 47 S. E. 875; *Newport News Shipbuilding & Dry Dock Co. v. Jones*, 105 Va. 503, 6 L. R. A. (N. S.) 247, 54 S. E. 314; *Illinois C. R. Co. v. Illinois*, 146 U. S. 387, 36 L. ed. 1018, 13 Sup. Ct. Rep. 110; *Sayre v. Newark*, 60 N. J. Eq. 361, 48 L. R. A. 722, 83 Am. St. Rep. 629, 45 Atl. 985; *Coxe v. State*, 144 N. Y. 396, 39 N. E. 400.

In *Illinois C. R. Co. v. Illinois*, 146 U. S. 387, 36 L. ed. 1018, 13 Sup. Ct. Rep. 110, it is said to be the settled law of this country that the ownership of and dominion and sovereignty over lands covered by the tide waters within the limits of the several states belong to the respective states within which they are found, with the consequent right to use or dispose of any portion thereof when that can be

done without substantial impairment of the interest of the public in the waters.”

* * * * *

(p. 192) “In *Coxe v. State*, supra, it is said: “That the dominion and ownership of such lands is in the sovereign for the benefit of the public has long been settled. Such dominion and ownership of property generally implies the power of absolute disposition; but, with respect to the land under navigable or tide waters, an important limitation has been ingrafted upon this power, from the nature of the title. The title of the state to the seacoast and the shores of tidal rivers is different from the fee simple which an individual holds to an estate in lands. It is not a proprietary, but a sovereign, right; and it has been frequently said that a trust is ingrafted upon this title for the benefit of the public of which the state is powerless to divest itself. * * * The title which the state holds, and the power of disposition, is an incident and part of its sovereignty that cannot be surrendered alienated, or delegated, except for some public purpose, or some reasonable use which can fairly be said to be for the public benefit.’”

Angell on Tide Waters, states:

(p. 27) “The crown may, by letters patent, grant to a municipal corporation, or the corporation of a town or borough which is *caput portus*, all the land which is between high and low-water marks; but the subject matter of grant, as being a *jus privatum* in the king, must be subject to the *jus publicum*, or public right of the people to the passing and re-passing over both land and water.”

Grants to private parties are authorized by act of the legislature of New Jersey, approved March 21, 1871 (N. J. P. L., p. 44), reading as follows:

“Sec. 1. That any riparian owner on tide-waters in this state who is desirous to obtain a lease, grant or conveyance from the state of New Jersey of any lands under water in front of his lands, may apply to the commissioners appointed under the act to

which this is a supplement and the supplements thereto, who may make such lease, grant or conveyance with due regard to the interest of navigation, upon such compensation therefor, to be paid to the state of New Jersey, as shall be determined by said commissioners, which lease, conveyance or grant shall be executed as directed in the act to which this is a supplement and the supplements thereto, and shall vest all the rights of the state in said lands in said lessee or grantee" (Rev.. 1877, p. 987) which act is still in operation—4 *N. J. Comp. Stat.*, 4390).

Grants to municipalities are authorized by Chapter 202 (P. L. 1903, p. 387), reading as follows:

"Sec. 1. Whenever any public park has been or shall hereafter be laid out or provided for by ordinance of any city or other municipality, under the authority of any act of the legislature of this state, along or fronting upon any of the tide waters of this state, and whenever any streets or highways shall extend to said tide waters, such municipality may apply through its legislative body to the commissioners appointed under the act to which this is a further supplement, for a grant or conveyance to such city or municipality of the lands under water within the limits of said public park, and of the land in front of said streets or highways; such grant to contain a provision that any land under water granted or conveyed for park uses shall be kept and maintained as an open public park or place for public resort and recreation, and that no building or other structures shall be erected on such park or on the lands under water so granted and conveyed inconsistent with its use as a public park or place for public resort and recreation; provided, however, that public walks and drives may be constructed along or upon any portion of the land so granted or conveyed."

Which is still in operation (4 *N. J. Comp. Stat.*, 4397).

"Such lands may be granted to a municipality constituting a political division of the state, for the

promotion of the commercial prosperity of the municipality and consequently of the people of the state.”

21 *Am. & Eng. Ency.* (2d ed.), 436.

It will be observed from the authorities already cited, as well as from the language of the acts just quoted, that grants by the state of shore frontage between high and low water marks convey title subject to all rights of the public therein.

The extent to and the manner in which the interests of plaintiff and its citizens are affected by the acts of defendant complained of will appear in the discussion of Points (4) and (5). The purpose and extent of this point is to show that in addition to its sovereign interest, and independent of and behind the titles of its citizens, plaintiff has an interest in all the earth water and air within its domain, which it is here to promote, protect and defend.

The remedy in cases of this character is broadly discussed in the authorities and decisions which justify a suit of this nature to be brought by the Attorney General even without the precaution of express legislative and executive authority and direction which characterize this case.

The particular form of action generally used in such cases within the state is an “information,” but the similarity of that form and practice to that of bill for injunction is so close as to be almost undistinguishable. Information is a remedy concurrent with that of indictment, and, like indictment, it is limited in its application to the courts of the realm whose right or peace has been invaded. It is not used in cases involving parties or transactions outside the state where the state courts lack jurisdiction.

Since an indictment against the defendant found by a grand jury in New Jersey, or an information by the Attorney General against defendant in the courts of New Jersey would be alike fruitless and unavailing, there is no suitable proceeding or remedy except that adopted herein by

way of bill for injunction, and this practice is amply justified by the authorities.

1 *Daniell's Chy. Pl. & Pr.* (3d Am. Ed.), states:

(p. 2) "If the suit is instituted on behalf of the Crown, or of those who partake of its prerogative, or whose rights are under its particular protection, such as the objects of a public charity, the matter of complaint is offered to the Court, not by way of petition, but of information by the proper officer, of the rights which the Crown claims on behalf of itself or others, and of the invasion or detention of those rights for which the suit is instituted. This proceeding is then styled an information. The rules of practice incidental to these two methods of instituting a suit differ so little from each other, that in the ensuing Treatise what is said with respect to the one may be considered as applicable to both, unless where a distinction is specifically pointed out."

(p. 6) "It has been said, that the Queen is not bound to assert her rights in any particular Court, but that she may sue in any of her Courts which she pleases, without reference to the question, whether the subject-matter of her suit is such as comes within the peculiar jurisdiction of such Court. Thus she may have a *quare impedit* in the Queen's Bench, or she may elect to sue either in a Court of Common Law or in a Court of Equity."

(p. 9) "In like manner the Attorney-General may exhibit informations on behalf of individuals who are considered to be under the protection of the Crown as *parens patriae*, such as the object of general charities, idiots and lunatics. Moreover, this privilege of the Attorney-General is not confined to suits on behalf of charities, strictly so called, but has been held, in many instances, to extend to cases where funds have been made applicable to legal and general purposes. In the case of the Attorney-General v. Compton, which was an information for the purpose of compelling the restriction of money alleged to have been improperly applied out of funds raised for the relief of the poor, by means of rates and assessments, Sir J. L. Knight

Bruce, V. C., said, 'that he apprehended the rule was, that where property affected by a trust for public purposes is in the hands of those who hold it devoted to that trust, it is the privilege of the public that the Crown should be entitled to intervene by its officer, for the purpose of asserting, on behalf of the public generally, that public interest and that public right, which probably no individual could be found willing effectually to assert, even if the interest were such as to allow it.'

In *New York v. New Jersey* (256 U. S. 296), this court considered an original action brought to restrain the discharge of sewage in the lower New York Bay. On the question of the right of the plaintiff to bring the action and the jurisdiction of the court, the court, in an opinion delivered by Mr. Justice Clark, said:

(p. 301) "But we need not inquire curiously as to the rights of the state of New York, derived from this compact, for, wholly aside from it, and regardless of the precise location of the boundary line, the right of the state to maintain such a suit as is stated in the bill is very clear. The health, comfort, and prosperity of the people of the state and the value of their property being gravely menaced, as it is averred that they are by the proposed action of the defendants, the state is the proper party to represent and defend such rights by resort to the remedy of an original suit in this court, under the provisions of the Constitution of the United States."

In *Georgia v. Tennessee Copper Co.* (206 U. S. 230), this court considered an equity action brought by the State of Georgia to restrain the defendant from emitting harmful gases which were claimed to injure the property of the plaintiff and its citizens. In the opinion delivered by Mr. Justice Holmes, the following observation is made which is pertinent to this point:

(p. 237) "This is a suit by a state for an injury to it in its capacity as quasi-sovereign. In that capacity the state has an interest independent of and behind the title of its citizens, in all the earth and air within its domain."

In *Missouri v. Illinois* (180 U. S. 208), in an opinion delivered by Mr. Justice Shiras, certain rules of law respecting the right of a state, by its Attorney General, to file a bill in equity to invoke the jurisdiction of this court to restrain the pollution of waters in one state in a manner to create a public nuisance in another state, were declared by this court as follows:

(p. 241) "It is true that no question of boundary is involved, nor of direct property rights belonging to the complainant state. But it must surely be conceded that, if the health and comfort of the inhabitants of a state are threatened, the state is the proper party to represent and defend them.

* * * * *

The health and comfort of the large communities inhabiting those parts of the state situated on the Mississippi River are not alone concerned, but contagious and typhoidal diseases introduced in the river communities may spread themselves throughout the territory of the state. Moreover, substantial impairment of the health and prosperity of the towns and cities of the state situated on the Mississippi River, including its commercial metropolis, would injuriously affect the entire state."

In *Kansas v. Colorado*, 206 U. S. 46, 83, this court said:

"Speaking generally, it may be observed that the judicial power of a nation extends to all controversies justiciable in their nature, and the parties to which or the property involved in which may be reached by judicial process, * * *.

A dispute of a justiciable nature is one which can be perfectly determined in a judicial proceeding, 185 U. S. 388" (*Bouvier's Law Dictionary*, Baldwin Century Ed. 637).

In *Missouri v. Illinois* (200 U. S. 496), this court entertained an original suit in equity to restrain the pollution of the Mississippi River. While the court found that the damage claimed was not supported by the proofs, there

are certain pertinent extracts from the opinion delivered by Mr. Justice Holmes (p. 518) :

“Whatever differences of opinion there might be upon matters of detail, the jurisdiction and authority of this court to deal with such a case as that is not open to doubt.”

Conclusions on Point (2).

Without citing further authorities, of which there are many, the above are sufficient to sustain the proposition of this point.

(3)

Defendant has no legal right to dump garbage and refuse at sea.

The complaint alleges:

“11. The defendant, the City of New York, has a population of more than 6,000,000 people, which is increasing at the rate of approximately 136,000 persons annually. Said defendant disposes of its garbage and other refuse by loading the same upon barges, which are towed out and dumped into navigable waters of the United States, off the coast of the plaintiff.

12. As the population and commerce of said defendant increases the amount of garbage and refuse thus disposed of constantly increases and at the present time many barge loads are thus disposed of daily.

* * * * *

19. Said acts of the defendant takes the property of the plaintiff and its citizens without due process of law in violation of Article XIV, Section 1, of the Constitution of the United States.

* * * * *

22. Said acts of the defendant violate Title 33, Chapter 9, Section 407 of the United States Code (approved June 30, 1926) and other laws of the United States" (pp. 8, 9, 10, 11).

Defendant denies these allegations, except that it admits so much of paragraph 11 as alleges that defendant has a population of more than 6,000,000 people, which is continuously increasing (Answer, pars. 2, 4, p. 4).

It is an established maxim of equity practice that the defendant must answer fully and that under an answer of general denial defendant cannot raise a defense which he might have pleaded (1 *Daniell's Chy. Pl. & Pr.*, Am. Ed., pp. 733, 735). Equity Rule 29 provides that "Every defense heretofore presentable by plea in bar or abatement shall be made in the answer * * *." If defendant claimed or intended to rely upon any lawful authority to dump garbage and refuse at sea, it was necessary for it to have set up that authority in its answer. Having contented itself with a denial that it dumped any garbage and refuse at sea, defendant was not at liberty to prove or argue any authority for so doing.

During the hearings, however, counsel for defendant undertook to claim authority by virtue of permits said to have been issued by the Supervisor of the Port of New York. None of such permits were offered in evidence. The only evidence offered was three reports of dumping by inspectors, which were not proven or connected up in any way (Defendant's Exhibits 1, 2, 3, R. 1619).

There is nothing in the record which would enable the court to find that defendant had, or has, any authority whatever to dump its garbage and refuse at sea.

If, as contended in Point (1), the dumping grounds are within the territorial limits of the State of New Jersey, such dumping is done in violation of the following statute of that state:

"47. *Deposit of refuse or solids in waters prohibited; fishing rights; discharge of sewage.* Sec. 1. That it shall be unlawful for any person or per-

sons to throw, place, deposit, in any way or manner, or cause to be thrown, placed or deposited in any way or manner, into or upon the navigable waters of the Kill von Kull, Arthur Kill or Staten Island sounds, Newark bay or tributaries, Raritan bay or tributaries, New York bay and harbor, or the Hudson river, within the jurisdiction of the state of New Jersey, or over which this state may have jurisdiction, any dredgings, mud, ashes, cinders, shells, refuse or any other solid material of any kind or description whatever, unless duly authorized so to do under the laws of this state or of the United States; provided that this section shall not apply to or affect the right any person has or may have to fish, by putting in poles or otherwise, to plant shell-fish, and fix and preserve the boundaries to any land he may be entitled to use for such purpose, or to interfere with the emptying of any sewage into the same by any city” (P. L. 1882, p. 155; 3 N. J. Comp. Stat. 3958).

For the sole protection of navigation, Congress has enacted the following legislation respecting the dumping of garbage and refuse in the navigable waters of the United States:

“It shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer, or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise, whereby navigation

shall or may be impeded or obstructed: *Provided*, That nothing herein contained shall extend to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the United States officers supervising such improvement or public work: *And provided further*, That the Secretary of War, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material above mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful. (Mar. 3, 1899, c. 425, Sec. 13, 30 Stat. 1152)" (*U. S. C. A., Title 33, Sec. 407, p. 427*).

Other acts of Congress, applying particularly to New York Harbor and adjacent waters, are as follows:

"That placing, discharging, or depositing, by any process or in any manner, of refuse, dirt, ashes, cinders, mud, sand, dredgings, sludge, acid, or any other matter of any kind, other than that flowing from streets, sewers, and passing therefrom in a liquid state, in the tidal waters of the harbor of New York, or its adjacent or tributary waters, or in those of Long Island Sound, within the limits which shall be prescribed by the supervisor of the harbor, is hereby strictly forbidden, and every such act is made a misdemeanor, and every person engaged in or who shall aid, abet, authorize, or instigate a violation of this section, shall, upon conviction, be punishable by fine or imprisonment, or both, such fine to be not less than \$250 nor more than \$2,500, and the imprisonment to be not less than thirty days nor more than one year, either or both united, as the judge before whom conviction is obtained shall decide, one half of said fine to be paid to the person or persons giving information which shall lead to conviction of this misdemeanor (June 29, 1888, c. 496, Sec. 1, 25 Stat. 209)" (*U. S. C. A. Title 33, Sec. 441, p. 455*).

“In all cases of receiving on board of any scows or boats such forbidden matter or substance as described in section 441 of this chapter, the owner or master, or person acting in such capacity on board of such scows or boats, before proceeding to take or tow the same to the place of deposit, shall apply for and obtain from the supervisor of the harbor appointed as provided in section 451 of this chapter, a permit defining the precise limits within which the discharge of such scows or boats may be made; and it shall not be lawful for the owner or master, or person acting in such capacity, of any tug or towboat to tow or move any scow or boat so loaded with such forbidden matter until such permit shall have been obtained; and every person violating the foregoing provisions of this section shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than \$1,000, nor less than \$500, and in addition thereto the master of any tug or towboat so offending shall have his license revoked, or suspended for a term to be fixed by the judge before whom tried and convicted. (May 28, 1908, c. 212, Sec. 8, 35 Stat. 426)” (*U. S. C. A., Title 33, Sec. 443, p. 458*).

There is no proof in the case that the daily dumping of numerous scow loads of garbage and refuse into the Atlantic Ocean, off the coast of New Jersey, have had even the benefit of permits of the Secretary of War under the Act of 1899, or of the Supervisor of the Port under the Act of 1888, as amended by the Act of 1908. Since the law requires every scow or vessel to have a separate permit, a few promiscuous permits, if obtained, or three inspectors' reports, offered in evidence, would not be sufficient for the hundreds of scows loaded with garbage and refuse that defendant dumps each year.

If, however, defendant had proven that each scow was protected by a permit, still it would lack legal authority for dumping its garbage and refuse at sea.

The only authority of the federal government is to protect navigation. Beyond the requirements of navigation its power is lacking.

Wisconsin v. Illinois, 278 U. S. 367, 418.

The interests of navigation and of plaintiff are in the same direction. The issuance of permits under the foregoing statutes constitutes merely an exercise of the "police power" and the admiralty jurisdiction of Congress to protect the harbors and adjacent channels and waters which the federal government dredges at great expense for the safe navigation thereof, and may be exercised beyond a marine league from shore.

U. S. v. Various Tugs, &c., 225 Fed. 505.

That case and others cited in the notes and annotations given in 33 *U. S. C. A.* (pp. 455 et seq.) show clearly that this is merely a police regulation to protect certain channels from obstruction or impediment.

In *Cummings v. Chicago* (188 U. S. 410), this court considered, among others, the question of whether Section 10 of the River and Harbor Act of 1899, which requires the authority of Congress and the approval of the Secretary of War and the Chief of Engineers, for the erection of structures in navigable waters, superseded the powers of the states wherein such structures are located so as to confer affirmative authority for the erection of such structures independent of the authority or consent of the state.

Following is an extract from the opinion of the court delivered by Mr. Justice Harlan (p. 430) :

"But we will not at this time make any declaration of opinion as to the full scope of this power, or as to the extent to which Congress may go in the matter of the erection or authorizing the erection, of docks and like structures in navigable waters that are entirely within the territorial limits of the several states. Whether Congress may, against or without the expressed will of a state, give affirmative authority to private parties to erect structures in such waters, it is not necessary in this case to decide."

(p. 431) "It is only necessary to say that the act of 1899 does not manifest the purpose of Congress to go to that extent under the power to regulate foreign and interstate commerce and thereby to supersede the original authority of the states. The effect of that act, reasonably interpreted, is to make the erection of a structure in a navigable river, within the limits of a state, depend upon the concurrent or joint assent of both the national government and the state government. The Secretary of War, acting under the authority conferred by Congress, may assent to the erection by private parties of such a structure. Without such assent the structure cannot be erected by them. But under existing legislation they must, before proceeding under such an authority, obtain also the assent of the state acting by its constituted agencies."

This case was cited and followed in *Montgomery v. Portland* (190 U. S. 89) decided at the same term in another opinion of Mr. Justice Harlan.

The same statute was involved in *Attorney General v. Hudson County Water Co.* (76 N. J. Eq. 543), where the Attorney General filed an information in the New Jersey Court of Chancery asking for an injunction to restrain the defendant from excavating for and laying a water pipe across the Kill von Kull, which is an arm of the sea connecting New York Bay with Raritan Bay and forming the boundary between the States of New Jersey and New York. The defendant had obtained from the Secretary of War, under Section 10 of the River and Harbor Act of March 3, 1899, a license to lay a water pipe in the bed of the Kill von Kull and by virtue of that authority claimed the right to dredge the bed and lay the pipe in spite of the objection of the State of New Jersey. The court considered the question whether the Federal license was plenary, or permissive only; that is, whether the license conferred authority to do the work or was merely a permission independent of the authority to do the work.

The decision of the court was rendered by Vice Chancellor (now Chancellor) Walker who held:

(p. 547) "By the settled law New Jersey is the owner in fee of all the lands below high-water mark in navigable tidewaters and arms of the sea within its boundary in virtue of its sovereignty as successor to the king of England. *Arnold v. Mundy*, 6 N. J. Law (1 Halst.) 1, 77; *Gough v. Bell*, 21 N. J. Law (1 Zab.) 156; *Attorney-General v. Hudson Tunnel Railroad Co.*, 27 N. J. Eq. (12 C. E. Gr.) 176, 181; *Simpson v. Moorhead*, 65 N. J. Eq. (20 Dick) 623. And such ownership extends from ordinary high-water mark to the centre of the Kill von Kull, which is the boundary line between the States of New Jersey and New York."

After reviewing the provisions of Section 10 of the River and Harbor Act and some of the cases thereunder, the court observed that the act was passed for the purpose of the prevention of obstructions to navigation and that it must be construed strictly, because it is in derogation of the common law rights.

(Citing *Willink v. U. S.*, 38 Ct. Cl. 693, 703), and that:

(p. 552) "If the act is in derogation of common right and is to be strictly construed, it certainly does not give any right against a sovereign state except in respect to those things which are strictly within its purview."

He also cites the following from the opinion of the United States Attorney General John W. Griggs, of February 10, 1899 (22 *Op. Atty. Gen.*, 332), concerning the construction of a similar provision in Section 7 of an act of Congress of July 13, 1892 (27 *Stat. L.*, 88):

(p. 553) "It is not, in my judgment, intended by this act that plenary power should be conferred upon the secretary of war to authorize the construction of bridges and similar works over navigable waters of the United States, but to substitute a new method by which the assent of the United

States should be required in all future cases, but without the necessity of a special act of Congress in each case.”

The court then says:

(p. 555) “and if excavating in the bed of the Kill von Kull for the purpose of laying a pipe line in the trench can be said to be a work which may be authorized by the secretary of war upon proper recommendation by the chief of engineers, which may be conceded, still, it is an authorization which the secretary may effectively give, only in the event of the party asking it having the right under authority, state or national, to do the work. In other words, the work cannot be done without such authorization, no matter if plenary authority for the doing thereof, independently of the secretary’s authorization, existed.”

* * * * *

“Section 10 of the act of 1899 may be searched in vain for the discovery of any affirmative grant of right or power for the construction of any instrumentality of commerce. The section is entirely negative and prohibitive in character. It is intended to prevent obstruction to navigation, and that alone. As already seen, it is an act in derogation of common law rights and is to be strictly construed. To say that it is authority for the prosecution of a work or works in or under any of the navigable waters of the United States, unless those works have first been affirmatively authorized by proper authority, either state or federal, is, in my judgment, to give the section a meaning which is unsupported by any rule of construction known to the law.

The Supreme Court of the State of Illinois has decided that the authorization of work by the secretary of war is a mere license to do the work and not a grant of power to do it” (*Cobb v. Lincoln Park*, 202 Ill. 427).

* * * * *

(p. 558) "The doctrine of *Cobb v. Lincoln Park*, as applicable to the case under consideration may be paraphrased as follows: The provisions of section 10 of the River and Harbor Act of March 3d, 1899, were designed to protect the navigable waters of the United States (including the Kill von Kull) from encroachment and from obstructions to navigation, and to commit the duty of their protection to an officer of the general government without whose permission no such obstructions can be made; that the act is a mere regulation for the benefit of commerce and navigation and that the license or permission of the secretary of war is only a finding and declaration that a proposed structure or excavation would not interfere with or be detrimental to navigation, and is not equivalent to a positive declaration by the authority of congress that the licensee may make such obstruction or excavation without first obtaining the consent of the owner of the submerged land; that the Water Company, not having by the law of this state the right to excavate on the submerged lands without the state's consent, could not acquire that right by obtaining a license from the secretary of war; that the act is not a declaration touching the rights of the owner of the submerged lands in question, and, assuming that the permission of the general government to the excavation and laying of the proposed pipe line is necessary, such permission is not given to override the rights of the owner of the submerged lands, namely, the State of New Jersey; and it is, as said, the declaration by the guardian of the interests of the public at large that the proposed work will not interfere with navigation, and is strictly permissive, and not an authorization by paramount authority to do the work proposed. Thus it appears that the cases, in principle, are parallel."

* * * * *

(p. 559) "In this connection it may be observed that the tenth section of the River and Harbor Act does not provide that it shall be lawful for the secretary of war to authorize the excavation of land in the channel of any navigable waters of the United States, but only that it shall not be lawful to do

the work without the authorization of the secretary, had before beginning the work. The section as worded clearly contemplates that the consent of the secretary shall merely be permissive of the doing of work for which authority already exists."

There is no difference in principle in this respect, between the River and Harbor Act involved in the cases above cited, and the acts to prevent obstructive and injurious deposits in the navigable waters of the United States or in New York Harbor and adjacent waters, quoted under this point. The latter are not different from the former on the question of affirmative authority.

Conclusions on Point (3).

If, as appears from the discussion under Point (1), the dumping grounds designated in the regulations of the Supervisor of the Port, and used by defendant, are within the territorial limits of the plaintiff, then, under the New Jersey statute above quoted and under the decisions above cited, affirmative authority of the plaintiff is necessary. In any event, some affirmative authority must be shown,

(4)

Dumping of garbage and refuse at sea by defendant creates a public nuisance upon the property and within the territorial limits of plaintiff.

In addition to the allegations above recited, the complaint also alleges:

"6. Said seashore is famous throughout the United States as a summer resort, and is improved by piers and wharves which are used for public recreation, commerce and fisheries, and by pavilions and bathing beaches and other conveniences used for the health, recreation and pleasure of the citizens of the plaintiff, and others who resort there-

to for such purposes. Along the seashore and for several miles landward the territory is improved by hotels, pleasure resorts, country clubs, private residences and magnificent estates, provided and maintained at great expense by or for the benefit of summer visitors and residents" (p. 7).

"7. The waters of the ocean adjacent to said shore and beaches are largely used for surf bathing and also for pleasure boating, fishing and other purposes. More than a hundred million dollars have been invested within the beach section particularly affected by the acts of the defendant hereinafter complained of, in hotels, bathing pavilions, landing and pleasure piers, boardwalks, shore boulevards, and other appurtenant facilities for pleasure, recreation and profit and several thousand persons are constantly employed to maintain and operate the same" (p. 7).

"8. The section of the sea coast in question lies between the two great metropolitan areas of New York City and Philadelphia, containing an aggregate population in excess of 12,000,000 people, and all parts thereof are within convenient commuting distance for daily travel by rail or motor vehicles from one or the other of said metropolitan areas. Many thousands of persons live along said seashore during the summer months, and commute daily to their places of business. Said seashore is visited by thousands of excursionists daily during the summer months, and also by many thousands of visitors over holidays and week-ends" (pp. 7, 8).

"9. The growth, prosperity, and substantial property values of the seashore communities in question have resulted entirely from enterprises dependent upon the popularity and suitability of said waters, beaches and shorefront facilities for fishing, boating, bathing and other seashore recreations and pursuits, and the continuance of these advantages primarily upon the ability of the plaintiff, its municipalities and its citizens to keep the waters of the shore and bays pure and wholesome, and the beaches, public highways and shorefront property free from pollution, contamination and unsightly or unhealthy conditions" (p. 8).

"10. Along the beach section in question are located more than a hundred fish pounds constructed under licenses issued by the plaintiff, and maintained by its citizens, who have invested therein approximately \$700,000. During the year 1928 said fish pounds yielded approximately twenty million pounds of fish having a value of nearly one million dollars. Approximately 500 men are constantly employed in said industry" (p. 8).

"13. Said garbage and refuse consist of all manner of domestic and industrial waste of a substantial nature, including boxes, crates, tin cans, bottles (empty, or containing drugs, medicines or chemicals), papers, rags, discarded household and toilet articles, dead domestic animals, mattresses, decayed or unmarketable fruits, vegetables, meats and fowls, the sweepings and refuse of public streets and markets, victuals and other vegetable and animal fragments from residences, hotels and restaurants; much of which garbage and refuse is in a putrid and decayed condition" (p. 9).

"14. A considerable proportion of said garbage and refuse floats upon or beneath the surface of the sea in huge masses or islands, which obstruct and impede the navigation of fishing boats and other craft, until it is driven by winds and tides upon the beaches of the plaintiff, and cast by the waves into heaps and windrows thereon and under, over and about the piers, wharves and pavilions, adjacent boulevards and private property, where it decays and pollutes the sea and land, unless and until removed and disposed of by the municipalities or their citizens" (p. 9).

"15. The removal and disposition of said accumulated garbage and refuse from the beaches, boulevards and other public places requires an expenditure by said municipalities of more than \$100,000 per annum, and additional large sums by the citizens of the plaintiff to clean and repair their private property of the filth and damage inflicted thereby" (pp. 9, 10).

"16. Said garbage and refuse so co-mingled with the waters of the shore and cast upon the beaches

and property of the plaintiff and its citizens is poisonous and otherwise injurious to human beings and to fish and other forms of marine life; obstructs and impedes the navigation of the waters of the United States; clogs, tears, injures and destroys the nets of the fish pounds; and renders the waters noxious and offensive and unfit for fishing, boating or bathing" (p. 10).

"17. The dumping of said garbage and refuse by the defendant creates a public nuisance which seriously impairs the usefulness, wholesomeness and safety of said waters, beaches and shore front facilities, and of the property of the plaintiff, said municipalities and their citizens, and thereby greatly damages the property and seriously menaces the health, safety and welfare of the plaintiff and its citizens" (p. 10).

Defendant denies all these allegations (Answer, pars. 2, 3, p. 4).

Legal Rights.

The primary uses of the sea are navigation and fishery (*Gould on Waters*, 1). The right of fishery within one marine league of the shore vests exclusively in the people of the adjacent state (1 *Moore Int. L. Dig.* 717, 718, 719). The free use of the ocean, for navigation and fishing, is common to all mankind (1 *Kent Com.* 27, 3 *Kent* 410, 412, 414, 416; *Martin v. Waddell's Lessee*, 16 *Peters* 367).

The most valuable perquisite of the exclusive ownership of water is the benefit of fisheries therein. The right to fish in the sea is common to all, but the right to fish in the territorial waters of a state belongs exclusively to its citizens (1 *Farnham, Waters and Water Rights*, p. 9; *Corfield v. Coryell*, 6 *Fed. Cases* 546).

The free use of the seas which everyone has under international laws and universal custom is, however, limited by the proviso that there shall be no interference with the equal rights of others.

Angell on Tide Waters, p. 15.

Gould on Waters, Sec. 17, p. 34; Sec. 21, p. 43;
Sec. 86, p. 166; Sec. 87, p. 167.

Farnham on Waters and Water Rights, Sec. 1,
p. 4; Sec. 23, p. 100.

The public right of fishery is second only to navigation in importance and value. It provides the sustenance which Lord Hale mentions as one of the principal reasons for sovereign title to the marginal sea. It is so recognized in many decisions.

Hardin v. Jordan, 140 U. S. 371, 381.

Arnold v. Mundy, 6 N. J. L. 1, 14, 94.

1 *Moore Int. L. Dig.* 699.

21 *Am. & Eng. Ency.* (2nd Ed.) 439.

The importance of the questions of navigation and fishing in this case deserve a better understanding of the nature and history of the law upon which they are founded. For that reason some consideration will be given to the text writers, as well as to the decisions of the courts, relating to these subjects.

“An obstruction is such an impediment as renders navigation less convenient, less secure, and less expeditious.

Thus, wire cables and ropes, anchors, gaspipes, weirs, accumulations of logs, embankments and jetties, and deposits of sewage and *debris* have been decided to constitute obstructions * * *.” (Italics ours.)

21 *Am. & Eng. Ency.* (2nd Ed.), p. 443.

“*History and Law of the Foreshore and Sea Shore*”
(Moore & Hall, 3rd Ed.).—*Hale's De Jure Maris*:

(p. 384) “1st. By the king's charter or grant; and this is without question. The king may grant fishing within a creek of the sea, or in some known precinct that hath known bounds, though within the main sea.”

(p. 669) "This dominion not only extends over the open seas, but also over all *creeks, arms of the sea, havens, ports, and tiderivers*, as far as the reach of the tide, around the coasts of the kingdom. All waters, in short, which communicate with the sea, and are within the *flux* and *reflux* of its tides, are part and parcel of the sea itself, and subject, in all respects, to the like ownership. This is abundantly proved by the cases hereinafter referred to, where the public *right of fishing* in the creeks, arms of the sea, havens, ports, tiderivers, &c., of the kingdom has been, in many instances, established upon the principle that they are *part of the sea*, and of the King's dominion, and as such, liable to the common law right of the subject to fish therein; of which right we shall, in a future page, take notice."

* * * * *

(p. 850) "There can be no doubt whatever but that the public have a right to fish on the *shore*, although the soil thereof may happen to be private property. To exclude the public there must be proved a *several* fishery, as well as an ownership of the soil. The public fishery extends over sea and shore, and there are many kinds of fish which can only be caught on the shore."

(p. 385) "Fishing may be of two kinds ordinarily, viz. the fishing with the net, which may be either as a liberty without the soil, or as a liberty arising by reason of and in concomitance with the soil, or interest or propriety of it; * * *."

(p. 385) "and this not only in navigable rivers and arms of the sea, but in creeks and ports and havens, yea and in certain known limits in the open sea contiguous to the shore."

Angell on Tide Waters says:

(p. 20) "In the case of the Attorney General v. Richards, in the exchequer, the information stated, that by the royal prerogative, the sea and the sea coasts, and as far as the sea flows and reflows, between the high and the low-water marks, and all the ports and havens of the kingdom, belong to his

majesty, and ought to be preserved for the use of his majesty's vessels and others, and that his majesty has the right of superintendency over them for their preservation.

But although the dominion over, and the right of property in the waters of the sea and inland waters of the sea are in the crown, yet they are of common right public (as by the civil law) for every subject to navigate upon, and to fish in, without interruption."

(p. 22) "And although the right of property in the *soil* covered and flowed by those waters, is in the king to high-water mark; yet the *shore*, or the land which is between the high and low-water marks, is also of common right public. The maxim is, *Rex in ea habet proprietam, sed populus habet usum ibidem necessarium*; the king has the property, but the people have the use necessary. The rights of use are considered to emanate from the king to his subjects, who, by virtue of their subjection, become entitled to the free and uninterrupted enjoyment of what are deemed inherent privileges. These inherent privileges are those of navigation and fishery, privileges which are classed among those public rights denominated *jura publica*, or *jura communia*, and thus are contradistinguished from *jura coronae*, or the private rights of the crown. They are said to exist of *common right*, which, according to Sir Edward Coke, is only another epithet for *common law*. The common law of England is known by the various appellations of 'right,' 'common right,' 'public right,' and 'communis justitia.' When, therefore, it is said, that a man has a thing by common right, it is understood, that he has it by the common law. The common law is furthermore denominated 'common right,' because it is the common birthright or inheritance which the people have for the protection and safeguard of their privileges."

* * * * *

(p. 23) "The right of property in tide waters, and in the soil and shores thereof, is *prima facie* vested in the king, to a great extent at least, as the representative of the public. To such an ex-

tent, that to the rights of navigation and fishery he has no other claim than such as he has as protector, guardian or *trustee* of the common and public rights.”

* * * * *

(p. 24) “The important doctrine, that public rights, and such things as are materially dependent upon them, cannot be alienated by the crown, seems to have been established at a very early period. The rule, as laid down by Bracton, is, that these things which relate particularly to the public good cannot be given, sold, or transferred by the king, or separated from the crown.”

(p. 124) “Fishery in the sea, and in the waters which are made to flow inland therefrom by its egress and influence, constituting as it does, a great source of sustentation, has in all ages and in all countries been deemed of such importance, that it has ever been regarded a privilege open and common to all persons. Selden in his *Mare Clausum*, and Grotius, *De Jure Gentium*, have collected from the works of the learned of all civilized nations, as well philosophers, divines, and poets, as lawyers, to prove that the waters of the sea are, conformably to the use which nature intended them, as common to all men as the air which blows over them. The obvious justice, that fishery in such waters should be free, open, and common to every one, has made it a part of the civil law and of the common law.”

* * * * *

(p. 125) “By the common law (though the right of fishery is subservient in a measure to the right of navigation) it has ever been well settled, that no member of the community can be excluded from an equal and fair participation of the benefit afforded by tide waters of fishing therein, so long as it remains unrelinquished or not curtailed by public authority, or so long as no particular and exclusive right has been acquired by an individual by prescription, or by the inhabitants of a place, by custom. In England, although the king, says Lord Hale, ‘has the primary right of fishing in the sea, and the creeks and arms thereof; yet the com-

mon people of England have regularly a liberty of fishing in the sea, or the creeks and arms thereof, as a *public common of piscary*, and may not without injury to their right, be restrained in the exercise of it, unless in such places creeks or navigable rivers where either the king, or some particular subject has acquired a property exclusive of this common liberty.’”

* * * * *

(p. 132) “The English doctrine as to the common right of piscary in tide waters, was declared to be the law by the supreme court of New Jersey,* as it has been so declared or so recognized by the courts of other states. The *prima facie* common right is, in fact, directly or indirectly recognized in every case in this country, relating to the right of property in tide waters.”

Following are extracts from 3 *Kent's Commentaries*:

(p. 412) “This private right of fishery is confined to fresh water rivers, unless a special grant or prescription be shown; and the right of fishing in the sea, and in the bays and arms of the sea, and in navigable or tide waters, under the free and masculine genius of the English common law, is a right public and common to every person; and if any individual will appropriate an exclusive privilege in navigable waters and arms of the sea, he must show it strictly by grant or prescription. The common right of fishing in navigable waters is founded on such plain principles of natural law, that it is considered by many jurists as part of the law of nations * * *.”

13 *Am. & Eng. Ency. of Law* (2nd Ed.), p. 556:

(p. 556) “Fish in their natural element, unconfined, are public property. They are the property of the nation, and, in the United States, of the state in whose waters they may be.”

* * * * *

* *Arnold v. Mundy*, 6 N. J. L. 1.

(p. 559) "The right of fishing on the high seas, without the territorial limits of any state, is a right common to all mankind, and cannot be granted or restricted by any particular nation."

* * * * *

(p. 562) "When the Revolution took place the people of each state became themselves sovereign; and in that character the people of the several states hold the absolute right to all navigable waters within their territorial limits, including the soil under them and the fisheries therein; for their own common use, subject only to the rights which the Constitution of the United States provides shall be exercised by the general government.

The legislature of a state, as the representative of the people, may grant to individuals the exclusive right of fishing in any of the navigable waters of the state, provided special constitutional provisions are not infringed by the grant, or may, in the prosecution of a public purpose, impair or destroy the common right of fishing."

* * * * *

(p. 565) "The public right of fishing in navigable waters extends to high-water mark. And this is so even where the title of the adjoining riparian owner runs to low-water mark."

The authorities and decisions cited under Point (1), as well as those which follow under this point, show that the common law of England regarding navigation and fisheries was adopted and has always been followed in New Jersey.

Corfield v. Coryell, 4 Wash. C. C. 371; 6 Fed. Cas. 546.

In that case a vessel was confiscated while dredging for oysters in the Maurice River Cove, in violation of a statute of New Jersey, passed June 9, 1820, which forbade any person to rake any oyster bed between certain months and forbidding non-residents to dredge at any time within the territorial limits of the state. This suit was for trespass

brought in the name of the owner of the vessel, who was not in possession of it at the time. It had been chartered to others.

The decision was rendered in 1823 by Mr. Justice Washington of this court sitting in the circuit for the Eastern District of Pennsylvania.

Following are extracts from his decision which are pertinent to the question in this case. (Federal case pages are referred to.)

(p. 549) "It was insisted, that New Jersey is a sovereign state, and entitled to all the rights and prerogatives of a sovereign, except such as are ceded by the constitution. As a sovereign state, her territorial jurisdiction on the Delaware river extended to the middle of the river, and on the sea, to at least a marine league. This being her right to the waters adjacent to her coast, it includes all the fisheries to the same extent. That these fisheries are the common property of the citizens of that state, may be admitted; but clearly the state may regulate and control the exercise of this right for the common benefit; and the jurisdiction of the state over them is unquestionable. Mart. 157, 160, 162, 165, 168; Vattel, bk. 1, c. 22, secs. 276, 278, 266; Id. c. 20, secs. 234, 236, 246, 248, 253; Id. bk. 1, c. 23, secs. 287, 295, 205; Grotius, bk. 2, c. 2, sec. 5."

* * * * *

(p. 551) "The *jus privatum* which a state has in the soil covered by its waters, is totally distinct from the *jus publicum* with which it is clothed. The former, such as fisheries of all descriptions, remains common to all the citizens of the state to which it belongs, to be used by them according to their necessities, or according to the laws which regulate their use. 'Over these,' says Vattel (book 1, c. 20, secs. 235, 246), 'sovereignty gives a right to the nation to make laws regulating the manner in which the common goods are to be used.' 'He may make such regulations respecting hunting and fishing, as to seasons, as he may think proper, prohibiting the use of certain nets and other destructive methods.' Vattel, bk. 1, c. 20, sec. 248."

Paul v. Hazelton (37 N. J. Law 106) was a suit in trespass in which certain questions of law were certified to the New Jersey Supreme Court for an advisory opinion. The opinion was delivered by Mr. Justice Van Syckel. The case involved the taking of oysters from planted grounds in public navigable water where the tide ebbed and flowed. The following propositions of law are stated therein :

(p. 106) “It must be considered as settled law in this state—

1st. That the title to the bed of navigable streams is absolute in the state; and

2d. That fishing for oysters in the navigable waters of this state is a right common to all its citizens, which may be exercised by them at will, except so far as it is restrained by positive law. *Arnold v. Munday*, 1 Halst. 1; *Gough v. Bell*, 1 Zab. 157; S. C., 2 Zab. 411; *Stevens v. Paterson and Newark R. R. Co.*, 5 Vroom 532.”

In *Smith v. Maryland* (59 U. S. 71) this court reviewed, on writ of error, a judgment of the Circuit Court for Ann Arundel County, in Maryland. The main question, relative to the seizure of a vessel engaged in oyster dredging, is not of interest to us now, but as a basis of the court's decision therein, the following extracts are pertinent from the opinion of the court delivered by Mr. Justice Curtis :

“Whatever soil below low water mark is the subject of exclusive propriety and ownership, belongs to the state on whose maritime border, and within whose territory, it lies, subject to any lawful grants of that soil by the state, or the sovereign power which governed its territory before the Declaration of Independence.” (Citing cases.)

“But this soil is held by the State, not only subject to, but in some sense in trust for, the enjoyment of certain public rights, among which is the common liberty of taking fish, as well shell fish as floating fish.” (Citing cases.)

“The State holds the propriety of this soil for the conservation of the public rights of fishery thereon, and may regulate the modes of that enjoyment so as to prevent the destruction of the fishery. In other words, it may forbid all such acts as would render the public right less valuable, or destroy it altogether. This power results from the ownership of the soil, from the legislative jurisdiction of the State over it, and from its duty to preserve unimpaired those public uses for which the soil is held.

* * * * *

It was also suggested that it is repugnant to the 2d section of the 3d article, which declares that the judicial power of the United States shall extend to all cases of admiralty and maritime jurisdiction. But we consider it to have been settled by this court, in *United States v. Bevans*, 3 Wheat. 386, that this clause in the Constitution did not affect the jurisdiction, nor the legislative power of the States, over so much of their territory as lies below high water mark, save that they parted with the power so to legislate as to conflict with the admiralty jurisdiction or laws of the United States.”

History of the Nuisance.

In spite of the denials in the answer the proof conclusively shows dumping of garbage and refuse at sea by defendant daily (unless weather prevents) for many years past.

Street Sweepings.

Following are extracts from the annual reports of the Supervisor of the Port to the Secretary of War relating to the dumping at sea of street sweepings of defendant;

(1915) “The transportation of that part of the city’s waste termed street sweepings has been a cause of trouble and complaint. Street sweepings consist of rubbish and very light stuff which, when

loaded into dumpers, frequently fail to clear at sea. The material is apt to bridge when the dumper doors are opened, and as it is impracticable to wind the doors up tightly in this condition more or less material escapes on the way into the harbor. Efforts have been persistently directed by the supervisor toward securing the adoption of some more sanitary and satisfactory method of disposition. * * * it seems that the contract for the disposition of this class of matter is slightly ambiguous on that point. So long as the contractor finds he can fulfill the legal obligations of his contract more cheaply by depositing this matter at sea rather than on shore, he will do so regardless of the ultimate welfare of the harbor" (Plaintiff's Exhibit 321, p. 1640).

The reports of 1916, 1917, 1918 and 1919 repeats substantially the same language as that of 1915 (Plaintiff's Exhibit 322, p. 1765; Plaintiff's Exhibit 323, pp. 1852, 1853; Plaintiff's Exhibit 324, p. 1896, and Plaintiff's Exhibit 325, p. 1997).

The report of 1920 contains the following:

"Street sweepings. About 50 per cent of the city street waste is utilized for filling behind bulkheads and reclaiming shore land. The remainder is towed to sea. The deposit limits are not less than 4 nautical miles east to southeast of Scotland Lightship, in not less than 17 fathoms of water * * *" (Plaintiff's Exhibit 326, p. 1993).

The statement then repeats the remainder, except the last sentence of the report of 1915 above quoted.

The reports of 1921, 1922, 1923, 1924 and 1925 repeat the same language concerning street sweeping dumped at sea, as that contained in the report of 1920 (Plaintiff's Exhibit 327, p. 2016; Plaintiff's Exhibit 328, p. 2135; Plaintiff's Exhibit 329, p. 1980; Plaintiff's Exhibit 330, p. 1978; Plaintiff's Exhibit 331, p. 1893). Thence forward the subject of street sweepings is mentioned in the reports in practically the same language as above quoted.

Garbage.

The dumping of defendant's garbage at sea comes into the annual reports of the Supervisor of the Port of New York to the Secretary of War for the year 1918. From thence forward it is a subject of annual mention, as follows:

(1918) "*New York City garbage.*—The garbage of the city was disposed of by cremation at Barren Island, Jamaica Bay, and Lake Island, Fresh Kills Creek, Staten Island, during the past fiscal year, with the exception of the months of August, September and October (1917), when, owing to the destruction by fire of the disposal plant at Barren Island, it was necessary to deposit this objectionable material at sea. The point designated for its disposition was 15 miles southeast of Scotland Lightship, and to insure its deposit at the proper point one of the deputy inspectors of this office, usually the mate of the patrol boat collecting the permit at the Narrows, was instructed to take passage on the towing vessel on every trip and see that the material was disposed of in accordance with the terms of the permit, reporting that fact in each instance to the supervisor" (Plaintiff's Exhibit 324, p. 1896).

(1919) "*New York City garbage.*—The Barren Island incinerator has not been rebuilt and about November, 1918, the Staten Island plant ceased operation. These plants have always been objectionable to their neighborhoods, properties to leeward always suffering. The practice of disposing of garbage at sea has continued * * *.

Garbage deposited at sea, no matter what the distance from shore is apt to wash up on the beaches. The operation is likewise expensive. It would be an advantage to the neighborhood of the beaches to secure legislation against such practice, and to the city to dispose of its garbage in sanitary and unobjectionable purifiers" (Plaintiff's Exhibit 325, pp. 1997, 1998).

Subsequent reports repeat the same statements except for changes hereafter noted.

(1920) "*Garbage.*—* * * About two years ago, at the request of the New York City commissioner of street cleaning and at the urgent solicitation of the commissioner of health, the supervisor authorized the disposal of city garbage at sea as a temporary measure, to continue for two or three months only. The practice still continues, and there is no prospect of an immediate change. * * *

Experience indicates that garbage disposed at sea, at no matter what distance, is liable to wash up on the beaches. In addition, the practice of towing such material through the harbor is highly objectionable. Furthermore, there have been numerous reports of short dumping of such material. It was found in some cases, also, that the garbage was loaded on the dumpers covered with ashes and sweepings, and then taken out and deposited under a permit for the latter class of material, which may be disposed of at a distance of only 4 miles, instead of 15 miles, from the lightship. In other cases it was found that the towboats in misty weather or in the absence of the patrol had failed to go the full distance; sometimes only half or less. * * *

Violations of the law have been the subject of several conversations between the city authorities and the supervisor, and will probably be less frequent in the future. The question of a suitable alternative plan of disposing of such material has been frequently discussed with the city and is still under discussion" (Plaintiff's Exhibit 326, pp. 1993, 1994).

The reports of 1921, 1922 and 1923 repeat substantially the same statements as that of 1920 (Plaintiff's Exhibit 327, p. 2016; Plaintiff's Exhibit 328, p. 2135; Plaintiff's Exhibit 329, p. 1980).

(1924) "*Garbage.* * * *. About four years ago, at the request of the New York City commissioner of street cleaning and at the urgent solicitation of the commissioner of health, the supervisor authorized the disposal of city garbage at sea as a

temporary measure. The greater part of this waste is disposed of in this manner, but the city government completed and placed in operation during the year one 300-ton and one 100-ton (daily capacity) incinerator and has under construction one additional 300-ton unit and one 100-ton unit to be put in commission during the coming year. The city government also has money appropriated and available for the construction of five 300-ton units, but it will require some time to complete them. The dumping limits were 15 miles southeast by east of Scotland Lightship, but owing to frequent complaints from the beach resorts of New Jersey and Long Island of contamination from garbage the supervisor arranged with the department of street cleaning to extend the point of deposit to 19 miles from the lightship. This change was effected on June 1, 1924. * * *

Experience indicates that garbage dumped at sea, no matter at what distance from shore, is liable to wash up on the beaches. In addition, the towing of such material through the harbor is highly objectionable. * * *” (Plaintiff’s Exhibit 330, p. 1979).

The report of 1925 contains the same statements as that of 1924, with the announcement of certain changes in dumping grounds:

(1925) “During the summer months and until November 22, 1924, the dumping limits were assigned at a point 19 nautical miles southeast by east from Scotland Lightship to obviate the complaints from the beach resorts of New Jersey and Long Island in regard to contamination from this refuse. * * *” (Plaintiff’s Exhibit 331, p. 1894).

The report of 1926 contains the same statements as that of 1925, with the following in addition thereto:

(1926) “The greater part of this waste is disposed of in this manner, but the city government completed and placed in operation during the year 1924 one 300-ton daily capacity incinerator at West Fifty-sixth Street, New York, and one 100-ton daily capacity incinerator at Georgia Avenue, Brooklyn.

These two incinerators habitually burn 50 tons more than their rated capacity. During the year 1925 an additional 300-ton unit was placed in commission at Madison Avenue and One hundred and thirty-nine Street, the Bronx, and an additional 100-ton unit at West Eighth Street, Brooklyn. The second Brooklyn incinerator burns 150 tons of garbage per diem and the One hundred and thirty-ninth Street incinerator, with minor repairs, will burn 350 tons per diem. The city government also has money appropriated and available for constructing five additional 300-ton units. It was contemplated to build one at Stanton Street, one at Seventy-third Street, one at Two hundred and nineteenth Street, and two in the Borough of the Bronx. The work has been delayed by the difficulty of acquiring proper sites. People living in the vicinity of a proposed site object to such a structure and have at times taken out injunctions against the proposed work, claiming that it would constitute a nuisance. The modern incinerator, constructed as those at present in use in New York, is not a nuisance, and it is believed that by proper education people can be brought to see the necessity for such method of garbage disposal" (Plaintiff's Exhibit 332, pp. 1892, 1893).

The report of 1927 repeats substantially all of that of 1926, without enumerating the incinerating plants present or proposed. In place of that enumeration it says:

"the city has completed and placed several incinerating plants in operation and is engaged on a program of incinerator construction that contemplates the abandonment of dumping garbage at sea" (Plaintiff's Exhibit 333, p. 1915).

The report for 1928 repeats almost verbatim the statements of the report of 1927 (Plaintiff's Exhibit 334, p. 2013).

The report of 1929 made by Captain W. S. Anderson, a witness for both sides in this case, covers the subject rather fully in the following language:

(1929) "*New York City garbage and refuse.*— From November, 1896, to August, 1918, garbage was

separated from the refuse collected by the street cleaning department of New York City and was disposed of by reduction at plants on Barren Island and Staten Island, the remainder being deposited at sea and for shore filling. The Barren Island plant was destroyed by fire in 1917, and the Staten Island plant ceased operation about November, 1918. They were always objectionable to the people in their neighborhood. About 11 years ago, at the request of the New York City commissioner of street cleaning, and at the urgent solicitation of the commissioner of health, the supervisor reluctantly authorized the disposal of city garbage at sea as a temporary measure. Since that date the greater part of the mixed refuse of the city is placed on deck scows and dumping scows. The deck scows are transported to Rikers Island where the material is deposited on shore for filling and the dumpers are taken to the dumping ground at sea. The city government has, however, completed and placed several incinerating plants in operation, and is engaged on a program of incinerator construction that contemplates the abandonment of dumping garbage at sea. * * *

Although the point authorized for deposit of this class of material is 20 miles southeast from Scotland Lightship and is 20 miles from the nearest shore, many complaints have been received from owners of property and from visitors along the New Jersey coast of rubbish and garbage coming in on the beaches, especially during northeast storms and protracted periods of easterly winds. The cooperation of the commissioner of street cleaning has been obtained to refrain as far as practicable from sending the scows to the dumping ground during these conditions of weather and to instruct the masters of the towing tugs to strictly observe warnings of the United States Weather Bureau with reference to storms and unfavorable winds. This may ameliorate the condition but will not do away with it. The only solution is to do away with dumping at sea. * * *

Experience indicates that garbage dumped at sea, no matter at what distance from shore, is liable to wash up on the beaches. In addition, the towing

of such material through the harbor is highly objectionable" (Plaintiff's Exhibit 335, pp. 2080, 2081).

Concerning the promises of defendant to the Supervisor of the Port, as stated in these reports, respecting the discontinuance of dumping at sea, the following statement of Captain Anderson is of interest:

"Garbage is a sore subject. The War Department has for a good many years, directly and by the supervisor, urged New York City to provide other disposition of its garbage and refuse than by dumping it at sea. When it is understood that Greater New York produces daily about forty-five hundred tons of garbage and rubbish combined, the magnitude of the problem is perceived. At present some 60 per cent of that is disposed of other than by dumping at sea. The city is also busy with the construction of incinerators to take care of the rest. Official statement has been made to the supervisor that this desirable situation would be reached by the end of 1930.

Experience in the past indicates that these sanguine estimates are not to be taken too literally, however. The residents of any particular locality in which an incinerator is about to be built do not welcome it with open arms, and the city is not infrequently delayed by injunctions and other obstructive tactics. It is to be hoped that the new Sanitary Commission just established for Greater New York will be able to push along the work and finally solve the problem, and thus eliminate dumping garbage at sea. In the meantime, the state of New Jersey, by an action against the city of New York, is trying to encourage it in that direction" (U. S. Naval Institute Proceedings, Vol. No. 56, No. 7, Whole No. 329, July, 1930, p. 577).

A summary of the foregoing reports shows the following salient facts:

Until July, 1917, the city, while dumping its street sweepings at sea, undertook to dispose of its garbage at Barren Island and Staten Island. In July of that year the Riker Island plant burned and has never been rebuilt.

For some reason unexplained the Staten Island plant discontinued operation in November, 1918, and has never resumed. Thence forward until the present time, in spite of the quantity claimed during a few years past to have been incinerated, an ever-increasing quantity of garbage has been dumped at sea.

From time to time the dumping grounds have been moved further away from the harbor entrance, but always southeast by east of Scotland Lightship, on account of complaints that the garbage was driven by the wind to the shores of Long Island and New Jersey, but regardless of distance the Supervisor has deemed it advisable to state in each report during the past ten years that—

“Garbage deposited at sea, no matter what the distance from shore, is apt to wash up on the beaches. In addition the practice of towing through the harbor is highly objectionable.”

As far back as 1919 the Supervisor added:

“The operation is likewise expensive. It would be an advantage of the neighborhood of the beaches to secure legislation against such practice, and to the city to dispose of its garbage in sanitary and unobjectionable purifiers.”

Why additional legislation is necessary we do not understand, since the statutes quoted in Point (3) seem sufficient if the War Department saw fit to enforce them.

It also appears from those reports that while the practice of dumping at sea was an emergency measure to be allowed in 1917 “as a temporary measure, to continue for two or three months only,” “there is no prospect of an immediate change.”

We are not concerned with the recital in the reports of violations of the dumping regulations, since we contend that the strictest observance of the regulations would still create a public nuisance on the beaches. From time to time the reports mention the institution of incinerators, but still the quantity dumped at sea constantly increases

(Defendant's Exhibit 12). "Frequent complaints from the beach resorts of New Jersey and Long Island of contamination from garbage" is more than once noted in the reports (1920-1929).

In some of the correspondence from defendant's officials, elsewhere referred to, they attempt to show that it is impossible for this garbage to reach the New Jersey shores because of the reverse tide movements. That argument falls before the universal testimony of plaintiff's witnesses, as well as the reports of the Supervisor of the Port, that it is the wind from northeasterly or easterly directions, and not the tide, that brings the garbage to those shores (1929).

In the last quotation from Captain Anderson he expresses what has been the experience of plaintiff for the past seven or eight years with the empty promises of defendant to discontinue dumping at sea. Referring to "Official Statement" made to him that incinerators would be completed so that dumping at sea would be discontinued by the end of 1930, Captain Anderson says:

"Experience in the past indicates that these sanguine estimates are not to be taken too literally."

He points out the objections of residents in the vicinity of the proposed plants and the delays by injunctions. This was also referred to by counsel for defendant during the hearings. We submit that this is no valid defense. If the defendant lacks the power to build incinerators it must obtain it from the legislature. It cannot be heard to present such a plea when it is imposing upon plaintiff an intolerable nuisance.

In *Wisconsin v. Illinois*, 281 U. S. 179, the defendants had shown that the people of Illinois had refused, on a referendum vote, to authorize the issuance of bonds to carry out sewer projects to relieve the necessity of diverting waters from Lake Michigan, which this court had

declared to be unlawful. Mr. Justice Holmes, in delivering the opinion of this court, said (p. 197) :

“They must find out a way at their peril. We have only to consider what is possible if the state of Illinois devotes all of its powers to dealing with an exigency to the magnitude of which it seems not yet to have fully awaked. It can base no defenses upon difficulties that it has itself created. If its Constitution stands in the way of prompt action, it must amend it or yield to an authority that is paramount to the state.”

In spite of promises of more incinerators and less dumping at sea, the following amounts of garbage alone were dumped at sea by defendant during the five-year period shown :

<i>Year</i>	<i>Cubic yards</i>
1925	1,517,934
1926	1,303,119
1927	1,219,416
1928	1,378,572
1929	1,478,165

(Defendant's Exhibit 12.)

Defendant's Exhibit 12 purports to show only “garbage.” Unless that term includes small wood, bottles, cans, bed springs, furniture and many other forms of rubbish and refuse, the amount of material actually dumped at sea by defendant must be greatly in excess of the cubic yardage shown on Defendant's Exhibit 12. At any rate, it clearly appears, thus far, that a prodigious amount of garbage and refuse is dumped by defendant in the ocean off the coast of plaintiff. What becomes of it is shown, in part, by the above-mentioned reports of the Supervisor of the Port, who annually repeats that—

“Experience indicates that garbage dumped at sea, no matter at what distance from shore, is liable to wash up on the beaches.”

Official Objections to Dumping at Sea.

On June 5, 1907, Mayor McClellan of New York City appointed a commission, consisting of H. de B. Parsons, Rudolph Hering and Samuel Whinery, all consulting engineers of the highest talents, to investigate and report on an improved and more effective system of street cleaning and waste disposal. Their report, entitled "Report of Commission on Street Cleaning and Waste Disposal, The City of New York," was submitted to Mayor McClellan on December 31, 1907. It contained a complete survey and analysis of the problem; not only in New York City but in other principal cities of the United States and Europe. In discussing the various possible means of disposition they touched upon that of dumping at sea and disapproved of it in the following language:

"Dumping at Sea.

All the refuse collections could be dumped into the Atlantic Ocean, *but unfortunately the least harmful material sinks and the foulest floats, so that much of the floatable mass will be scattered along the beaches, through the action of current and wind. This fouling of the beaches creates a nuisance that the public should not be asked to tolerate.* The cost of sending the scows so far to sea that there would be no danger of fouling the beaches, and the delays and interruptions caused by storms and ice, forbid the use of this plan. *The dumping of refuse at sea should not be resorted to except in cases of emergency, when the period of such sea dumping will be of short duration.*" (Italics ours.)

That "emergency" occurred when the Barren Island plant burned in August, 1917, and the Staten Island plant closed in November, 1918. For more than thirteen years plaintiff and its citizens have been compelled to endure the horrible fulfilment of the prophecy of those "three wise men."

Exhibit No. 347 (also referred to in the record as Exhibit No. 348) is entitled, "Report of the collection and disposal of solid wastes in the city of New York, 1921." It was submitted to Mayor Hylan, June 1, 1921, by a committee of ten heads of departments and officials of that city. It reviews the method of collecting and disposal of garbage, rubbish, ashes, street sweepings, paper, etc., past and present, and discusses future changes in those methods. It registers objection to the dumping of garbage and refuse at sea, but does not recommend any change in that practice because of the cost involved therein. It deals with the subject primarily on a basis of economy. The following extracts from the report are pertinent to this case:

(p. 5) "Since October 2nd, 1918, all garbage from the Boroughs of Manhattan, The Bronx and Brooklyn has been disposed of by dumping at sea. For this purpose the department uses seven sea-going dumpers of its own and two hired dumpers. These vessels are so constructed that the garbage is dumped into a series of pockets on both sides which open either at the side or at the bottom by means of a mechanical contrivance operated from the deck. The garbage is discharged without the employment of manual labor."

* * * * *

(p. 7) "Past Method of Disposal of Garbage, Ashes, Street Sweepings and Rubbish and Garbage. Prior to August, 1896, all refuse collected in Manhattan, The Bronx and Brooklyn was mixed, placed upon deck scows and towed to sea. In 1896, the disposal of garbage at sea was discontinued and a five-year contract was made with the New York Sanitary Utilization Company, which erected a garbage reduction plant on Barren Island in Jamaica Bay, the site being selected by the city officials."

* * * * *

(p. 7) "Between January 1st, 1914, and October 2nd, 1918, a period of four and one-half years, the City of New York disposed of all its garbage from Manhattan, The Bronx and Brooklyn, not only

without any expense to itself, but actually at a profit in cash of \$319,376, and in securities of \$240,000, a total profit of \$559,376, or at the rate of about \$124,000 per year. Since October 2, 1918, the city has disposed of its garbage by dumping at sea."

* * * * *

(p. 10) "The greatest objection to the present system of disposing of waste material is in connection with the method now being used for getting rid of garbage, which is both unsanitary and uneconomical. For some years the disposal of garbage not only did not cost the city anything, but as a matter of fact, returned a small yearly profit. * * *. Aside, however, from the question of cost, it seems undesirable to dump garbage at sea as it is being done at present. It is known that the Federal authorities quietly resent, if they do not openly object to it, and there is always the possibility of objections from other communities which have in the past claimed that they have been injured by the practice. When these objections become sufficiently strong it may be that New York will find itself so unprepared as to be unable to quickly introduce a more satisfactory form of disposal."

* * * * *

(p. 10) "In this manner much valuable information was obtained respecting the reduction and drying of garbage, the burning of garbage and rubbish, complete incineration of all waste products and a variety of other processes and forms of utilization whereby it was argued the City of New York could effect a material saving over the system now in use."

* * * * *

(p. 14) "The committee believes, therefore, that the city must continue for a time, at least, to dump the garbage at sea, even though it recognizes that this practice is not free from objections. * * * It recognizes, above all things, that it is essential to dispose of city wastes in the most sanitary and most satisfactory manner, and desires to place itself on record as favoring only such method and

plan of operation as can be established to be free from nuisance. The public health is greater than any other consideration. If profits can be made, or if the cost can be reduced, so much the better, but these should be of secondary consideration. In expressing this opinion the committee believes it has the support of those who have given this subject thought and study.”

That report discloses three important facts, namely :

1. The false economy of dumping at sea ;
2. A recognition of the nuisance which it creates ;
and
3. That only the selfish consideration of cost has prevented the adoption of some other method.

Samuel A. Greeley is a sanitary engineer and a member of the firm of Pierce, Greeley & Hanson of Chicago (R. 2008). In 1906 he was employed by Rudolph Hering to assist in the studies upon which the Parsons-Hering-Whinery report of 1907, above referred to, was based (R. 2009). He was the co-author with Mr. Hering in the publication of a book, entitled “Collection and Disposal of Municipal Refuse,” in 1921, which is a standard text book on the subject. He is familiar with the methods of the defendant in the collection and disposal of garbage (R. 2012).

He testified that the dumping of garbage at sea is a temporary means of disposal suitable for emergency only (R. 2013). The objections are: 1. The danger of polluting adjacent shores; and (2) the danger of interruption by rough weather (R. 2015), which tends to increase the quantity dumped at one time.

Dumping at sea is not a satisfactory method of garbage disposal (R. 2016) for the reasons described at page 100 of the Parsons-Hering-Whinery report (R. 2017; Plaintiff’s Exhibit 346), and for the reasons given in the report of 1921 (R. 2019; Plaintiff’s Exhibit 347, R. 2030).

He also quoted from a paper published in the "Proceedings of American Institute of Civil Engineering," November, 1926, by Mr. Kenneth Allen, Sanitary Engineer in the office of the Chief Engineer of the Board of Estimate of the defendant, stating in part as follows:

"But the floating refuse is unsightly, and with winds in the quarter of the southeast, there is always the probability of its reaching the shore and fouling the beaches" (R. 2020).

He also quoted from an article by Mr. Allen in the magazine "Municipal Sanitation," January, 1930, page 16, entitled "How New York Handles Her Garbage and Rubbish Problem," as follows:

"Many complaints have been received from owners and lessees of Long Island and New Jersey bathing beaches, of rubbish and garbage which drifts at times to the shore and strand there."

That is also Mr. Greeley's opinion (R. 2020-2021). An incinerating plant of 350 tons per day capacity requires one year for actual construction (R. 2033).

Plaintiff's Exhibit 257 is the minutes of a conference of a joint committee of New York and New Jersey of the National Coast Anti-pollution League, held at Long Beach, New York, September 19, 1923. The City of New York was represented by Commissioner Taylor of the Street Cleaning Department and George P. Nicholson, Corporation Counsel. There were other representatives from New York, including Captain Olmstead, Supervisor of the Harbor, and there were representatives from New Jersey.

The record of that meeting, generally speaking, represents a mutual exchange of alibis and compliments. The subject-matter of the meeting was garbage on the New Jersey and Long Island beaches. Corporation Counsel Nicholson admitted that some of the garbage is attributable to the dumping of garbage and trash by New York City (p. 2). He also said that the dumping of garbage at sea was "only a temporary arrangement" (p. 4) and he ex-

pressed the opinion that it was impossible for it to reach the shore.

Captain Olmstead stated that after dumping the scows circled around anywhere from two to three hours to wash everything out of the dumpers (p. 9). He described the dumping grounds as fifteen miles out—about sixteen miles from one shore and seventeen from New Jersey shore, “and possibly some garbage does get in, that is a question we have not decided yet” (p. 9). Regarding the dumping of city garbage at sea, Captain Olmstead said “that is not the simplified way to handle garbage. Most cities have incinerators and burn it; that is the way to do” (p. 10). He also said, “You will get this wood and stuff, it would float in” (p. 11). Commissioner Taylor said, among other things, “However, I want to say this question of garbage has been a vexed question for a great number of years” (p. 13). In answer to the suggestion that the dumping grounds be removed further to sea, Commissioner Taylor said: “It would not do you folks any good” (p. 14). The question was raised about the bottles that came on the beach and Commissioner Taylor admitted a few might find their way into the refuse from the buildings (p. 21).

Plaintiff's Exhibit 258 is the minutes of a meeting of the Governor of New Jersey, Congressmen and Mayors and other representatives of the seashore municipalities held at Asbury Park, August 23, 1923, to take action concerning the pollution of the beaches and water with filth, garbage, etc. The only purpose of this exhibit is to show the widespread interest in their discussion of this subject at that meeting.

Governor Silzer's testimony in statement form, with the correspondence and papers therein mentioned, was introduced as Exhibit No. 298. A summary of those papers is as follows:

September 10, 1923: A letter from John W. Weeks, Secretary of War, to Governor Silzer stating that the War Department had issued no permits for dumping New York City garbage at sea, but that permits had been granted

by the Supervisor of the Harbor; that temporary permission only has been given "on the understanding that the practice of dumping at sea was regarded as highly objectionable and that the city was expected to provide other methods of disposal as soon as possible."

June 16, 1923: Letter from Mayor Hetrick of Asbury Park to Mayor Hylan of New York City complaining that "the Asbury Park bathing beaches are completely littered with refuse and trash that is dumped by the City of New York by scows that empty too near our shore line," and asking that the dumping of garbage and trash be made at sufficient distance from the shore to prevent the material from being carried to the beaches.

June 22, 1923: Letter from Commissioner Taylor, Department of Street Cleaning, New York City, to Mayor Hetrick stating that the garbage from New York City is towed a distance of twenty miles southeast of Scotland Light and suggesting that the garbage on beaches may come from steamships.

August 4, 1923: Letter from Mayor Hetrick to Governor Silzer complaining about pollution and uncleanness of the beaches on account of garbage and describing the importance of the seashore summer resort business and the conservation of seafood, both of which are being seriously affected by the garbage.

August 15, 1923: Letter from Mayor Hetrick to Governor Silzer referring again to the pollution of the New Jersey beaches by rubbish and trash dumped by the City of New York.

August 8, 1918: Letter from Health Commissioner R. S. Copeland of New York City to Commodore Smith, Supervisor of the Harbor, admitting the dumping of garbage at sea as a "temporary disposition of garbage"—"it is simply a temporary expedient to bridge over an emergency."

August 17, 1918: Letter from Commissioner MacStay to Commodore Smith, Supervisor of the Harbor, requesting a temporary permit "for the dumping of said material

(garbage) at sea until about the 15th of September (1918)."

August 15, 1918: Letter from Secretary Kohler, Department of Health, New York City, to Commodore Smith, Supervisor of the Harbor, stating that the city is faced with a situation "approximating a public nuisance in relation to its garbage disposal" and requesting permission to dump the garbage at sea. He refers to "a so-called 'influenza' epidemic" as connected with the garbage.

December 9, 1918: Letter from Commissioner MacStay to Commodore Smith admitting the dumping of two scows at sea "loaded with ashes, sweepings and garbage" and asking permission to dump at sea an accumulation of "70 loaded deck scows" of "this mixed material."

December 18, 1918: Letter from Commodore Smith, Supervisor of the Port, to Mayor Hylan concerning "this most important subject of deposit of city's garbage at the mouth of the harbor" and referred to permits issued "in the summer of 1906" "for the deposit of that material at a point three miles southeast of Scotland Lightship, which, however, met with a great deal of objection and complaint from residents along the New Jersey shore" and referring to the renewal of the conditions that existed at that time.

"In view of the experience above stated I feel that I should not be called upon to jeopardize the health of residents and sanitary conditions of the beaches along Long Island and New Jersey coast by modification of the conditions as to the deposit of such offensive material as at present in operation" * * * "As I have already stated to you in my previous communication, the deposit of this material at the mouth of the harbor is most objectionable from every point of view."

May 14, 1924: Letter from Director Price, New Jersey Department of Health, to Mr. Pearse, Secretary to the Governor of New Jersey, "in reference to garbage nuisance along the Atlantic Seaboard" and enclosing the report of an investigation "of this nuisance." The accompanying report is dated May 14, 1924, and covers the result of an inspection of the New Jersey seacoast from Deal to Bel-

mar, showing that "the condition is as bad, if not worse, than that which occurred last year," and stating that "large quantities of garbage were cast up on the beach" * * * "The amount of garbage was equally distributed along the entire distance" with greater accumulations along bulkheads and jetties. The articles observed in this garbage are described. "This will cause a great expense to the shore municipalities and will have to be done very soon because objectionable odors have already been given off by the material and flies are feeding on the material in increasingly large quantities."

May 24, 1924: Letter from Director Price to Governor Silzer enclosing another report "concerning garbage and refuse along the Atlantic Seacoast in our state" and transmitting packages of refuse indicating "that there appears to be no doubt but what this garbage and refuse comes from New York City."

The accompanying report is dated May 22, 1924, and covers the shore from Spring Lake to Long Branch and stating "the garbage under the boardwalks was rapidly disintegrating and giving off very perceptible odors. There was no doubt that this was New York garbage rather than steamship refuse. The accumulation was nearly 2 feet deep and the drift covered the entire stretch from Long Branch to Spring Lake, indicating that enormous amounts had been dumped at sea." The report then describes articles which bore printing material showing that they came from New York City. It is ascribed to the "five-day northeast winds preceding the accumulation," and containing a report of one Proctor, who stated that of his own knowledge scows are frequently dumped twelve miles or less from land. Pictures of garbage accumulations on the beach accompanied that report.

May 29, 1924: Letter from Commissioner Taylor, Street Cleaning Department of New York City, to Governor Silzer admitting the dumping of garbage at sea and describing the dumping place. He states what has been done to provide incinerating plants and promising to take every precaution to see that the New Jersey beaches are kept free from refuse and litter.

May 31, 1924: Letter from Captain Fremont, Supervisor of the Port of New York, to Governor Silzer stating that "since 1918 a certain amount of New York City garbage has been going regularly to sea every day, and depositing it a point not less than fifteen (15) nautical miles to the eastward of Scotland Light Vessel and promising to further assure that this refuse will not find its way ashore, by increasing the distance of the dumping grounds. I can assure you that the seriousness of the condition of which you speak is well appreciated by this office."

September 30, 1924: Letter from Mr. Pearse, Secretary to Governor Silzer, to Mr. Nicholson, Corporation Counsel of New York City, describing articles that come in on the beach in the garbage.

June 19, 1925: Letter from Governor Silzer to the Secretary of War, complaining about the litter of New York City garbage along the beaches of New Jersey and asking him to take action to require the garbage to be hauled further to sea and to require New York City to complete incinerators so as to stop the garbage dumping. "We wish to live at peace with our neighbors and have no desire to interfere with other people's business, but only in this way will New York be forced to finish its incinerator plants. Our information is that they could have been and should have been finished long before this time."

July 9, 1925: Letter from the Acting Secretary of War to Governor Silzer replying to his letter of June 19, 1925, "The objectionable features of which you speak are appreciated, and I am urging the Mayor of the City of New York to use his influence in the matter of providing other means of garbage disposal." "Storms sometimes cause the premature dumping of scows at points where the material may possibly be washed ashore."

July 22, 1925: Letter from Governor Silzer to John W. Weeks, Secretary of War, pointing out the impossibility of this garbage coming from passing vessels as has been suggested by New York City.

There are many others of like import, all of which show the efforts made by Governor Silzer during his three-year term of office (1923-1925, incl.) to improve this condition.

Governor Moore's statement on the record was offered as Plaintiff's Exhibit 299, and was accompanied by certain letters therein referred to. He was Governor of New Jersey for the years 1926, 1927 and 1928. These letters show a continuation for another three years of the efforts of New Jersey executives to obtain some relief from the garbage condition on the shore. Following references to those letters are made:

July 1, 1926: Letter from Captain Bennett, Supervisor of the Port, to Governor Moore, "The only final solution of the problem, so far as I can see it, is the erection of suitable and adequate incinerators to handle the garbage in order that no New York City garbage is dumped anywhere at sea. Constant pressure is being brought to bear on the municipal authorities."

July 10, 1926: Letter from Secretary of War Davis acknowledging complaints about garbage accumulations on the New Jersey coast. "In reply I would state that this situation has been brought to the attention of the Supervisor of New York Harbor with instructions to take necessary action to insure that none of the New York City garbage reaches the New Jersey coast."

"You will probably be interested in knowing that the Department has also called the attention of the Mayor of New York City to the objectionable features of this method of garbage disposal and the importance of the early completion of the city's program for the construction of incinerators and disposing of the garbage on shore."

June 23, 1927: Letter from Captain Bennett, Supervisor of the Port, to Governor Moore acknowledging complaints "in reference to the unfortunate condition of the beach at Avon and other beaches in the vicinity." "I believe that by continuance of the pressure which is continually brought to bear on the City of New York, that by the end of 1931 the necessity for dumping garbage at sea will have passed."

July 18, 1927: Letter from Acting Secretary of War Davison to Governor Moore acknowledging complaints about garbage on the New Jersey beaches:

“As you know the Federal laws prohibiting the discharge of refuse matter into the navigable waters of the United States are primarily intended to protect navigation, being based upon the power reserved to Congress by the commerce clause of the Constitution to regulate and protect interstate and foreign commerce. Accordingly, this Department does not consider that it is authorized to control the discharge of refuse matter which has no injurious effect upon navigation, but is harmful merely on account of causing objectionable deposits on bathing beaches or other property.”

* * * * *

“The War Department has communicated several times with the Mayor of New York urging early completion of this program and, while it seems that the Department has done everything it can to improve the situation, it will again call the matter to the attention of the proper officials of New York.”

Defendant has not only disregarded all these complaints and admonitions, but has also disregarded two other very direct and positive demands of the Secretary of War.

Plaintiff's Exhibit 336 is a letter dated July 9, 1925, from the Acting Secretary of War to Mayor Hylan of New York City, reading as follows:

“Referring to the present practice of the City of New York of disposing of garbage by dumping it at sea outside of Sandy Hook, I would inform you that the Governor of the State of New Jersey has protested to the Department against the continuance of such dumping as a nuisance, a detriment to health, and, as in many cases, almost destroying beaches both of New York and New Jersey for bathing purposes.

As you are doubtless aware, deposits of this kind are forbidden by the Act of Congress approved June 29, 1888, as amended by Section 3 of the River and Harbor Act of August 18, 1894, excepting under authority of a permit granted by the Supervisor of the Harbor.

That official gave permission for such dumping as an emergency measure soon after the destruction of the Barren Island Garbage reduction plant in 1917. The action was on the understanding that the city would immediately take steps to dispense with the practice. It appears, however, that it has been continued to the present time, and that there has been considerable delay in the completion of other means of disposal.

In view of the representations made to the Department by the Governor of New Jersey and others concerning the objectionable features of such dumping, I feel constrained to advise the Supervisor that steps must be taken to terminate the privilege as soon as possible, and I wish to ask that you will urge upon the proper city officials the necessity of promptly taking action to dispose of garbage otherwise than by dumping at sea."

Plaintiff's Exhibit 337 is a letter dated July 18, 1927, from the Acting Secretary of War to Mayor Walker of New York City, reading as follows:

"Reference is made to previous communications from this Department urging that the City's program of construction of garbage incinerators be pressed to completion as rapidly as possible.

The Department is again receiving numerous protests against the present method of disposing of New York City garbage by dumping at sea and I desire, therefore, to renew at this time the suggestion that every possible effort be made by the City to expedite the completion of sufficient incinerators to dispose of all its garbage so that this objectionable dumping may be discontinued."

The position of the defendant during the hearing is the same as it has been during the past seven or eight years

of complaint of officers of the State of New Jersey and of the seashore municipalities. The defendant's officers have stoutly claimed that the garbage which they dump at sea did not come ashore in New Jersey. At the same time Commissioner Taylor of the Street Cleaning Department of defendant was making trips to Seabright pleading with Smack to "lay off of him" (R. 12, 13) because the constant complaints from the New Jersey shore were making his life "a hell" (R. 63) and promising that if the complaints were withheld defendant would complete all the plans for incinerating all of its garbage and dumping at sea would be discontinued within a year. That was in August, 1925 (R. 14).

Also Commissioner Taylor and Corporation Counsel Nicholson attended a meeting on September 19, 1923, of an organization composed of representatives from the Long Island and New Jersey beach municipalities formed for the purpose of stopping the pollution of the beaches by New York City's garbage. At that meeting both of them promised that within a relatively short time all dumping at sea would be stopped (Plaintiff's Exhibit 257).

This strange companionship of denials, and of promises not to do it any more, are to be found in the correspondence and negotiations between Governor Silzer and the officials of defendant as indicated in Exhibit 298 and the accompanying correspondence and papers, and also in the papers and letters which accompany Exhibit 299, which describes Governor Moore's efforts to stop this nuisance. According to these promises complete discontinuance of dumping at sea has been promised for some time in every year since 1925.

The reports of the Supervisor show that repeatedly since 1920 "the question of a suitable alternative plan of disposing of such material has been frequently discussed with the city and is still under discussion" (Plaintiff's Exhibit 326, pp. 1393, 1394).

In 1929 the city is still promising the Supervisor of the Port that it "is engaged on a program of incinerator con-

struction that contemplates the abandonment of dumping garbage at sea (Plaintiff's Exhibit 335, pp. 2080, 2081).

Defendant's witness, Dr. Schroeder, the present Commissioner of Sanitation and Chairman of the Board, testified to the policy of the defendant respecting final disposition of garbage; that it intends to completely incinerate all rubbish and garbage (R. 1795-1796). They have a program for the construction of incinerator which, if approved, they would be able to complete by June, 1934 (R. 1796-1798). He stated that by June 1, 1934, no material would be dumped at sea if their present program is carried out (R. 1799). Having had these promises for so many years, the Supervisor of the Port in July, 1930, says, "Experience in the past indicates that these sanguine estimates are not to be taken too literally, however." These efforts of the Supervisor of the Port have been repeatedly supplemented by those of the Secretary of War (letter of July 9, 1925, from Acting Secretary of War to Governor Silzer, p. 2, part of Exhibit 298; letter of July 10, 1926, from Secretary of War to Governor Moore, and letter of July 18, 1927, from Acting Secretary of War to Governor Moore, part of Exhibit 299).

Governor Larson's testimony shows that the pledge to clean up the beaches of New Jersey by stopping the nuisance of garbage from New York was in the Republican platform of New Jersey continuously and every year from 1922 to 1929, both inclusive, and in the Democratic platform of New Jersey for four of those years. It was discussed in the annual messages of Governor Silzer for 1924 and 1926, and of Governor Moore of 1927, and of Governor Larson in 1929. It was the subject of joint resolutions of the legislature in 1927, 1928 and 1929 (Plaintiff's Exhibits 66, 67 and 68, R. 373-379). This suit was brought pursuant to the instructions of the legislature contained in the resolution of 1929.

As a result of this accumulation of experience of the Supervisor of the Port, the Secretary of War and the negotiations of the governors and resolutions of the legislature

covering a period of the past seven years, plaintiff is convinced that defendant's promises are entirely worthless, and that only prospect of relief is through an injunction by this court.

Testimony as to Navigation and Fishing.

Because of its importance in showing actual dumping of garbage and refuse at sea by defendant, its presence and movement in the water after dumping, and its detrimental effect upon navigation and fishing, the testimony of Mr. Smack and the fishermen will be set forth quite fully.

Plaintiff has prepared and printed, in narrative form, all of the testimony except that taken at the hearing on December 5, 1930, and has provided the special master and the defendant with copies thereof. This will facilitate the examination of the testimony in detail. The testimony of the hearing of December 5th has likewise been reviewed in narrative form and is printed as Appendix "D" to this brief. At the beginning of the abstract of the testimony in both instances there is a list of the witnesses with page reference to their testimony in the stenographer's minutes and in the printed book. There is also a complete list of exhibits with like duplicate page references.

Appendix "A" to this brief is a list of articles identified on the garbage scows, in the sea and on the shore, connected up between the scows and the shore, with page references to each place in the record where each article is mentioned. The letters "N. Y." after a page number means that at that place in the record that particular article is identified as having come in the garbage from New York City. With rare exceptions no attempt will be made in the text of the brief to repeat or enumerate these articles and reference to them will be indicated by the term "garbage," although they do include refuse, generally, in addition to garbage.

Appendix "B" to this brief is a tabulation of the municipalities with reference to which testimony was given concerning winter and summer populations, length of beach

front, value of hotels and boarding houses, assessed valuation, cost of boardwalks, jetties, piers, pools, pavilions and pleasure places, value of private homes, cost of cleaning beaches, cost of bathing facilities and investment in fish pounds.

For convenience of discussion the testimony has been divided as much as possible into single subjects. The following discussion under this point has been arranged accordingly.

It is impractical to separate the testimony on the two subjects of Navigation and Fishing without duplication of testimony and citation.

Plaintiff claims for its citizens the rights of free and unimpeded navigation and of uninterrupted free fishery in all the waters within its territorial limits, including the marginal sea adjacent to its shores and also upon the high seas. These rights include free and unimpeded access upon and across the public beaches owned by the sovereign for the benefit of its citizens between high and low-water mark. Plaintiff contends that anything that interferes with any of these rights creates a public nuisance.

Dumping and Drifting of Garbage.

Captain Anderson testified that a good many hundred tons of garbage are dumped at sea every day by defendant (R. 1621). And in 1929 complaints of thirteen violations were filed by his office with prosecuting authorities of the Federal Government for violation of garbage permits alone (R. 1622-1623). His office received complaints from representatives of cities in New Jersey and Long Island and from individuals about the dumping of New York City garbage (R. 1626). The permits obtained in 1918, and reluctantly authorized by the Supervisor, was for the dumping of city garbage at sea as a temporary measure, but that temporary status has never changed (R. 1631). The statement in the Supervisor's report of 1929, that "Experience indicates that garbage dumped at sea, no matter at what distance from shore, is likely to wash up on the beaches. In addition, the towing of such material

through the harbor is highly objectionable" is Captain Anderson's own language and his own opinion (R. 1632-1633). He has had complaints about dumping garbage at sea from both Long Island and New Jersey in about equal number (R. 1932). He has been in the navy for over thirty years and is familiar with the winds and their effect on the surface of the sea (R. 1937). In view of his experience he believes the garbage from these dumps could reach the New Jersey shore (R. 1938).

John G. Haas, a Deputy Inspector of Barges connected with the office of the Supervisor of the Port, investigated floating garbage dumped by New York City at sea on six trips made in February, March and April, 1929 (R. 1944). He stayed out twenty-four hours two or three times. When the garbage is dumped it stretches out a mile or so, 30 or 40 yards wide. He picked out the biggest drift and stayed with it (R. 1945). Wind influences the movement of garbage on the surface (R. 1946). On March 1, 1929, three scows dumped eight miles southeast of Scotland Light. The garbage drifted to within nine miles of Long Beach (Long Island) in twenty-four hours. When he left it it was still headed toward the beach (R. 1947).

On March 19, 1929, three scows dumped eight miles southeast of Scotland Light at a point about twelve miles from the Jersey shore. In twelve hours it had drifted to within three miles of the shore at Long Beach (R. 1948). There was a twenty-five mile an hour wind and the garbage drifted thirteen or fourteen miles during twelve hours (R. 1949), and had distributed itself over an area greater than he could see from his boat. On February 25, 1929, he observed two scows that dumped eight miles southeast by east of Scotland Light. He followed it from 5.50 P. M. to 11 A. M. the next day (R. 1950). The garbage worked northerly for four or five hours and then back to the southward; then to the westward toward the New Jersey shore. A thirty-five mile wind toward the Jersey shore compelled him to leave the garbage when it was approximately six miles from that shore and moving in that direction (R. 1951) about off Seabright, N. J.

On March 11, 1929, three scows dumped eight miles southeast by east of Scotland Light and the garbage drifted eastwardly before a southwest wind. On February 22, 1929, he observed a scow dumped (R. 1952); he followed it for twenty-four hours and in that time it drifted approximately eighteen miles without much wind (R. 1953). April 4, 1929, three scows dumped twelve miles southeast by east of Scotland Light. He followed it for twenty-four hours. It drifted from eight to ten miles in that time (R. 1954). Of the instances he observed there was only one when the direction of the wind was taking the garbage to the New Jersey shore (R. 1956). The wind affects the surface (R. 1957).

Mr. Smack testified that garbage has come ashore since he was seven years old. It comes whenever the wind is from the east and the quantity has increased from year to year (R. 9). The quantity was very large in 1924 and was the source of constant complaint because it prevented bathing (R. 10). He was the superintendent of the Seabright Beach Club (R. 7). The garbage became so bad in 1926 that he was appointed a committee of one by the Seabright and Rumson Chamber of Commerce to try and obtain relief (R. 11). In August of the previous year Mr. Taylor, the Street Cleaning Commissioner of New York City, came to the Seabright Beach Club with another man and talked with Mr. Smack and his lifeguards. This was a result of complaints that had been made to the New York City authorities. Taylor promised Smack that if the latter would "lay off of him" within a year the city would have completed plans to incinerate all of its garbage (R. 12, 13).

From April 30th through the summer of 1929 Mr. Smack made a special study of the garbage situation on the beaches and of the dumping at sea. With Gustave Holgarson and James Hall as members of his crew, he went to sea on thirty-four different occasions to observe where the New York City garbage scows dumped their garbage and what it contained (R. 13). On fourteen of these occa-

sions they were close by when the scows dumped and they deposited postcards in bottles, self-addressed and stamped, bearing a request for the name of the finder with place and date of finding and that it be mailed. They were addressed to Mr. Smack (R. 14). Sixty-one of these cards came back by mail from finders on beaches from Long Island, New Jersey and New England.

On May 22, 1929, he observed the largest and foulest garbage dump that he had seen. Two scows were going out and he met a number of scows coming in and out. The loaded ones were moving southeast by east of Scotland Lightship. He saw three loaded scows dumped and some other loaded scows going in the same direction. The returning scows left a trail of garbage in the sea after them. He followed this trail of garbage and grease on the water for two miles where he found garbage strewn over the surface of the sea for an area seven miles long and two miles wide (R. 25). He was present when two other scows were dumped that day. Piles of garbage remained along the ridge of the scows which dropped off into the sea. These scows bore the initials D. S. C., representing the Department of Street Cleaning of the City of New York and another identification letter which was used in the place of numbers.

On June 30, 1929, he and his associates saw three New York City scows dump garbage eighteen miles southeast by east of Scotland Light. He ran into the mass while the dumping was in progress. In addition to the body of a perfectly formed child (R. 27), the garbage contained a great many different articles which are enumerated in a list which the witness made at the time and read into the record. We will not pause here to enumerate the articles which the witness saw in that garbage, since they are included in Appendix "A," but by comparison of that list with the articles enumerated by other witnesses who testified to conditions on the shore, it is readily observed that the articles and class of articles are the same as all the witnesses testified to generally (R. 28). The different kind of articles contained in the garbage as observed by

the witness in the scows, in the water and on the shore are so numerous and some of them are of a nature and condition so disgusting and revolting that we have decided not to repeat them with reference to the testimony of every witness.

On the June 30th date Smack saw a number of scows dumped. Garrett Johnson was with him to take pictures, which were offered in evidence and will be discussed collectively in their proper place. These pictures were identified, not only by Mr. Johnson, but also by Mr. Smack, as being true representations of conditions which existed at or near the dumping grounds and also the conditions of the scows on their way in with large masses of garbage clinging to the ridges and being pushed into the sea by the attendants as the scows neared the shore.

On July 17th Mr. Smack went out again with Johnson, Hall and Holgarson (R. 29), and they took other pictures of the dumping grounds where three scows had discharged their cargoes and on returning left a definite trail of grease and garbage on the sea. On that occasion the list of articles that they saw on the scows or in the garbage as they were dumped are the same as those described as having been seen and listed on June 28, 1929 (R. 28), and those articles compared generally with what he saw in the scows which were dumped in the sea on the fourteen different occasions when he actually saw scows dumping (R. 30).

Stormy weather holds back the scows, otherwise they dump every day, but when they have been held for a day or two, particularly in warm weather, the smell of the garbage on the scows will conquer everything but a very strong stomach. The day he saw the infant in the garbage it was particularly bad smelling and made him sick (R. 31).

The barges are side dumps with gates or doors on the side which swing out. The center of the barge peaks and the garbage slides off in the sea (R. 33).

The type of scows are shown clearly in Johnson's pictures (R. 34-35). These side dumping scows invariably have a large amount of garbage clinging to the ridge which gradually falls off on their return. Exhibit 5 shows men cleaning ridge line of a scow. They do not start cleaning until they are within three or four miles of Scotland Light and the cleaning continues until they have passed that light and are within approximately four miles of Sandy Hook (R. 36).

Exhibits 4 to 11 also show scows and the accumulation of garbage hanging on after they have dumped. The cleaning of these scows on the way in leaves a trail of garbage and grease on the sea which can be followed for miles (R. 37).

Exhibit 12 shows a tow of scows returning empty. The lighter section of the water shown in this picture is the wake of grease and slick from the garbage which is left in the water after the scow passes (R. 39). The grease is of a peculiar type and consists of little flecks from the size of a person's fingernail down to minute particles. It comes from the meats and greasy substance in the garbage (R. 40).

After the scow dumps the mass of garbage which they leave is sometimes piled as high as a foot above the water. Displacement gradually takes place; the heavier stuff finds its way through the mass and sinks to the bottom, leaving the lighter material floating on the surface. Exhibits 15, 18, 19 and 22 shows these conditions (R. 41).

Exhibits 13, 14 and 15 show the density of the mass which actually supports objects out of the water. When the additional scows dump the mass spreads out and increases, according to the number of scows dumping, before the first dump has been dispersed by the action of the water (R. 42).

He has observed two tows of three scows each dumped so close together in time and place that the mass of garbage of the six scows formed one island covering an area of at least seven miles long (R. 43). On one of his trips he

sailed in the boat that he was using ("Oceanic") alongside one of these floating islands of garbage at the rate of seven miles an hour for forty-three minutes, or a distance of over five miles. He has seen these masses seven miles long and two miles wide (R. 44).

On May 22, 1929, while he was at the dumping grounds he saw twelve scows of garbage dumped into the sea (R. 45). The mass was so dense that it was necessary for him and his crew to repeatedly reverse the motor to clear it of stuff that had clogged the propeller and stopped the boat. The vegetable and animal matter was very odoriferous. It was in the process of decay and was offensive to sight and smell (R. 46). He repeatedly stopped and observed the action of the wind and the tide on the garbage mass. It invariably moved ahead of the wind regardless of the direction of the tide (R. 47). When the wind blew from the west the movement of the garbage was off-shore (R. 48). If the wind came from the east the movement was toward the Jersey shore. When the wind came from the south it moved toward the Long Island shore (R. 49).

Exhibits 17 to 24, both inclusive, taken by Johnson in witness' presence, shows areas of garbage in mass and in process of distribution as it drifted toward the New Jersey shore (R. 50).

Exhibit 13 shows men cleaning the barges as they were passing Scotland Light on the way in. Large quantities of garbage was still dripping from the scows and left a trail of garbage on the sea. He has seen men clean scows and throw garbage into the water three hours after dumping took place (R. 51). They never start cleaning immediately after dumping, but they wait until they get near Scotland Light before they begin. He has seen them push off as much as 25 cubic yards on the way in. On a northeast wind the garbage floats toward the New Jersey shore. He has seen it go all the way to the shore. He has seen it work north ahead of a wind from the south and when the wind shifted to the northeast the mass of the garbage drifted toward the shore (R. 52). As it ap-

proaches the shore the garbage becomes involved in the undertow and when it gets inside of the breakers it is thrown in a mass in the water and is distributed on the shore. The garbage fills the shore water with so much grease that soap will not work on bathers who have been in that water. A horrible mass of garbage is left on the beach, which has to be cleaned up as well as possible, but the grease is left on the sand and sticks to the feet of the people walking on the beach and clings to their toes (R. 53).

In sailing around the edge of a floating mass of garbage at sea he could look into the water and see the stuff dropping down from the floating mass. As the density of the mass was relieved these heavier articles were released and began to sink (R. 56), but the lighter stuff drifts ahead of the wind and is deposited on shore (R. 57).

Sometimes the garbage is carried as much as ten miles to the north ahead of the wind and when the wind changes to the northeast or to the northward the garbage immediately changes to the direction toward which the wind is blowing. If the wind is from the northeast at the time of dumping the garbage will strike the shore approximately ten miles further south than under the other conditions (R. 64).

The witness described the side dumping scows somewhat in detail (R. 84). The garbage floats in large masses over the surface of the water for an appreciable length of time after dumping (R. 88). It is known to float in such masses for at least five hours before being dispersed (R. 89). He has followed the trail of garbage, which he has seen dumped, in a definite line continuously to the beach. This particular quantity of garbage had been dumped approximately twenty miles southeast by east of Scotland Light and the beach was four miles from the light. He followed the line of garbage from the dumping point to Sandy Hook (R. 90). He stayed with it and traced the course and direction for four and one-half hours when the wind was blowing at the rate of about thirty miles an hour (R.

92). He has studied the tides and courses of the ocean off the New Jersey shore and has found that anything that floats on the surface is not appreciably affected by the tide when the wind is blowing at all hard (R. 93). Floating objects are driven before the wind (R. 95), and even heavy objects which settle to the bottom near the shore work up on the beach by the wind and the waves and undertow. His observation has been that the wind affects the water and the movement of objects in it at length of as great as 18 feet (R. 96). Since his testimony on December 11, 1929, Mr. Smack made further investigations on the dumping of garbage at sea. He went out on January 7, 1930 (R. 750) with Axel Forsman and James Hall on a fishing cruiser; they saw a tug and three scows coming in. He saw the tug Woodman and city D. S. C. scows "Q," "O" and "R" of the Department of Street Cleaning of New York. There was some garbage visible on each of the scows in heaps and patches along the ridge line at least 12 cubic yards (R. 751). They left a definite trail or slick of grease as far as they could see, and in it were different kinds of vegetables and fat, which he describes. The side gates of the scows were loose and swinging and garbage was dribbling through them. When the scows passed Scotland Light on their way in, no effort had yet been made to clean off the mass of garbage still clinging to the scows (R. 752).

Forsman and Hall confirmed this testimony (R. 755-759).

Exhibit 205 is a U. S. C. & G. S. map of July 25, 1925, on which Smack marked the locations where he has seen dumping of garbage take place. He marked points at twelve, nineteen and twenty-one miles. He also put an (x) on the map to indicate where he had seen the scows dribbling garbage on January 7, 1930 (R. 937). The twelve-mile point is about eleven and one-half miles off-shore from North Long Branch. The twenty-one-mile point is about nineteen and one-quarter miles off-shore opposite Asbury Park. The most frequent dumping grounds he saw was between the nineteen and twenty-one-mile points oppo-

site the beach between Deal and North Asbury Park. He also saw dumping between the twelve and twenty-one-mile points (R. 938), which would be opposite the beach from North Long Branch to North Asbury Park. The compass on this map will show the direction the garbage would float in an east or northeast wind (R. 939). When the wind is east, whatever is on the surface of the water goes ahead of the wind. When the wind is blowing the top of the water in a given direction, the undertow is moving in the opposite direction (R. 940). Any wind from the east or northeast carries the garbage toward the New Jersey shore. The wind does not have to blow hard to blow the stuff in. A mild wind will do it, but it takes longer to reach the shore (R. 941). The tide has very little effect on the garbage (R. 944). The wind has the greater effect (R. 945). He has followed the garbage when it was coming in ahead of an east wind.

Garrett I. Johnson, photographer, lives in Long Branch and has been a photographer for six years. He accompanied Smack, Foresman and Hall on some of the trips to inspect garbage and took pictures out there (R. 951). Exhibit 3, taken July 2, 1929, shows scows moving back to New York (R. 952). Exhibit 4, taken July 2, 1929, shows scow returning about one mile from Scotland Lightship. Exhibit 5, picture taken July 29th, shows scow coming in about one mile from Scotland Lightship, shows workmen pushing garbage from ridge pole (R. 953). Exhibit 6, picture taken July 2, 1929, shows scows returning from dumping grounds going toward Scotland Lightship, showing heaps of garbage on the scows after dumping (R. 954). It also shows another scow covered with garbage. Exhibit 7, picture taken July 2, 1929, shows scow a mile from Scotland Lightship with workmen pushing garbage from the ridge pole. Exhibit 8, picture taken July 2, 1929, shows scow a mile from Scotland Light with garbage adhering to ridge pole (R. 955). Exhibit 9, picture taken July 2, 1929, shows scow about one mile from Scotland Light—same scow. Exhibit 10, picture taken July 2, 1929, shows closeup view of scow with garbage

adhering to ridge pole a short distance from the dumping grounds (R. 956). Exhibit 11, picture taken July 17, 1929, showing a scow returning to shore after dumping the major part of its load at sea. Exhibit 12, picture taken July 22, 1929, showing the greasy trail in the water left by the scows (R. 957). Exhibit 12, picture made July 17, 1929, showing a portion of the garbage dumped at sea. The picture was taken at the dumping ground. It shows the appearance of the water after the scow has dumped, but it includes only a part of the area (R. 958). He could not estimate the total area covered with garbage, but about 300 square yards are included in the picture. Exhibit 14, picture taken July 14, 1929, showing the dumping ground and the horizon line (R. 959). It shows a limited area taken at close range. They met the scows and followed the garbage trail which they left out to the dumping ground (R. 960). Exhibit 15, picture taken July 17, 1929, showing the garbage dump and a portion of the garbage floating there. Exhibit 16, picture taken July 17, 1929, shows a portion of the garbage floating on the sea (R. 961). Exhibit 17, picture taken July 17, 1929, showing a portion of the garbage floating at sea. Exhibit 18, picture taken July 17, 1929, showing a view of the garbage at sea (R. 962). Exhibit 19, picture taken July 17, 1929, of the garbage at sea. Exhibit 20, picture taken July 17, 1929, showing the way garbage is streaked on the surface of the ocean, particularly before they came upon the main garbage dump. This is not the dribble. The trail of the scows is a greasy scum on the water (R. 963).

Exhibit 21, picture taken July 17, 1929, showing the garbage dumped at sea. Exhibit 22, picture taken July 17, 1929, showing the garbage dumped at sea (R. 964). Exhibit 23, picture made July 22, 1929, showing the Scotland Lightship and the scows in the distance with garbage still along the ridges (R. 965). Exhibit 24, picture made July 17, 1929, and shows the garbage dumped at sea. Exhibit 29, picture taken July 17, 1929, showing the garbage dumped at sea (R. 966). The garbage as he saw it in a

mass containing wooden things (R. 973). Crates, boxes, pieces of lumber, short sticks 3 or 4 inches wide, house utensils, brooms, brushes and handles. There was a considerable proportion of wood in the garbage. They saw some dumps where there was more wood than in others (R. 974). Exhibit 222, picture taken underneath the Brooklyn Bridge, New York City, January 20, 1930, and shows a scow tied to the dock partly loaded with rubbish with a truck dumping ashes into the scow, which was D. S. C. "R" (R. 1047). The scow contained corrugated cardboard boxes, paper, straw, wood shavings and general rubbish. Exhibit 223, picture of the dock at 107 Street, taken January 20, 1930, showing two scows, the nearest of which is D. S. C. "K," completely loaded. While he was there trucks were dumping stuff into the scow next to the dock (R. 1048). These scows contained rubbish. Exhibit 224 was made at 107th Street, New York City, January 20, 1930, showing the same scows as the last exhibit. Exhibit 225 was taken at 57th Street, New York City, January 20, 1930, showing a partly loaded scow at the dock and a truck dumping a load in which looked like cinders. The contents of the scow were general rubbish. Part of it was garbage containing apples and other fruit and citrous fruit rinds. It was a side dumping scow. The 57th Street dock is on the Hudson River. Exhibit 226 is another photograph of the same dock taken the same day (R. 1049). This picture shows a truck which has just dumped into the scow. Exhibits 227 and 228 were pictures taken at 107th Street dock January 20, 1930, of the scow D. S. C. "K" loaded and another scow in the process of being loaded. It shows trucks on the dock which are dumping into the scows (R. 1051). He has lived on the shore for a number of years and he saw many things in the scows shown in Exhibits 222 to 228 which he has seen as rubbish and garbage on the beaches, including papers and cardboard containers, wood shavings and straw just as he saw in those scows (R. 1056).

Testimony of the Fisherman.

Frederick I. Voorhees lives at Highlands and has been a fisherman for about twenty-one years (R. 126). He fishes off Scotland Light for lobster (R. 137). He has seen garbage scows dump practically every day whenever he is fishing in that locality. He is familiar with the garbage scows shown in Exhibits 3, 5, 6, 9 and 10 (R. 137-138). He usually sees from three to five of these scows every day (R. 139). His lobster pots are strung on a main line about one-half mile long at intervals of ten to twelve fathoms. The line has an anchor and a buoy on each end. There are thirty to thirty-five pots on the line (R. 140).

The scows usually dump around eighteen or twenty miles southeast of Scotland Light or southeast by east (R. 140). Scotland Lightship is about three and one-half miles from the New Jersey shore (R. 142). He catches more or less garbage in his lobster pots. There is a funnel-shaped opening to pots which catches everything from horses' collars to old rags, underwear, corsets and pieces of wire and rubber. The garbage gives them a great deal of difficulty in handling their lines. Rags and other stuff wrap around the lines and make them so heavy that the men cannot pull them up (R. 144). Sometimes they suffer the loss of their pots and lines on that account (R. 145).

He has seen quite some garbage floating out at sea. He recognizes the conditions shown by Plaintiff's Exhibits 14, 19, 20, 24 and 29 (R. 145). He encounters areas of floating garbage in going out and in. If it is not too thick he goes through it, if it is he goes around it (R. 147). He has seen it so thick that he could not sail through it for fear of getting his propeller stuck. When he comes to a bunch of garbage too thick to go through he hunts for a thin spot or goes around it (R. 148). He has seen floating areas of garbage four, five or six miles south of Scotland Lightship and he has seen the garbage floating in as near the shore as he has ever been with his boat. This condition of garbage on the surface of the water is a

more or less regular thing. He sees it every day that he is at sea. He knows this garbage comes from the scows (R. 149).

Some of the garbage remains above the water for a considerable length of time and some of it sinks quickly (R. 153). The coastwise vessels that pass are about three or four a day. Some days you don't see any. The ocean liners all go directly offshore (R. 155). He has seen coastwise and ocean-going vessels throw garbage and ashes into the water, but only in very small quantities. He is out there practically every day. He goes out at daylight and returns anywhere between 12 and 5 o'clock (R. 156). The garbage dumping grounds are not in the steamship lane. The garbage scows run southeast and the vessels go out from Ambrose Lightship north of the dumps and keep more to the eastward and pass from two to four miles (R. 157) north of the garbage dumping grounds. A few vessels sail inshore from the dumping ground and these are the ones which he has seen throwing out small quantities of garbage (R. 158).

Alfred Schweitzer lives at Highlands and is a lobster fisherman in summer from June until the end of October. He goes out where the garbage scows dump and he sees them dump their garbage (R. 159). He sees them dumping every day he goes out. They leave a great big mass that doesn't sink and the part that does sink is sometimes caught in the ground swell of a southeast sea and is brought from the dumping ground to his lobster lines four or five miles inshore from the dumping ground (R. 160). He has sailed around these floating areas of garbage to avoid hitting his wheel and oftentimes he does hit the wheel. He has to run slow and he has had to straighten his propeller wheel which became involved in the garbage. Sometimes you can go through a whole season without injuring the propeller and again you may injure it two or three days in succession. That is a common thing among the fishermen (R. 161). He has seen this floating garbage drift toward shore to within five or six miles of the shore. He has not seen it closer because he does not go closer

on his course. His course is from the point of the Hook to Scotland Lightship and then southeast by east. Sometimes throughout the whole course he has to pick his way so as not to be hit by logs, driftwood and other stuff in the garbage which would injure his boat. He has sailed for thirty or forty minutes under such conditions. His boat travels at sixteen miles an hour, but when he encounters the garbage he has to slow down to six or seven miles (R. 162) an hour and pick his way. He has sailed for four or seven miles through a drift of garbage before he could get out of it. He has seen the garbage on shore as far down as Seaside, which is abreast of Toms River. The garbage seems to run slightly toward the southwest and always strikes in towards the beach according to the wind. He sees in this garbage almost everything that can be seen in any garbage can, such as rags, cans, bottles, chicken entrails, small dead animals, etc. He has had trouble on his lobster line from rags and trash that was hardly fit to put his hand to (R. 163). When they have a little easterly weather the ground swell fills up and makes the lobster pots drift on the bottom and acts the same on the garbage. The rising and falling of a line in the water allows the garbage to get tangled up with them and frequently causes loss of lines. The year before last he lost two lines. It is impossible to raise the lines because of the mass of garbage attached to them. He has thirty traps on each line. He has trouble of that kind every year after an easterly storm (R. 164). He has seen conditions like that shown by Exhibit 13 right after the dump of the scows, also conditions shown in Exhibits 18 and 12 (R. 165). After the scows dump and get clear the mass of garbage comes right to the top. He has seen it string out in the sea as shown on Exhibit 24. There is driftwood among the garbage large enough to damage his boat (R. 166), and it takes a pretty good size piece of material to do that. Other refuse gets tangled up in the propeller and he has to clean it out (R. 167). The floating garbage forms in tide streaks. He describes the different

things he sees (R. 170). When the garbage is first dumped it stays in a body about the size of the scow and the longer it lays the more it straightens out into tide streaks. Its motion is affected by the wind and current. When the tide and wind is from a certain position it comes ashore. The condition of this garbage is mostly decayed and stuff that will drift. He recognizes conditions on the water shown in Exhibit 12 (R. 172). That is what he calls a tide streak. There is grease in those "slicks." You can see the oil and grease on the top of the water and it affects his boat (R. 173). The garbage that gets wound up in their lobster lines by the ground swell is what does the biggest part of his damage (R. 181). He has been very close to the scows when they dump and has recognized some of the material dumped as that which was tangled up with his lines on the following day (R. 182). The garbage scows carries stones and sticks and pieces of iron (R. 183).

Louis H. De Camp lives at Highlands and has been a lobster fisherman (R. 184) for fifteen years. He goes out to the Scotland Lightship and then works southeast as far as the Cholera bank and sometimes further. He goes out where the garbage scows dump and has seen plenty of them dump. He fishes a short distance from where they dump (R. 185), but tries to keep outside of their line. He has seen as many as five scows out there in one day. When the scows are dumped most of the material comes to the top. Some of it sinks. The mass bubbles and floats on the water and spreads out. At first it is all together in a close mass, then it strings out, spreads and goes all over. He has run through it with his boat. He has seen it drift in close to shore. It comes in to shore with an east wind or a northeast wind. He generally hits it inside of the lightship because it generally works to the south or southwest. Part of it comes in the undertow—that part which can't float (R. 186). He recognizes conditions shown on Exhibits 22, 16, 21 and 19. The garbage remains in the condition shown in those pictures for about an hour, according to the strength of the wind. It floats around,

spreads out and works loose, but it does so more rapidly if there is a wind. He recognizes the conditions shown in Exhibit 18 and has picked his way through the water leads such as shown in that picture (R. 188). He recognizes the conditions shown in Exhibits 17, 22, 14 and 24. The last picture shows the way it stretches out after it has been dumped. He has run through it for ten or fifteen minutes at a time. It gets clogged up in the propeller of a boat (R. 189). It is so thick that sometimes you can't make over two miles an hour with your engine wide open. He has followed it pretty well in—clear in to the ship pier—inside of the ship pier before he could get through. He has seen it all the way down in tide streaks working toward the south and the southwest off Seabright. He has seen it within two miles and a half of the beach (R. 190). He describes the contents as containing fruits and vegetables, meat (R. 191), dead chickens, cats, dogs, even the meat that sinks, decomposes and comes to the top. Scotland Lightship is two and three-eighths miles directly off New Jersey shore (R. 192). He has followed the garbage scows pretty well in. The garbage follows the scows as they go in (R. 194).

Lars Peterson lives at North Long Branch (R. 195) and has been a lobster fisherman for twenty years. He goes out nearly every day to where the garbage scows dump and he sees them dumping garbage. It is about eighteen miles offshore, but they do not always dump in the same place (R. 196). When the scows dump part of the stuff floats and part of it sinks. He recognizes conditions shown on Exhibits 21, 15, 18 and 13 and has seen those conditions often. He recognizes conditions shown in Exhibit 14 as those which exist after the stuff has been in the water a little while (R. 197) and has spread out and is drifting. He remains out in the vicinity of the dumping ground usually five or six hours and sometimes more. The tide and the wind move the garbage around and he has seen it drift towards the shore before a northeast wind. He has followed it all the way to the beach (R. 198) at Galilee, which is Monmouth Beach. The garbage that is

dumped from the scows comes right in onto the beach at Monmouth Beach. He has seen this frequently (R. 199). He enumerates the articles which he has seen in the garbage, including various fruits and vegetables, tin cans, bottles, bedding, dead animals' victuals, chickens, meat, etc. He has recognized identification marks on some of the material, such as fish boxes from Fulton Market, New York City (R. 200). Sometimes he has been laying out at sea when the garbage would drift by his boat and when he started for shore he would follow the garbage all the way in to the shore. This was garbage that he saw dumped. He usually went out about 4 o'clock in the morning (R. 202) and returned about 2 or 3 o'clock in the afternoon (R. 203). It usually took from two and a half to three hours to get out to his lobster pots (R. 204).

Anton Holgarson lives at Monmouth Beach, N. J., and has been a lobster fisherman for the past six years. He fishes at distances of from two to fourteen miles from the beach. He has seen the garbage in the sea after the scows have dumped. On one occasion (R. 206) he ran through different kinds of garbage for about forty to fifty minutes and had to slow down because it was so thick. He was going about seven or eight miles an hour (R. 207). The garbage consists of sticks of wood, loaves of bread, papers, waste, fruit skins and other kinds of garbage from houses (R. 208). He has seen the garbage conditions often during the entire time he has been fishing. He has seen it drift on the surface with the tide and if the tide or the wind comes from the east it brings the garbage right on the beach. He has run through it all the way from the dumping ground to the shore at North Long Branch (R. 219). He has taken up papers and other things from the garbage which showed that it came from New York City (R. 210). The garbage affects his lobster fishing. His lines become wrapped with rags, electric light wire and other things that drag along the bottom in the sea swell. This is principally the material that sinks from the garbage (R. 210). He has had a hole knocked through his boat by a stick which the propeller picked up.

He has had to sail around areas of garbage which were too thick to sail through and he has had to pick thin places to sail through. He has seen this garbage on the beach where he launches his boat and has to clear the beach off at times in order to handle his boat. There is lumber, paint cans, tin cans, bottles and pieces of wood (R. 211) and vegetable and animal matter and grease which causes slicks on the water among the garbage (R. 212). On November 14 or 15, 1929, the garbage was all the way to the shore for a distance of five or six miles. He came through it. It was scattered all over the water (R. 214). This drift of garbage was continuous for five or six miles up to the shore and part of it had already been deposited on the shore (R. 215).

Carl Holgarson lives at North Long Branch and has been a lobster and net fisherman for ten years (R. 217). His fishing seasons extend from the 1st of April until about the middle of November. He was out where the garbage scows were dumping and saw them dumping in August, September and October, 1929. He saw them dumping almost every day and has seen the condition of the garbage in the ocean after dumping. He has seen conditions like those shown on Exhibit 19. He has seen tide streaks of garbage that were two or three miles long and 100 yards or so wide. He recognizes the conditions shown on Exhibit 14 (R. 218) and Exhibit 24. They try to get through it where it is not so thick, but sometimes have to change their course in order to find a place where they can get through. It slows them down. Garbage areas drift with the tide and wind. He has often drifted with the garbage, sometimes to shore and sometimes offshore. He has never drifted all the way to shore with the garbage (R. 220). He has seen this drifting garbage at places ten miles offshore, one mile offshore and right on the beach. It looked like a general mass of garbage. It consists of vegetables and cans, bottles, boxes, oil waste, particles of wood and boards (R. 221) and sometimes heavy logs. He has seen grease "slicks" following the barges as shown on Exhibit 12. Sometimes the garbage looks fresh and other

times it looks pretty sour (R. 222). It sometimes contains dead dogs and cats. He has seen the beach covered with garbage. It interferes with their boats in the water and sometimes with the landing or launching of boats on the shore (R. 223).

Alex Oleson lives at Monmouth Beach and fishes for lobsters and fish. He has been in that business for (R. 298, 299) every season for twenty-five years. The season extends for sometimes five months and sometimes for the whole year. His work takes him out to the place where the scows dump and he has seen them dump their garbage. He sees this in the summertime nearly every day. The heavier stuff sinks, but the lighter stuff and the decayed stuff floats on the top. The garbage sinks when it first slides off the scow, but a great part of it comes back to the surface (R. 300). Other heavier portions can be seen drifting along in the water below the surface at distance from 8 to 10 feet. He recognizes conditions shown in Exhibits 17, 16, 21, 14 and 24 (R. 301). He has seen the grease "slicks" and heavy masses shown in the pictures. Several times garbage has been so thick on the ocean that he had to stop his motorboat and push his way through it with the oars. It contained boxes, barrels, blocks of wood and all kinds of garbage mixed in with it. Sometimes it drifts in to the beach. He has run through it from the dumping ground all the way to the beach and has frequently had to find a place on the beach where they could land a boat, so much garbage having accumulated there. They frequently have to clean the beach before they can put their boat on the roller to take it up the beach. Sometimes they are unable to lay the planks upon which they roll the boat (R. 302) without first cleaning up the garbage. He has seen the floating tide streaks extending from the dumping grounds to the beach; at other times they run in other directions; he has seen a streak of garbage extending from the dumping grounds to the beach, but heavier in places, and he has sailed his boat along one of these streaks going in, quite often. The garbage that is dumped at sea contains anything that could

be found in a kitchen or that will be discarded. He mentions various kinds of vegetables and fruit (R. 303). He has seen marks on the articles showing that they came from Fulton and Washington Markets, New York City. This garbage interferes with lobstering and with landing on the beach; sometimes the lobster traps are filled (R. 304) with various articles of garbage and stuff which is not very sweet to pick out with your hand. It contains various things which are dumped down on the lobster pot, from an automobile frame to a sewing needle. Articles that sink and cut the lines and he loses his rigging. Last year in five months he lost eighty-five pots on account of stuff dumped in the garbage. Even the irons with which they grapple for their lobster lines get tangled up in the stuff and are lost. They lose a lot of time cleaning the beaches so they can moor their boats and the material in the water is bad for the boats (R. 305). He stepped on a broken bottle while landing his boat and had to go to the hospital, where they took ten stitches in his foot (R. 306). Passing ships throw some garbage overboard, but it wouldn't amount to enough so you could find it. He knows where the garbage comes from that he sees in the ocean because he sees the tugboats and the scows dumping it. Hundreds of times he has followed the scows out on his way from Fulton Market where he sells his lobsters (R. 309).

Gustave Holgarson lives at Seabright and has been a fisherman for forty-eight years. He fishes in the summer-time for bluefish with hook and line and nets (R. 320). He has been out where the garbage scows dump hundreds of times and has seen them dump numberless times. Many times he has had to lift his anchor while fishing to get clear of the garbage. After the scows dump the garbage floats on the water like small islands. They are big enough when first dumped so that you can almost walk on them, then they spread out. He made the various trips with Mr. Smack (R. 321) and steered the boat from the beginning to the end of each of those trips. He was present when all of Mr. Johnson's pictures were taken. He has

seen the garbage on the scows before it is dumped and the masses after it was dumped. He describes the different things he has seen in the garbage, including fruit and vegetables, dead cats and dogs, tins, bottles, boxes and crates. He sails back and forth fishing each day and has met the garbage along the way. He has followed it all the way to the shore. There is more or less dirt and grease and oil in the garbage (R. 322), which makes a slick and a tide streak which extends for miles in toward the shore. If the wind is from the right direction it goes right in to the beach, that is, from the northeast and east (R. 324). Even with an ebb tide, if the wind blows from the east or northeast, it forces the garbage in to the beach. When the wind comes from the southeast the garbage moves northwesterly. When the wind comes from the westward the garbage moves toward Long Island. He has seen the garbage on the beach at Seabright and has cleaned up a good many tons of it (R. 325).

William Warren Barbour lives at Rumson, N. J., of which he is the mayor. He owns a boat which he operates in the Atlantic Ocean off the coast of Seabright. He has been out where the garbage scows dump (R. 352) and has seen them dump their garbage into the sea. He has repeatedly seen the garbage after it is dumped. He has seen conditions shown in Exhibits 24 and 21 (R. 353). He has seen conditions like those shown in Exhibits 16 and 17, showing grease slicks from the garbage. He has seen these conditions in places coming ashore from several miles out. He has followed the garbage from the place where it was dumped to the place where it went ashore. He has seen it on the shore and in a great many different positions. He is a member of the Seabright Beach Club (R. 354) where residents of the neighboring municipalities bathe during the summer months. It is supported like a country club and has several hundred members. It employs persons to clean the garbage from the beaches. The garbage not only interferes with, but prevents bathing, and happens markedly often. Several times a week sometimes. There has been trouble from the garbage (R. 355)

from the Beach Club for at least ten years within his knowledge. The garbage interferes with boating. The sticks and other things in the garbage interfere. He describes the articles he has seen in the garbage which appear in various degrees of putrefaction and is sometimes worse than others in that respect (R. 356). He has seen garbage around the scows falling off the scows and at various places between the scows and shore and is positive that it is the same garbage (R. 357).

M. Hall lives in Seabright. Has made a business of fishing for the past ten years. He was one of the party that went out with Smack and Holgarson and was present when the pictures were taken. He went on thirty-two of the trips Smack made (R. 429), extending from April up to about the 17th of July. He goes out eight or nine miles to fish. He has been out where the garbage is dumped many times. He has seen the scows dumping a dozen times and has noticed the condition of the water after they dump. He recognized and identified Exhibits 29, 18, 13, 20 and 21 (R. 430). He was present when Johnson took the pictures July 2nd and 17th. He has been familiar with the garbage on the sea for a number of years. He is apt to come in contact with it drifting about anywhere out at sea. He drifts about when fishing for seven or eight miles with his nets. The garbage drifts about also and when the conditions are right it comes to the beaches. He has seen the garbage dumped and it forms a compact mass on the water, which spreads out after a while according to the roughness of the sea (R. 431). He has seen it for miles on the water and has followed it with his boat and sailed through it lots of times. It is very dangerous at night because it contains material that injures a boat. It contains not only vegetables and fruit refuse, but also wood containers, barrels and bottles, electric light bulbs, etc. He has followed the garbage on the water all the way from the dumping grounds in to the lightships. You can follow the garbage trail and the wake of the scows (R. 432). There is always some garbage attached to the scows after they dump and it has to be shoveled off while the scows

are returning. The scows do not stop to dump, but dump while they are moving (R. 433). They make a great circle and it takes about twenty minutes to dump the loads. Each scow leaves a big mass; it floats on the water sometimes as high as 2 feet above the water, which finally spreads out. He has run into the garbage with his boat and on one occasion it took them half an hour to extricate the boat from the garbage mass. You can see the heavier material floating below the surface and dropping down. It gives the water a milky color and is the most filthy mess he ever saw. He has sailed along masses of garbage floating toward the shore for over an hour at a time, traveling about seven miles an hour. He has seen it floating in to the shore lots of times (R. 434). He has seen it coming in on the beaches and after it has come in. Stuff that is dumped is decayed matter. When it reaches the beach it stays there until it is removed. The fishermen get together and clean the beaches and bury the garbage in the sand (R. 435). The scows bear the initials "D. S. C.," which represents New York Department of Street Cleaning. He was present when Smack deposited the bottles containing the return postcards. They were put in the garbage where it had been dumped by the scows. He put some of the bottles in himself (R. 436). When he was on the trips with Smack they were within 12 feet of the scows when they dumped and they threw the bottles into the mass (R. 439). As a rule there are three garbage scows in a tow that dump together (R. 440). He has seen them cleaning the scows when they were halfway back—up as far as Scotland Lightship. He has followed the garbage trail of the scows from the lightship out to where they dump, probably six or seven miles (R. 442). It was a trail of garbage with a grease scum on the water (R. 443). After the scows have dumped he has seen a mass of floating garbage a square mile in area (R. 444).

Steward Cook has been a fisherman for seventy years. He testified that the garbage contains articles like boxes, bed springs and crates and other articles which get fast in the fish nets, and if the water is agitated by a storm

Charles M. Hankins (R. 541) has been mayor of Lavallette for four years. There was quite a lot of garbage at the Chadwick Fishery on the morning he testified; it was coming in on the beach (R. 542). He is a fisherman and has been in that business for eight years. He has fished along the shore different years and is familiar with New York Harbor and the Atlantic Ocean in the vicinity, and has seen the garbage scows going out and coming in, and has seen them dump their garbage at sea (R. 543). He goes out fifteen or twenty miles fishing and has seen plenty of garbage out there, consisting of everything imaginable that will float on the water (R. 544). He has seen the conditions shown in Exhibit 29 (R. 545). He has seen the garbage in streaks, consisting of all kinds of vegetables and fruit and dead animals, not only floating on the water, but down in the water. It interferes with their lobster rigging. He has seen it as far south as Seaside Park and at places offshore for a distance of ten or twelve miles. He frequently fishes up trash from the bottom which has settled from the garbage. It affects the fishing business pretty bad and it affects the pocketbooks of the fishermen (R. 546). Seven years ago he gained \$4,000 through a summer's fishing. The next year they got \$8,000 worth of fish, but this year it has dwindled down and he ascribes it to the pollution of the water from the garbage. It drives the fish away; it fouls and sours the bottom and accumulates over the lobster pots (R. 547). It affects the beach badly in the summertime. The lifeguards have to rake up the garbage and the employees burn it or cart it away (R. 548). He has seen articles which bore addresses, such as boxes from Fulton Market, Washington Market and from produce markets and commission houses in New York City (R. 549).

Albert B. Carver lives at Bradley Beach and has been a lobster fisherman for seventeen years. He has seen the scows dumping garbage at sea (R. 704). He has seen the condition of the garbage in the sea after it was dumped and has followed it to the shore lots of times. He has seen the garbage dumped at sea and followed it in a continuous

line for eleven or twelve miles to the beach. Other times he overtakes the garbage (R. 705) four or five miles offshore, and finds it continuously until he reaches the shore. Other times on leaving the beach he finds the garbage all the way out as far as eleven miles, a continuous line of garbage in the form of a strip over a broad area as far as you can see up and down. It interferes with the running of his boat (R. 706). After a storm they get a lot of it in their lobster pots. It consists of all kinds of vegetable matter, boxes and wood and he has seen this material in the scows when they dumped it (R. 707).

Bert M. Haley lives at Long Branch and has been engaged as a lobster fisherman for about ten years until about three years ago when he took up a concession on the beach. He has been out to the dumping grounds and has seen scows dumping their garbage into the sea (R. 1010). The garbage includes all kinds of stuff, such as boxes and barrels and great masses of it come to the surface after it is dumped. All this is mixed in with the garbage on the same scows. It covers an area of two acres. He has had to run his boat through it. He has seen it from the dumping ground in for a mile in area. It affects lobster fishing. Scows dump the garbage over the lobster gears used to hold the lobster pots (R. 1011).

August Popp lives in Long Branch. Has been there for fifteen years (R. 1090). Has been a fisherman for twenty years altogether for lobsters and mackerel. Has been out where the garbage scows dump. Is there every day in the summer if the weather is fit to go out (R. 1091). There is floating garbage out there. Scows dump on top of the lobster rigging eighteen miles (R. 1092) southeast by south of Sandy Hook. For the past five or seven years he has seen them dumping garbage. Scows are designated by letters. It is a matter of complaint among the fishermen and costs them a great deal of time and money (R. 1093). What is heavy goes down and the lighter floats. There is all kinds of stuff in the garbage, tin cans, dead chickens, hospital refuse and things that are worse that he cannot tell about. The garbage gets into the fish nets. Easterly

winds bring garbage to the New Jersey shore. The water around the dumping scows is all colors from the stuff that is dumped in it. Has seen conditions shown in Exhibits Nos. 13, 16, 17, 18, 19, 21 and 22 (R. 1094). After the garbage is dumped it backs up and moves before the wind. Whatever direction it is blowing. He has seen this garbage at various points between the dumping place and shore. Has followed the garbage areas as he came in. Sometimes he has sailed through it. Has traveled as much as ten minutes alongside a patch of garbage at the rate of sixteen miles an hour. Has traveled for ten minutes through garbage when he could not get out of it (R. 1097). Has seen garbage in various places on his way in, not in one stretch but in big patches. Has seen the same things in the garbage in the sea that he has seen in the garbage on the shore (R. 1098). He has seen the same kind of grease or oil slick on the ocean from the garbage as shown on Exhibit No. 12. If you are on the leeward side of the garbage scows you have to have a gas mask to stand it. The odor of the garbage and slick on the water that follows the garbage scows is bad (R. 1099). It costs him money, too, because the stuff is dumped on top of his lobster lines and cuts them. Rags of all kinds from hospitals and everywhere get wound around the lines. They are so filthy he is afraid to handle them. You don't know what disease they contain. They have blood stains on them. All kinds of filth are dumped in where he is fishing between Ambrose Channel and Scotland Light. On one occasion they dumped on his lobster pots and he found 300 pounds of dead lobsters in his pots the next day and a lot of grease on the water (R. 1100). He has trouble with the outshore dumping of garbage with his boats. He has lost four lines—one year he lost two lines. These lines have thirty-five lobster pots on each one. The pots cost \$3 each. The line costs 22 cents a pound. They use six fathoms of line for each pot (R. 1101).

Neils Jacobson lives at Seabright and has been a fisherman for past twenty years. Net, hook and line fishing.

Goes twenty miles from shore sometimes. Has been out where scows dump (R. 1163). Has seen them dump garbage hundreds of times. Was out last summer. After they turn the buckets loose in scows it does not take many minutes before scow settles on one side and then the other, then raises up and pulls away and the garbage is on the surface for an area of about 300 feet and then it spreads out. Then the tides and winds carry it on. He has had difficulty in operating boats many times (R. 1164). When garbage and tide streaks come together with logs, garbage, boxes and cans he cannot run through it with his boat. He has to back away (R. 1165). He has seen dead dogs and cats. Has observed garbage moving with wind. Has seen it moving toward shore and stretching out. Saw it in ocean the day he testified no more than three miles, just before coming to court to testify (R. 1166). Saw garbage from the dumps to-day. Came to beach at quarter of two. When garbage is dumped current runs south and carries it in southerly direction. Current may change from variations of wind and turn around and drive it to shore (R. 1167). A current from the northeast will switch it and send it to the beach.

Thomas A. Hines lives in Long Branch (R. 1213) and for approximately ten years was a lobster and net fisherman. He has been out where the garbage scows dump and has seen them dump as many as a hundred times (R. 1214). He has seen the scows come out of the New York Harbor. They carry everything in general. The stuff that sinks covers up their lobster pots and the light stuff floats on the surface. Other material floats below the surface and gradually works in to the shore. The garbage contains quite a little wood (R. 1215). He has seen the garbage floating in the sea. He describes the articles he has seen in it. He has seen areas of at least two or three miles of it. He has seen it between the dumping place and the shore. He has followed it the entire distance between the dumping place and the shore. He has made trips when he has seen the garbage and wood and other stuff (R. 1216) all the way in and on the beaches.

The material that sinks covers the lobster pots so that you cannot get them up (R. 1217).

Edward Phillips lives in Long Branch and has been a lobster fisherman for about thirty years and was a fisherman before that. He has been out where the scows dump (R. 1226). They carry garbage from New York City, including chickens and dogs and other articles which he described, and chunks of lamb and beef and all kinds of crates. He has seen the scows dump (R. 1228). He cited an instance when the garbage scow ran his boat down and when they dumped they took some of his lobster pots. After the scows dumped he could not run his power or move his wheel because of the garbage. They afterwards came back to Long Branch. The garbage was also thick and there was such a mass of the stuff in the water that the boat could not run through it. There was an east wind (R. 1228) and the garbage was piled up on the beach. They had to remove the garbage from sections of the beach in order to get their boat out. He had to move dogs and chickens and things like that between the garbage dumps and the shore. He has seen garbage strewn in the sea for five or six miles out from the beach. On the day which he referred to, he came upon the garbage five or six miles out which had been dumped that day (R. 1229). If the wind is northeast, all the garbage that floats comes on the Jersey beach, every bit of it. It remains in the sea and waits for the proper wind. On the day he mentioned, he would not have taken \$100 for the property he had in the lobster pots which were destroyed when two scows dumped over his gear. One hundred tons of garbage were dumped down on his pots. He has had that experience twice (R. 1230). The garbage on the shore is mostly the same kind of material that he saw dumped from the scows. He has identified objects in the garbage from their peculiar appearance which he recognized floating on the sea at different times and places (R. 1231). He is familiar with the action of the wind on the surface of the water. It is part of his business to know that (R. 1234). The scows dump from five to twenty-five miles off

the beach. If the weather and sea are severe, they dump nearer. He has seen them dump within five or six miles of the beach (R. 1237). When they took his rigging and lobster pots they were not five or six miles offshore (R. 1238).

Charles W. Phillips lives in West Long Branch and has been a fisherman for fourteen years. He has been out where the garbage scows dump and has seen them dump. The garbage from the scows on their fishing grounds got so bad that they had to give up those grounds. They lost so much gear that it didn't pay (R. 1241). He described the character of materials he saw in the garbage. The heavy stuff sinks. On one occasion, two scows dumped on the top of his lobster pots and gear and took the buoy off. The light stuff then comes to the top and looks like a floating island. It covers about a quarter of a mile or something like that and then spreads out and drifts away, according to the tide and wind (R. 1242). The mass breaks up as it drifts. Its direction depends upon the tide or wind. The same kind of material comes on the Jersey beaches. He has seen it between the dumping grounds and the beach. Sometimes he has to run around it. You cannot run through it. You have to shut off power for fear the wheel will hit something and be taken off. He has started to the dumping ground and met it (R. 1243) coming in. He has observed it all the way from the shore out from the dumping grounds. The garbage interferes with their fishing, they lost a lot of gear. On one occasion they rescued seven out of twenty-two pots. The rest were covered with a wheelbarrow, bed springs and other junk that was dumped in the garbage. The garbage interferes with the navigation of the boat. You cannot run across it, you have to shut (R. 1244) down the power or run around it. It will pull your propeller off. They sometimes have to clear the garbage away on the beach before they can get the boat off the beach. He has seen articles and picked up papers which came from New York City addresses, one package from the New York Edison Company in New York City (R. 1245).

Harry Peterson lives at Seabright and is a fisherman, although he runs a yacht during the summer season (R. 1261) for Mr. Barbour, president of the Linen Thread Company. He has seen the garbage after it has been dumped right alongside the dumping grounds. The scows dump six miles or ten miles and at other distances from shore, according to the weather. If it is foggy, and they can get away with it, they dump it in the channel (R. 1262). He has sailed around the scows at sea and has met them in the channel. He describes articles contained in the garbage, including vegetables and animals, and "things I would not want to mention that give us more trouble in fishing than anything else" (R. 1263). It distributes if there is a sea. He has identified the same mass of materials on the shore plenty of times. He has seen garbage in the undertow as far as five miles out from the shore. Had to stop the motor of the yacht to get through it. It would break the propeller or shaft if they went through it. They have gone out of their way, changed their course to get away from it at points five miles at sea. The garbage interferes with his fishing. For mackerel fishing they use nets four or five miles long (R. 1264). Garbage gets into the nets and they have to stop and pick up sticks and other things in order to avoid trouble and tearing their nets. They lost two nets on one occasion when they caught a lot of tin cans and other stuff in the garbage. The garbage interferes with the navigation of the yacht and causes loss of time. They have to slow up and sail around. It affects the landing of their boats on the shore and the launching of their boats from the beach for fishing trips (R. 1265). They make a living out of their fishing and they lose considerable time on account of garbage (R. 1266). He knows the signal for dumping scows. In foggy whether he can hear the signal at Seabright pretty close in (R. 1267).

John J. Woods lives in Asbury Park and has the fishing pier concession opposite First Avenue. Has been in that business for four years. Serves an average of ~~500~~ people a day during the summer months. The garbage interferes

with his business (R. 1333). Men will not fish when they see garbage. Garbage lasts as long as three days at a time whenever there is a northeast storm. He fishes at the jetty and encounters lots of garbage. Has identified objects among the garbage that had names and addresses on them. Has found many crates, pads (R. 1334) with New York City names and addresses on them (R. 1335).

Pound Fishing.

Free fisheries as contemplated by law are those carried on by means of hooks and line, drifting gill nets, lobster pots and tackle on the bottom and such other forms as do not provide fixed objects on or near the surface of navigable water.

Pound fishing is carried on in a fixed location. A pound or trap is constructed of nets, and wings of nets are stretched out between the pound and the shore for the purpose of heading off schools of fish as they feed to the shoreward, and leading them through the opening into the trap by such a means as to prevent them of finding their way out. Since this method of fishing requires the exclusive occupancy of a certain area of bottom and water it is authorized and regulated by statute. The following statutory provisions of the plaintiff deal with this subject:

“License to operate fish pound nets. 1. It shall be unlawful for any person or persons, corporation or corporations, to erect, set, operate or maintain any fish pound nets in any of the waters of the Atlantic ocean, within three nautical miles from the coast line of this State, or in Sandy Hook bay or Raritan bay, without first obtaining a license for such purpose as hereinafter provided.

2. Applications for licenses for the purpose mentioned in the first section of this act shall be made to the Board of Fish and Game Commissioners. Said board shall, upon the payment to them of the sum of fifty dollars for each fish pound net to be erected or set in the Atlantic ocean, and ten dollars for each pound net to be erected or set in Sandy Hook bay or Raritan bay, as a license fee, issue to

the person or persons, corporation or corporations, applying therefor and paying said sums as aforesaid, if entitled thereto under the provisions of this act, a license duly signed by the secretary of said board to erect, set, operate and maintain a fish pound net in one of the waters above specified" (N. J. P. L. 1919, Chap. 94, pp. 214, 215; 1 N. J. Cum. Suppl. 1364, 1365).

These licenses are issued to authorize fish pounds within the exclusive territorial limits of plaintiff. It will be observed in Section 1 of the above quoted act that fish pounds are authorized "in any of the waters of the Atlantic ocean, within three nautical miles from the coast line of this State." While this language indicates a marginal sea three nautical miles in extent, that distance is not measured from the shore line, but from the *coast* line, thus recognizing the rule of *terrae fauces* discussed in Point (1) of this brief.

Following is the summary of the testimony relating to pound fishing:

William J. Meyers (R. 295) lives at Monmouth Beach and has been in the fish business for forty years. He has seen the garbage scows going in and out and has seen the garbage on the sea and loads and loads of it on the beach. He has seen them pull old beds out of the fish nets at the pounds at Galilee; bed springs and boxes get into the nets and tear them to pieces. At times the garbage is so thick on the beach after a northeast or east wind that you can hardly walk. The garbage is decayed, some of it very much so. It has to be scraped up and buried. This condition always follows a northeast or east wind. He has taken home loads of wood from the garbage (R. 297).

Brazil Wooley lives at Spring Lake and has a fishing pound at Belmar representing an investment of between \$18,000 and \$20,000. He has been in that business for eighteen or twenty years. It is composed of nets (R. 846) stretched out like fences with a pocket. His catches in 1921 were worth \$55,000; 1926, \$44,000; 1927, \$41,000; 1928, \$29,000 (R. 847). The number of men employed in

1928 was twenty-three; 1927, twenty-four; 1926, twenty-nine. He has encountered difficulty with the garbage in his fishing pounds. The garbage is getting worse every year. It tears his nets and interferes with the operation of the pounds; the holes in the nets let the fish out. This is due to the crates, bed springs and such things which come in the garbage (R. 848). It interferes with the catch. It increases from year to year as the garbage increases. The garbage forms a scum and accumulates in his nets (R. 850). His nets accumulate from the garbage all manner of things like dead chickens and other bad stuff which drives the fish away (R. 851). The nets of the fishing pound extend for a distance of about 1500 feet out into the ocean (R. 851). He has one pound at Spring Lake and another at Belmar. They are operated under a state license (R. 853) from the Fish and Game Commission, for which he pays a license fee (R. 856).

Charles J. Markus lives in Belmar (R. 865) and is commodore of the yacht club with which he has been connected for seven or eight years. He has encountered the garbage at sea when he has been fishing; he has seen the garbage seven or eight miles out. Many times he has encountered the slick from the grease in the garbage probably a mile long and half a mile wide, containing refuse of all kinds, garbage and boxes, crate wood, wooden strips and crates and mattresses (R. 866). There are lots of electric light bulbs and other things which he described. They steer clear of it when they are out in the sea as much as possible. The garbage accumulates in their yacht club basin and they have to clean it out as fast as it comes in (R. 867). It piles up from a northeast wind. It is carried up the ramp that leads from the water to their boat house. It stops fishing because the garbage and refuse collects on the lines. He has seen 100 men at Sea Girt sitting around waiting for the tide to change to carry off the garbage in the water so that they could begin their fishing. That condition has existed for seven or eight years (R. 868).

Frank Weber lives at Monmouth Beach and has been a pound fisherman for thirty-three years. He goes to sea frequently (R. 981). He has seen garbage as far as you can see out on the ocean. He has seen it in waves or rows on the water three or four hundred yards wide, so thick you could walk on it. He has encountered it in his boat. He describes one occasion when he tried to find a hole to get through the garbage, broke his propeller shaft and lost it. He described the condition of the garbage (R. 982). It smells bad. It damages nets and cuts the strands. He has an investment of \$40,000 in his fishing pounds. The damage from the garbage has amounted to between \$2,000 and \$3,000 in one storm. The stuff has accumulated against the nets and swept them away. He catches from 800,000 to 900,000 pounds of fish per season (R. 983). Has seen garbage in the water in a solid streak a foot or two deep and about 300 or 400 yards wide (R. 984). The value of his fish catch ranges from \$35,000 to \$50,000 a year. His expenses run somewhere around \$30,000 a year (R. 985). He employs eighteen men (R. 986).

Fred Weber lives at Monmouth Beach and has made a business of fishing for the past ten years (R. 986). He does trap fishing or pound fishing and is associated with his father. He has seen garbage in the ocean as far as he could see. If it is calm you can see stuff drifting out there consisting of crates, barrels, garbage, fruit, vegetables, dead animals, short lumber in sticks from 50 to 60 feet wide up to 200 to 300 yards wide (R. 987). They sometimes strike it. He has seen it continuously from the shore out to where he goes a mile and a half from the shore. They have dodged it all the way from the beach out to the pound. It is in the undertow along the shore, on the shore and all over. It gets tangled up in the nets and they have to hang around for three or four hours at a time to take the drift stuff out of the nets. They have to clear the garbage off the beach before they can get their boat out or get into the water (R. 988).

William G. Pressley lives at Long Branch and has been in the fishing business for fourteen years. He is a pound fisherman off Normandie between Seabright and Galilee. He has an investment of \$12,000 and catches about half as much fish as Frank Weber. He employs ten men (R. 989). He has encountered the garbage and describes the articles which he has seen in it. He has seen areas of garbage in the ocean as big as a city block. He has seen it on the shore. The Wednesday before he testified he saw it on the beach at Long Branch and Seaside Park (R. 990). It had the appearance of that shown in Exhibits Nos. 157, 154, 153 and 156. About the same type. Boxes and barrels which come in the garbage tear the nets and let the fish out (R. 991). He has two pounds and damage caused by the garbage requires from \$1,000 to \$1,200 a year for repairs. He has lived two blocks from the shore all his life. Garbage destroys bathing at times and people will not go in. They will not risk stepping into this kind of garbage or grease in the garbage or on nails in the driftwood that comes with the garbage. He has known cases of injury from that cause (R. 992).

Samuel Siciliano lives at Long Branch and has been a pound fisherman for five years. He has had experience with the garbage in his own pounds half a mile from shore. He has seen garbage and accompanying driftwood thrown against the nets and cut the ropes and strands. His investment is \$12,000. Last year he caught 4,000 pounds of fish (R. 992). He employs nine men in addition to his own labors. Garbage is pretty regular in the ocean between his pound and the shore. It comes from the north-east direction. It is an awful mess. When the sun shines on it, it smells (R. 994). They have to collect and bury it in order to find a place to land their boats. It interferes with their boats, particularly the nails and boards. Their horses have stepped on them and were injured (R. 995).

Fred Cook lives at Monmouth Beach and is a pound fisherman at Galilee. He has an investment of from \$12,000 to \$14,000. Annual catch, 35,000 to 40,000 pounds of fish (R. 1004). He has had plenty of experience with

garbage in the ocean. Has seen it a mile or a mile and a half out in the water consisting of anything that will float. Covering areas of a half mile. Has seen it on the shore. Has seen areas of floating garbage a mile and a half in length and half a mile wide consisting of barrels, cans, boxes, logs, garbage and dead animals (R. 1005). Rubbish catches in the nets and tears them so that they are put out of use a day or two at a time until they are changed or repaired. Repairs from that cause cost \$1,000 to \$1,200 a year. He employs twelve men. They have much garbage on the beach. At times it is difficult to launch or land their boat. The garbage at Monmouth Beach sometimes prevents bathing. It piles up in windrows (R. 1006). It produces a bad smell and people will not go in bathing. He has identified boxes and crates and other articles in the garbage as having the names and addresses of New York City parties.

Hilding Swenson lives at Manasquan and has been a pound fisherman for twenty-five years. He has seen the garbage in the sea—lots of it. As far as he could see. His nets are about two miles off shore. He can see the stuff coming in. Sticks in the garbage go through the nets. The stuff drifts between the nets (R. 1111). He describes the articles in the garbage. Consists of all the things they use on the table. He has seen as many as twenty dead chickens at a time. His nets catch all this stuff. At times it has taken him and his men from 4 o'clock until 10 o'clock in the morning to clean the stuff out of the nets. When the nets are full of garbage they never get any fish—the stuff keeps the fish away. He has seen the stuff on the beach so that (R. 1113) fifteen of his men and four horses and wagons have been required to clean the beach off. He has seen it a foot deep on the beach. It has to be moved before they can move their boats. It cost \$25,000 to \$35,000 a year to operate the business. Considerable portion of that amount is spent to repair the nets. The storms do not affect the nets, except when they bring in garbage. It tears the nets to pieces. On December 20, 1929, they

had a storm from the northeast which brought in garbage and boxes and kegs which tore the nets loose (R. 1114). He has seen check books, check stubs, theatre tickets, restaurant slips, showing that they came from New York City. Last November, 1929, he picked up a book full of check stubs from a New York City concern—a construction company (R. 1116).

Edward Combs lives at Manasquan and was a fisherman for thirty-five years, until four years ago—pound fisherman. He has seen plenty of garbage on the beach—drifting in with the northeast wind, until it was a foot or two deep (R. 1119). Describes the contents. He has seen it in streaks, in the water, two or three miles long—as far as five miles from shore, and from there extending right through to the beach. Whenever they had a northeast wind it gathered in their nets, and broke them so that they lost their fish (R. 1120).

Coast Guards.

Along the Atlantic Coast within the section of plaintiff's shore involved in this suit, the United States Coast Guard Service has established and maintains numerous coast guard stations for the purpose of giving aid in case of shipwreck or accident to vessels at sea. Patrols are maintained between coast guard stations to keep watch of the ocean and to discover signs or signals of distress from vessels.

Little need be said about the importance of this service and of the necessity of maintaining conditions in the shore waters and on the shore conducive to expeditious action in case of need.

The following summary of testimony of coast guards shows the nature and extent of the nuisance and impediment caused by defendant's dumping of garbage at sea in connection with the launching and operation of lifeboats on the shore and in the water.

Frederick Bailey has been a coast guard for twenty-eight years along the New Jersey coast. He sees plenty

of garbage along the shore when they have an east wind or a northeast wind (R. 465). It comes in in such large quantities that they have to clean up the beaches in front of the coast guard stations and cart the stuff away in a wagon (R. 467). The garbage seems to come from off the lightship. The wind doesn't have to be so strong. A wind of twenty or thirty miles an hour will bring it. No passing vessel ever throws off enough to make the quantities that get on the beach.

Benjamin F. Newman has been in the coast guard service on the New Jersey shore for fourteen years and is familiar with the garbage conditions on the beach. After an east wind or a northeast wind the garbage piles up on the beach in large quantities (R. 478). He has seen the garbage piled up solid along the beach for seven-eighths of a mile. They had to rake it up and cart it away for a day or so at a time. He describes the articles, including cats and dogs and chickens. He has seen it in the water floating on the surface and in the undertow just as it breaks along the beach. He has seen it thick and spread out (R. 479).

William J. Butler (R. 481) has been a coast guard for twenty-five years on the New Jersey coast and is familiar with the garbage conditions all along the shore. An east or northeast wind for two or three days always brings in a large amount of garbage (R. 482). The garbage comes on the beach as far as Beach Haven but does not come on the South Jersey beaches due to the currents and curvature of the shore below Barnegat. He has seen garbage floating on the surface and in the undertow. He has noticed various articles in the garbage which show that it came from New York City (R. 484).

W. D. Townsend has been a coast guard for twenty-two years on the New Jersey coast between Shark River and Spring Lake and Monmouth Beach. He is familiar with the garbage conditions. It comes in on an easterly wind in tremendous quantities. He describes the articles (R. 500). It is in decayed condition. Sometimes the entire

area between high and low water mark is covered with garbage. He has seen it floating in the water. He has seen milk bottle caps from New York City and barrels which have been addressed to Fulton Market, New York (R. 501).

I. T. Gifford has been a coast guard for fifteen years at Spring Lake. He has seen the garbage in the sea floating off his guard station. It covers the shore as high as the sea goes at high water. It washes up on the beach and stays there until it decays and rots or is taken away (R. 503). This occurs every time the wind is from the east or northeast (R. 504).

Henry D. Parker has been a coast guard for twenty years and has been stationed for nine years at the Seaside Park station. He has seen the garbage in the sea all along the coast in areas as much as a half acre in size. He has had to sail through it. He has seen it on the beach in large quantities (R. 504). It is mostly spoiled fruit, dead dogs and cats, chickens, ducks, trukeys and vegetables (R. 506). Saw garbage on the beach at Seaside Park the day he testified. It was knee deep and consisted of everything, fruit, etc. (R. 514). The garbage comes after every north-east storm. He walked 50 yards along the beach the morning he testified and the garbage lay in the roadway of the boat and had to be shoveled away to get the boat clear (R. 515).

W. H. Wilbur has been a coast guard on the Jersey coast for twenty-five years. He has seen the garbage on the sea in front of his station, patches of it—an acre or a half acre. He has seen garbage on the beach consisting of vegetables, fruit, beds, bedding, wood, Christmas trees, baskets. There was some on the beach the day he testified. The wind that day was east or southeast—the day before it was northeast to east, southeast. The garbage is generally on the beach when they have easterly weather (R. 517).

Lester Brower has been a coast guard at Mantoloking for twenty-seven years. He has seen the garbage a half

mile out at sea, in patches of a quarter of an acre. Has seen it on the shore at all seasons (R. 521). It consists of fruit, vegetables, cats, dogs, pigs, wood, etc. Northeast-erly or easterly winds bring it (R. 522).

C. C. Perrine has been a coast guard in the service twenty-four years and at Bay Head four years. He has seen the garbage scows being towed out to sea. He has seen large quantities of garbage floating in the sea four or five miles offshore and he has seen it on the shore. It consists of cats, dogs, fruit and vegetables, trees, horses (R. 524). During the summer months they keep three men at work keeping the beach clean (R. 525).

C. Brower has been a coast guard for eight years and is stationed at Chadwick, N. J. (R. 506), about twenty miles below Asbury Park. He has seen the garbage in the sea and on the beach from Sandy Hook to Chadwick, Deal, Shark River, Spring Lake and Manasquan. He has seen lots of it on the shore—wagon loads. He describes the articles he has seen in it, including dead chickens and animals, fruit and vegetables (R. 507).

A. B. Forsythe has been (R. 525) a coast guard at Bay Head, New Jersey, for twenty-nine years. He is familiar with the garbage in the sea in various quantities up to half an acre at a time. He has seen it on the beach (R. 526).

C. W. Cook has been (R. 527) a coast guard for twelve years. He has had experience with the garbage on the beach and in the undertow at sea. He has seen it in the water to the extent of half an acre or an acre at a time; he describes the articles in the garbage (R. 528). It is in a bad condition. He mentioned times during July and August, 1929, when it was impossible for people to bathe. The garbage smelled bad, and had to be cleaned up and carted away with teams and wagons. It comes in on an east or a northeast wind. He saw garbage in the sea and on beaches on the morning he testified (R. 529).

Edward Roswell is a coast guard at Manasquan, and has had experience with the garbage on the beach. His duty is to patrol three miles of the beach (R. 531). He

described the articles he had seen; it is decomposed. The coast guards have had to rake it up and bury it. That occurred three times during the bathing season of last year. The bottles break up in the waves and are dangerous on the beach; people cut their feet and that has frequently occurred near his coast guard station. It prevents people from going bathing (R. 532).

John C. Salter is a coast guard at Chadwick Station, Lavalette. He has been a coast guard for four years. Has seen the garbage floating towards shore in areas of an acre or two, or 200 or 300 yards along the beach. He has seen large quantities of it on the beach. It consists of fruit, cats and dogs, boxes. The condition is bad after a northeast storm. The garbage is in a spoiled condition (R. 510).

L. E. Mitchell is a coast guard at Highland Beach Station, Seaside Park. Has been in the coast guard service for twenty-eight years. He has seen garbage floating offshore as far as you could see, and also in the undertow. It lays in windrows along the beach from Barnegat to Lovelady Station. It consists of spoiled fruits and vegetables, dead dogs, cats and fowl (R. 511).

Exhibit 121 shows the coast guard men cleaning the garbage from the beach so they can launch their lifeboat (R. 661).

Elias Herbered lives at Long Branch and has been a coast guard at Monmouth Beach for twenty-four years. His station is a half mile from the Beach Club shown on Exhibit No. 206 (R. 975). He has had experience with garbage on the beach at his station. Lots of garbage comes in on easterly winds. It piles up. He can see it coming on the shore. It comes in a mass, right up to the bulkhead sometimes. It interferes with the bathing. They have to clear it away to get their life saving equipment out sometimes. Sometimes in order to bring out their boats they have to clear away a path through the garbage. It has to be removed from the bathing beach. His beat is two and a half miles long between Monmouth Beach Station and

Sea View Avenue, Long Branch (R. 976). There is garbage all over, all the way through the entire length of his beat. He has seen it floating in the ocean. Sometimes a quarter of a mile of it (R. 978).

Carroll Osborne lives at Long Branch and has been a coast guard for fourteen years. He is now the officer in charge of the Monmouth Beach Station (R. 979). Every time there is an easterly wind the beach is practically covered with garbage consisting of decayed vegetables, dead animals. It just covered the beach. When they have to go out for drill they have to clean it up and the beach is not fit for bathing purposes in the summer. He has seen garbage on the ocean in areas as large as a city block. It comes from an easterly or northeasterly direction (R. 980).

Defendant's Witnesses.

Defendant's witness Gainard testified that he made observations and investigations at sea with respect to the garbage dumped by the City of New York (R. 1646). On January 30, 1930, he was present when the scows dumped and stayed with and followed the floating material until it almost disappeared due to the heavy beating of the sea (R. 1647). He followed the garbage all night (R. 1648). He confirmed plaintiff's witnesses to the effect that the area of surface covered with garbage after dumping varies with the wind and sea (R. 1649). On the occasion he mentions the area was about a mile in length and about 200 feet wide (R. 1650). He followed the drifting garbage for about ten miles and discontinued because a heavy snowstorm set in which obscured his view of the garbage (R. 1651). The sea churned up the garbage and beat the oil out of it (R. 1652). He followed the garbage from the dumping point which was about twenty miles from that shore (R. 1650) to within fourteen miles of the Jersey shore (R. 1653).

On February 1, 1930, he was present when the scows dumped twelve miles southeast by seven-eighths east from

Scotland Lightship (R. 1653). There was a southwest wind and he followed the garbage while it drifted two and one-half miles in five hours, and stretched out in long streaks. A large percentage of it was floating below the surface of the water (R. 1654).

On February 29, 1930, he was present when the scows dumped eight miles from Scotland Lightship. Their garbage covered an area about three miles in length (R. 1656). He watched it that night with a searchlight. In the morning it was mostly floating below the surface (R. 1657). He put bottles overboard in the garbage to test its floating, but did not gather any of them up because they were floating to the New Jersey shore (R. 1674).

Defendant's witness Lawrence went on the inspection trips with Gainard. It was his opinion that the garbage did not interfere with navigation (R. 1752). The twenty-mile dump on January 30, 1930, was opposite Long Branch or between Long Branch and Asbury Park (R. 1756). While he watched that garbage it floated about eight miles (R. 1757). Some of the garbage floats below the surface of the water (R. 1767). When the garbage leaves the scows it stops when it strikes the water, it does not expand immediately, a band of garbage about 20 feet wide is left after the scows pass (R. 1776). He followed the garbage after dumping for about four hours. About 10 per cent. of it remained afloat, the rest had been beaten down by the wind and sea. It was torn up except bottles and electric light bulbs (R. 1864). It drifted about ten miles (R. 1865). There was a northeast wind blowing thirty-five or forty miles an hour (R. 1866). On February 2nd, he followed the garbage from midnight until 6 P. M. next day. It drifted two and one-half miles in the first 5.9 hours. After 6 A. M. in the morning it was spread out in three long streaks about seven miles long and 200 feet wide, consisting of pineapple, grapefruit, orange peels, rags, bottles, books, dolls, pillows and mattresses. He stayed with the general mass for seventeen or eighteen hours (R. 1867). On March 1st he observed six scow loads dumped

and he followed the mass from 10.15 P. M. until 3 P. M. next day (R. 1868-1869).

Mr. Bergsten testified that on January 30th and February 1st, the wind was moving in the opposite direction to the current (R. 1878); that objects above the surface of the water are affected more by the wind, and those below more by the current (R. 1879).

The testimony of these three witnesses is confined to three instances, namely, January 30th, February 1st and February 2nd, 1930. Their testimony confirms that of plaintiff's witnesses regarding the drifting of the garbage under the influence of the wind. It confirms the testimony of Smack, all the fisherman and Inspector Haas as to the distribution and appearance of the garbage on the water. Their estimates, however, of the percentages that remained at a given time are of little consequence because in the process of dispersion by wind and wave large quantities would disappear from sight, especially at night, on account of distance. They agreed that a large quantity was held in suspension below the surface of the water. Whether the garbage remained on the surface or floated below the surface is all the same when it reaches the shore. When it is carried up on the beach by the waves the porosity of the beach and the retardation of the velocity of the water on the return of the waves act as a sieve to screen out of the water and deposit on the beach whatever may be in the water. Nor is the fact that the garbage is beaten up, as they term it, of consequence because the testimony of many witnesses, hereafter reviewed, shows that this "garbage soup," as some of the witnesses called it, is as objectionable as any part of the garbage, not only because it is offensive to bathers but also because it deposits on the shore material so fine that it cannot be conveniently gathered up.

Summary.

The foregoing documents and testimony, which are not answered or contradicted by any of defendant's proof, carry the overwhelming conviction not only that defend-

ant dumps garbage at sea, but also that it is a matter of constant annoyance and creates a public nuisance to the proper use of the waters in question for the operation of boats and fishing, in violation of rights of plaintiff's citizens as already established by the authorities and decisions referred to under this point.

Defendant attempts to justify this dumping on the basis of permits alleged to have been issued by the Supervisor of the Port. As has already been observed the only interest of the Federal Government, exercised either by the Secretary of War or by the Supervisor of the Port, is to prevent these dumpings in places that will interfere with the main ship channel. As we know from Exhibit 299, as well as from the law and decisions, the Federal Government is concerned only with navigation. It does not undertake to protect the public rights of fishery of plaintiff's subjects. Moreover, plaintiff, in spite of the Federal jurisdiction respecting navigation, has the right to protect the interest of its citizens in that regard at least in its own territorial waters.

Smith v. Maryland, 59 U. S. 71.

United States v. Bevans, 3 Wheat. 336.

"Title to water and soil.—No title to the water, or soil covered by it, was conferred by the Constitution upon the Federal government, but the title to them remained in the several states."

Farnham on Waters and Water Rights, p. 48, Sec. 10.

Angell on Tide Waters:

(p. 60) "But the power of Congress, which comprehends the use of, and passage over, the navigable waters of the several states, by no means impairs the right of state governments to legislate upon all subjects of internal police within their territorial limits, which is not prohibited by the constitution of the United States, even although such legislation may indirectly and remotely affect commerce, provided it do not interfere with the regulations of Congress upon the same subject."

The proof shows that subjects of the plaintiff are interrupted and impeded in their navigation and fishing. That the garbage is dumped upon their fishing equipment which is destroyed thereby. That damages aggregating substantial amounts are suffered by these subjects as the result of the garbage dumped at sea, and that the fish pounds of other subjects, enjoyed by them under licenses from plaintiff, are torn and destroyed by articles floating in the garbage and that the material is so offensive as to drive the fish away from the area which it affects.

Bathing.

One of the most important uses of plaintiff's ocean front is surf bathing. The comfort and health of the bather is affected in two ways, namely, by the garbage in the water, and the offensive accumulations thereof upon the beach. The right of the public to bathe in the ocean deserves a brief consideration, in point of law.

The question whether bathing in the sea was a common right, along with fishing, was involved in the case of *Blundell v. Cotterall* (5 Barn. & Ald. 268) in 1821. That case held that access to the sea for bathing across the private lands was not a common law right, as was a similar right of access for navigation or fishing. However, the dissenting opinion of Mr. Justice Best, and the discussion provoked by that decision plainly shows that bathing in the sea was one of the public conveniences recognized by Bracton and later generally acknowledged by the most eminent English and American authorities.

Angell, Tide Waters, pp. 28-35.

Hall's Essay on the Rights of the Crown in the Sea-Shore (3rd Ed.), p. 156 *et seq.*

Following are extracts from above cited "*History and Law of the Foreshore and Sea Shore*":

(p. 523) "Taking the word ('commons') in this confined sense, over land between high and low

water mark easements and privileges are exercised in many manors bordering on the sea in many parts of England; * * *. Public ways pass over it, and it would be a valid custom for the inhabitants of a villa within the manor to bathe in the sea and go over the foreshore.”

* * * * *

(p. 542) “In the case of *Mace v. Philcox*, in 1864, it was held * * *. A distinction was drawn here as to the right of the public to bathe and their right to use the shore. Erle, C. J.: ‘* * * If you can lawfully get to the sea-shore, I apprehend you may lawfully bathe there.’”

* * * * *

Following are extracts from *Angell on Tide Waters*, which is widely cited and quoted as authority by the courts in both this country and England:

(p. 17) “The claim of the citizens and inhabitants of a state or country to the free use of the waters of the sea and their shores, for private advantage, is so obviously dictated by the law of nature, that in the first ages of all countries, they have been left open to public use. It is either so directed by the positive codes of law, or so made obligatory by the acknowledged customary or common law, of every enlightened nation.”

* * * * *

(p. 18) “‘And truly by natural right, these be common to all; the air, running water, and *the sea*, and hence the *shores of the sea*. Nobody is therefore prohibited to come to the sea shore.’”

* * * * *

“‘And by the law of nations the use of the shore is also public, and in the same manner as the sea itself, and for this reason any person is at liberty to place a cabin there, in which he may harbor himself, and for the like reason to dry nets and draw them from the sea.’”

* * * * *

(p. 34) “It is very clear, that the only restraint, which by the common law is imposed upon the com-

mon liberty of bathing in tide waters, where no right of private property is involved, is that which is imposed by decency and a respect for public morals.”

(p. 192) “Both commerce and fishing, therefore, and bathing in the sea, although they are matters favored by the common law, by reason of public and national benefits to be derived from them, do not, because the waters of the sea are open to all persons for all lawful purposes, afford a universal right of access to them over land which is private property.”

Other authorities confirm this statement of the common law.

Gould on Waters (3rd Ed.), Sec. 4, p. 8.

1 *Farnham on Waters and Water Rights*, Sec. 37, p. 175.

21 *Am. & Eng. Ency.* (2nd Ed.), p. 439.

Testimony Respecting Effect of Garbage Ashore.

With twenty-nine separate municipalities affected and the testimony of something over 200 witnesses, principally public officials directly interested therein on behalf of their municipalities, it is extremely difficult to summarize this testimony within a narrow compass. The testimony of a great many witnesses, and any extended discussion of the numerous exhibits, have been avoided. Further reduction in testimony could doubtless be made, but in view of the magnitude of the injury resulting to more than fifty miles of plaintiff's beach front, and to twenty-nine of its municipalities, it seems important to emphasize those aspects of the testimony which deal with the importance from a recreational point of view of one of the finest ocean beach fronts in the world, and to impress upon the mind of the court the intolerable public nuisance inflicted by this garbage, in the annoyance and inconvenience in the use of the beaches, the cost of removing the garbage therefrom, the detriments to municipal and economic development along the shore, the menace to health and comfort of the people

and the sense of self-respect and decency which plaintiff and its subjects desire to preserve in the enjoyment of these great natural advantages.

Morgan F. Larson is Governor of New Jersey, who at the time he testified had been in office for one year (R. 372). After his inauguration he consulted the Attorney General for advice as to the institution of the necessary action to compel New York City to stop polluting the beaches. The Attorney General, pursuant to the witness' instruction, prepared a resolution which was adopted as Joint Resolution No. 16 by the legislature of 1929. It passed both houses and was approved by him as Governor (Exhibit 68). This suit is the result of the instructions contained in that resolution (R. 379). He has been familiar with the beach pollution for the last six or seven years. Unless it is stopped it will ruin the beaches as playgrounds. Many people have told him that if it is not stopped they would give up their seashore homes. He has been familiar with the garbage condition on the beaches (R. 379). The relation between the recreational value of these beaches and the economic welfare of the state is shown by the assessed valuation of property in the seashore municipalities in the area affected for 1929 contained in Exhibit 69, which is \$139,599,751 (R. 380). During his service in the Senate the state was continually asked for assistance to help the municipalities along the shore build jetties to protect the beach and the state in realization of the valuable asset of the beaches has contributed millions of dollars toward that purpose. A statement of the figures of such expenditures for beach protection between Highlands and Beach Haven from 1920 to 1928, together with the amount contributed by the municipality, is shown (R. 381) in Exhibit 7 showing: Appropriations, \$896,921.52; total cost, \$1,734,559.65; state expenditures, \$838,494.28. The difference between the last two items was paid by the municipalities (R. 302). There are licensed fish pounds along the coast, which is a substantial industry. The value of these pounds, the proceeds derived from the sale of their products, the weight of

fish caught, number of licenses issued, number of pounds operated and of men employed is shown on Exhibit 71. He considers the beaches one of the greatest assets of the state (R. 383), which benefits the whole state, since the people from all parts of the state resort to the seashore places for recreation. He has met people there from many countries of Europe and he has met people from Chicago and elsewhere in the summertime at these resorts. The portion of his inaugural message relating to this subject was offered as Exhibit 72 (R. 384).

Mr. Smack testified that the effect of this garbage upon the development and enlargement of the uses of the beaches is very harmful. It is absolutely impossible at times to bathe on account of the garbage in the water and on the beach (R. 54). People do not think of going into the ocean at such times. He has seen the waves full of floating material, bottles and everything that comes in the garbage. When he was Superintendent of the Seabright Beach Club he always had two and sometimes three first-aid kits for occasions when people's feet were cut on the glass from bottles that had broken in the surf (R. 55). He has repeatedly seen islands of garbage float to the shore. He has seen these masses of garbage follow a definite trail from the dump grounds to a point where they deposited it in large quantities at Sandy Hook (R. 56). The garbage which accumulates on the shore contains the same mass which he described as having seen in the scows as dumped at sea, except that the heavier things which the scow contain sink before they reach the shore (R. 56). As guard and superintendent of the beach club he has had occasion repeatedly to stop little children, who had picked up condrums from the garbage mass on the beach, from blowing them up. When the garbage reaches the shore it is putrid. It has to be carted away or buried (R. 57). He has seen the beach strewn with garbage for practically the entire distance of twenty-six and twenty-eight miles. As Secretary of the Seabright and Rumson Chamber of Commerce, Mr. Smack made complaints about the garbage to New

York City. He communicated with Mr. Taylor and the Street Cleaning Department and he received a letter in reply from Mayor Hylan (R. 60). He was visited by Mr. Taylor in respect to his complaints.

On the occasion referred to when Commissioner Taylor visited Mr. Smack and asked him "to lay off," Mr. Taylor also said that the complaints were making his life a hell and that if they would stop the complaints New York City within one year would have completed all of its plans for incineration to dispose of its entire garbage output (R. 63). That was in August, 1925 (R. 13).

At Seabright Beach Club it was necessary to employ one extra man on account of the garbage and he with two lifeguards and some other boys, eight all told, were required at times to devote their time entirely to cleaning the beaches. The service of one lifeguard and two boys was chargeable entirely to garbage (R. 62). He has collected exhibits which show where the articles in the garbage came from. They consisted of theatre tickets dated a few days before they were picked up; personal letters dated mailed from New York City addresses to New York City addresses. They had been opened and disposed of in the garbage. He had also picked up on the beaches milk bottle caps, business letterheads, bills, boxes and other articles bearing New York City addresses, showing that they had been discarded as after receipt in New York City (R. 66).

Charles R. Zacharias lives in Allenhurst and has been familiar with garbage condition on the beach for ten years. He has seen the garbage floating in the sea whenever the wind comes from the northeast, east or north in such quantities that it has covered the Allenhurst beach. He described the articles that he has seen (R. 122, 123) and has identified some of them as coming from New York City addresses. He is connected with the government of Allenhurst, which employs an extra man throughout the entire season for the sole purpose of cleaning the garbage from their beach (R. 124). This garbage injures the bath-

ing business very seriously and causes a great deal of complaint (R. 125). The garbage affects the morals of the community (R. 125). Exhibit 25 shows the Allenhurst Bathing Pavilion and other facilities which have been provided by the city. It is a community of family homes (R. 126). Exhibits 26, 27 and 28 shows conditions at Allenhurst when the garbage was on the beach on February 27, 1929 (R. 126). Garbage affects bathing and business conditions along the beach since the city depends upon the beach for its attraction. That has been Mr. Zacharias' experience along the shore for twenty-five years (R. 128). Complaints about the garbage conditions come to him frequently and he makes personal investigations and inspections because he had charge of the beaches for Allenhurst for the past eight years and for four years has been directly responsible for keeping the beaches clean (R. 129). The garbage condition shown by Exhibits 26, 27 and 28 occur frequently every year. Whenever the wind is from the north, northeast or east (R. 130). He has seen those conditions frequently and several years ago he complained to the Governor of New Jersey about those conditions (R. 131). The garbage not only comes up on the shore, but the undertow is filled with it and the stuff floats in the water offshore (R. 133). The beach at Allenhurst is owned by the municipality under grant from the state. The city has provided bathing houses and bathing facilities which it rents to the bathers (R. 133). Allenhurst has been a high class community for about twenty-eight years. The bathing season extends from June 15th to September 15th (R. 134). He testified that he made a trip along the beach on the Sunday morning previous to the date of this testimony and he presented a list of the things that he found, and also some photographs showing the conditions (R. 887). The list was offered as Exhibit 182 (R. 888). Exhibits 183 to 187 were presented by him as pictures taken at Loch Arbor and Allenhurst, showing conditions as they were at that time (R. 899).

Jesse A. Howland lived near the beach at Seabright for fifty-nine years and for thirty-nine years has been engaged

in the business of building bulkheads and jetties along the shore from Sandy Hook to Bay Head. He is particularly familiar with the beach conditions between Seabright and Beach Haven (R. 98-99). He has been on the beach all his life and is familiar with the garbage conditions along the shore. He has seen no end of scows, several of them have come ashore with the garbage (R. 100-101). He has seen so much garbage on the beach at times that it was impossible to find a place to bury it, and he has personally spent at least three hours a day raking up and burying articles consisting of all kinds of vegetable and animal matter, which he describes. He has seen two dead babies in the garbage (R. 102). Other things with identifications as having come from New York City are shown by his testimony (R. 103). The garbage contains vast quantities of bottles, which are broken in the undertow as they reach the shore and people cut their feet on the glass. He has seen the beach so covered with garbage that there was not room for a person to lay down on the sand (R. 105). He has seen vast quantities and masses floating in the sea (R. 105). In a northeast wind he has seen streaks of garbage in the sea as far as he could see, estimating for a distance of probably three miles out from the beach. His examination of the garbage has identified it as coming from New York City (R. 106). The dumping grounds are southeast of Seabright and the garbage is brought ashore by northeast, east or southeast winds (R. 107). In building jetties Mr. Howland encounters the garbage almost every day. During the past four or five years he has seen almost every kind of garbage in the water; the undertow is filled with it. Sometimes considerable quantities lie to the leeward of the jetties for considerable time. It becomes waterlogged and submerged, but does not sink to the bottom. He has seen the waves break over the jetties with the water full of garbage when there was nothing apparently floating on the surface (R. 108). He has seen this garbage in all the places that he has worked, except Beach Haven, Ocean City and Margate

(R. 109). There is a great deal of this garbage in such a decayed and offensive condition that no one wants to come in contact with it. It is putrid and sometimes they have to send for the dead animal wagon to carry away the dead animals that are in it (R. 109). The garbage leaves gobs of grease and fat which is gooey, and when bathers with bare feet step on it it oozes up between their toes. It produces grease slicks in the water and on the bathing beaches (R. 110).

Steward Cook testified that he lived in Long Branch for more than eighty-three years and had been a fisherman on the sea for seventy years (R. 116). He testified to the condition of the garbage floating in the sea and what it consists of and the piles and piles of it which he has seen on the shore (R. 117-118), and he has identified articles which showed that the material came from New York City (R. 120). The garbage interferes with the use of beaches and bathing. It brings a kind of grease and he has seen children come out of the water all greased up (R. 119).

John F. Murray is Director of Public Works and is one of the commissioners of the city government of Newark. He has a summer home at Belmar, about 300 feet from the ocean, where he has spent his summers for ten years. He frequents the beach and is familiar with the garbage conditions there (R. 401). On numerous occasions he has noticed filthy conditions of garbage on the beach which is left there by the recession of the tide. He describes the kind of things the garbage contains. Frequently he has had to take his children away from the beach because it was so filthy and the water was unfit to use for bathing. It was full of filthy stuff. When the wind is from the south the garbage does not come in, but if the wind comes from the direction of Sandy Hook it brings in the garbage. More garbage comes in when the weather is foggy. He has seen garbage floating in the water when he has been out in the ocean fishing (R. 402). It floats in large spots. He has observed the conditions all the way from Monmouth Beach to Spring Lake. He has driven along the

beach to see the accumulation of garbage for distances of twelve or fifteen miles. Unless the garbage is promptly removed in warm weather it produces an odor that is objectionable for a considerable distance from the beach and is very offensive (R. 403). The garbage contains fat and grease which becomes offensive in the sun and produces an unpleasant odor. Belmar depends entirely upon the attraction of its beach front and any damage to that beach injures the borough. He has seen them bury dead cats and dogs more than once, and other offensive matter. Much of the garbage has to be buried on the beach to get rid of it quickly (R. 404). He has seen the garbage floating at sea five or six miles away from the shore. At times he has been unable to fish because the sea was covered with garbage. He has seen areas larger than a city block in a single patch of floating garbage (R. 405).

August G. Birkenmeier lives at Maplewood, N. J., and has had a summer home at Bradley Beach for the past forty-two years. He is at the seashore from about May 15th to October 15th each year (R. 409). He frequents the bathing beaches at Bradley Beach and is familiar with the garbage conditions there. At times it is real bad and especially so during the past year (1929). He goes bathing every night when there isn't garbage floating in the water. He referred to one occasion in August, 1929, when the condition was terrible. The beach was littered with all sorts of crates, barrels, cans, rinds of fruit and every imaginable thing which you see on a garbage dump. It was also on shore (R. 410). No one was able to go swimming that day. He lives within 200 feet of the ocean and can smell the garbage 100 feet from the beach. He has seen slicks on the water, consisting of garbage and a sort of foam which it produces. It is a greasy scum. He has seen garbage floating in the sea when he is fishing four or five miles out (R. 411). He has run into big spots of rubbish and they had to turn around and travel for miles around it. It floats pretty much together and it is broken up near the shore (R. 412).

Ferdinand Kienli is a member of the commission government of Avon, where he has lived for nine years (R. 413). He is familiar with the garbage conditions on the beaches and has had charge of them since May 17, 1927. He has had considerable experience with the garbage. Conditions were worse this year than any other year he remembers, particularly on February 6th and 7th (1930), it covered the full length of the beach, which is 2,900 feet. He saw tons of garbage, fruit skins, restaurant menus, bed springs, mattresses, pails, etc. (R. 414). He has charge of cleaning the beach and has to cart the stuff away. It has to be carried from the beach to the roadway and loaded on trucks. The condition of the garbage is so bad that they can't leave it on the beach or even bury it, because children digging in the sand would uncover it. They are required to employ one man continuously from June until Labor Day, who does nothing else but clean up the beach (R. 415). Their regular forces also work on the beaches to remove the garbage. The beach has to be cleaned up every morning. They get some garbage every day when the winds are from the northeast and east. At such times the garbage comes in in large quantities and the people cannot bathe. Sometimes they cannot go on the beach at all (R. 416). On January 12 and 13, 1930, his attention was called to the pollution of the beach by garbage and he went down to inspect it. The beach was literally covered with garbage over practically the whole area along the Borough of Avon (R. 765). They had just cleaned up their beach about a week before. There was an "avalanche" of garbage out of which he picked up various papers showing that they came from New York City. This he described in his testimony. The garbage contained decayed vegetable matter, thousands of bottles, tin cans; there were about thirty sales slips from a shop on Broadway, New York City, the name and address of which he gave. The last time they cleaned the beach it cost them \$104 to do it (R. 766). The present condition would cost another \$100. There is probably fifty loads of garbage on

the beach. At the time he testified the beach was literally covered with garbage (R. 767), and that was the condition in which the special master saw it on the day before the witness testified.

S. Thomas Penna lives at Avon and manages a hotel called Avon Inn, which accommodated 300 to 325 people at a time. He is also one of the commissioners of the Avon government. His inn entertains an average of 250 people from the 1st of July until Labor Day. They have trouble with the garbage on the beach (R. 417). It is very disagreeable to his guests who wish to bathe and they complain about it. He is Commissioner of Finance of Avon (R. 418). They have spent for bathing pavilions and clubs \$40,000, including a pool owned by the city. This pool is necessary in order to provide a place for bathing when the beach is unfit for that purpose. They have 300 bathhouses. When the garbage is bad they use the pool (R. 419). Lots of bottles and tins come in with New York City addresses on them, and stacks of order blanks, which he identified as coming from New York City drug-stores, tied up in bundles (R. 420). He has seen crates which had been shipped to Washington Market in New York City, and dead dogs and cats in a putrid condition so that the skin was torn off and only parts of the animal remained; also pieces of meat and fowls and putrid masses of decaying flesh. When the garbage is removed it leaves a greasy substance on the sand which is difficult to remove. If it remains for several days it has a bad odor (R. 423).

Raymond Dodd has lived in Avon for eighteen years and has been Superintendent of Streets for the past nine years. He has to clean up the beaches (R. 424). He cleans up garbage and trash and wood which consist of all kinds of vegetables, dogs and cats and chickens, bottles, cans and boxes, and various fruit and vegetable waste. The accumulation of February 9, 1930, taken from the beach 2,900 feet long was sixty-three Ford truckloads of garbage and trash, bottles and cans, which came out of the ocean. Each truckload contained a yard and a quarter, cubic measurement (R. 426). He has seen pieces of paper and

bundles of sales slips from New York City stores, also theatre tickets and hotel menus from the same place. When the garbage is cleaned up it leaves a sticky grease on the sand (R. 427) and the sand has to be raked over to cover it up. When the sun shines on it it gives off a bad odor (R. 428).

Frederick F. Schock (R. 453) lives at Spring Lake and is president of the National Bank of Spring Lake and the Hasings Square Hotel Company, which operates one of the hotels at Spring Lake which accommodates 350 guests at a time and 20,000 day guests during the season. He is familiar with the garbage conditions on the beach, which comes in with wind from the east or northeast, which litters the beaches (R. 454). It is very detrimental to the beaches. People continually complain about it (R. 455).

Frederick N. Riechey has lived at Bradley Beach for fourteen years and is clerk and collector of the borough. He has been familiar with the beach for fifteen or twenty years. He pays the vouchers for cleaning the garbage from the beaches. During the week following February 7, 1930, he paid \$477.23 for cleaning garbage from the beach (R. 458). They have had trouble with the garbage on the beach for a number of years. People complain about the garbage and state that unless some action is taken to abate the nuisance they will seek some other summer resort. They have a municipal bathing beach (R. 459). Between August 1 and August 31, 1929, bathing tags were issued to 19,760 persons (R. 460).

E. Allaire Cornwell lives at Red Bank, N. J. He identified two milk bottle caps which he picked up on the beach the day he testified. They were from Sheffield Farms Company in New York City, 125th Street (R. 492), offered as Exhibits 84 and 85. He also presented a billhead of Stern Brothers, 42nd Street, New York City, addressed to a person at 309 West 71st Street, New York City. They were picked up at Long Branch (R. 494, 495), offered as Exhibit 86. He also presented pieces of boxes with the name of a concern in Green Street, New York City (R. 496).

William E. Selby lives at Allenhurst and has been Mayor since May, 1924 (R. 536). During the past season (1929) the garbage became so burdensome that they were unable to bury it all and had to carry it away. It leaves a bad odor (R. 537). It retards the enjoyment of the beach and its use by the bathers. At times it is so bad on the beach and in the water that bathing is stopped. Allenhurst is a residential community with first class residences and is a high class summer resort (R. 538).

They have constant complaints about the garbage. If something is not done they cannot retain the class of people which now comes there; they will leave the town and go elsewhere, since the bathing is the main attraction, and the town depends absolutely upon the beach. In order to protect their beach they have spent nearly \$300,000 within the past three years to prevent erosion. Bathing is the main attraction (R. 539). Unless the water and beaches are cleaned they cannot expect people to come. When the garbage is bad it carries such an odor that it even affects the water in the pool, and some parts of the garbage get into the municipal pool (R. 541).

M. E. Snyder (R. 228) lives in Ocean Grove and has been General Superintendent since April 1, 1926, of the Ocean Grove Camp Meeting Association, which is a religious organization maintaining a camp meeting resort at Ocean Grove since 1869. Numerous meetings are held during the camp meeting season from the second Sunday in June to the second Sunday in September (R. 229), sometimes as high as twelve or thirteen meetings a day, including elaborate programs of concert entertainment and lectures given by outstanding persons, including bishops of various denominations. In 1928, 97,710 persons attended their preaching services. In 1929 the number was 85,216. Concerts are given by Galli-Curci, Madame Schuman-Heinke, John McCormick, Kreisler, Marion Talley and other world-famous artists, who often have audiences (R. 230) of 10,000 people, the capacity of their auditorium, which is shown in Exhibits 30, 31 and 32 (R. 231).

Ocean Grove is served by the Pennsylvania Railroad and the New York & Long Branch Railroad and two regular bus lines to New York and Atlantic City (R. 242). He has attempted to obtain relief from garbage conditions on the beach by communicating with the State Board of Health, with the Supervisor of the Port of New York and with Governor Moore of New Jersey. He has seen the beaches littered with garbage a foot deep, consisting of various items which he mentions (R. 243). He has seen restaurant tickets and crates marked with New York addresses. The restaurant tickets were from a Vesey Street restaurant in New York City (R. 244). He has seen garbage floating on the ocean and in the undertow off the beach. It interferes with bathing. It comes in with the northeast or east wind (R. 252) and includes driftwood, frequently a hundred wagonloads (R. 262) of trash and stuff that has to be gathered up and removed after a garbage accumulation occurs. It fills up the flume at the south end of a lake that empties into the ocean and has to be removed (R. 263).

George L. Goodrich lives in Ocean Grove within a block and a half of the beach. Has lived there the year round for nine years and has seen lots of garbage on the beach (R. 265). He visits the beach every morning and has noted the garbage and rubbish which accumulates after a storm, not only on the beach, but in the water. You can see it coming in in troughs between the waves and strewn on the beach as far as the tide goes. At times there are great quantities. He has known occasions when ten or fifteen wagonloads have been carted off in boxes because the beach is inaccessible to wagons. It consists of various kinds of vegetables and fruit, cans, boxes, bottles, etc. (R. 266). The garbage and rubbish litters the whole beach and patrons of the hotel complain about the dirty water and the dirty beach. It has to be cleaned up and at times bathers are prevented from going in on that account (R. 267). This always occurs after a northeast storm (R. 268).

William Parker lives at Ocean Grove and is superintendent of the association. He has supervised the cleaning of the beaches for ten years and is familiar with the garbage conditions on the beach (R. 269). Those conditions occur after an east or a northeast storm. Garbage of all descriptions comes in. He enumerates a number of articles which he has seen, including dead dogs and cats. It is quite a job to clean off the beach. It has to be carried off the beach and carted away in trucks and wagons (R. 270). The garbage is mostly decayed stuff and there is always an odor from it—a very unpleasant odor (R. 271). It interferes with bathing. It floats in the undertow.

George T. Moston, Ocean Grove (R. 274), is a retired physician and has lived there continuously for five years. He goes to the beach almost every day in the summertime to bathe and is familiar with the garbage conditions on the beach. At times it is literally covered with garbage of various kinds, which he describes, which interferes with the use of the beaches for bathing. He has gone down there when it was so nasty that you could not go in without (R. 275) getting it in your mouth. In the action of the water this garbage forms a nasty yellowish foam in the water. Bathing is interrupted until it can be cleaned up (R. 276). These garbage conditions are the subject of complaint among the summer visitors. He has observed quantities of garbage floating in the water offshore as far as he could see easily. Some of it floats on the top and some of it mixes with the waves (R. 277). He has seen garbage in the water as far as you would see toward Asbury and down to Bradley Beach, a continuous streak of it. He has seen the beach covered to a width of 20 or 30 feet throughout its entire length (R. 278).

Calvin Reed lives in Ocean Grove and has been Street Superintendent for fifteen years or more. He keeps the beaches clean. After a northeast wind they can count on an accumulation of garbage and trash on the beach. The beach is about 3,600 feet long and about a hundred feet wide (R. 285) from mean tide to the boardwalk. After

a northeast wind the beach is just covered with garbage and trash from one end to the other, consisting of almost everything you can think of, including bottles, barrels, boxes, wood, etc. On one occasion last summer (1929) he carted four loads of garbage off the beach, each load filling a yard and a half dump wagon (R. 286).

William Catley has lived in Ocean Grove for sixteen years and is Captain of Police. He has been familiar with beach conditions for the past sixteen years and has seen garbage lying on the beach in windrows as brought up by the water. He has seen it in the undertow. It produces a white scum on the top of the water. He describes the articles seen, including dead animals and fowls (R. 390). He has seen bathers go down to the water and refuse to go in on account of the garbage. The bathers complain about the odor of it. He has seen check books and check stubs from New York City banks and old billheads. He has seen bathers cut their feet on the bottles which break up in the waves, and has had to give them first aid in the hospital (R. 391).

Arthur L. Barklew has been a police officer in Ocean Grove five years and has been around the beaches for ten years. He is familiar with the garbage on the beaches. At times it lays in windrows the whole length of the beach at Ocean Grove, and also up to Asbury Park and down to Shark River. This occurs every time there is a northeast wind. It ruins bathing and renders the beach unfit for use. Bathers refuse to go in the water. He has found cancelled checks, billheads and tags from New York City addresses (R. 393) among the rubbish and garbage (R. 394). The garbage comes from the ocean (R. 395).

George B. Goodrich is Mayor of the Borough of Avon and has been in official position there for twelve years. They have trouble with garbage and have a terrible lot of it on their beaches. They have had so many complaints that it has become a serious question and is a detriment to the use of the bathing beaches. He identified pictures of conditions of the beaches at Avon (R. 396), taken early

in 1929 (R. 397), which were offered as Exhibits 73, 74 and 75. The conditions they show occur frequently. Whenever the wind is from the northeast or east the beaches are covered with garbage. To remove the garbage from the beaches the beach commissioner has to employ men and trucks to gather it up and carry it away (R. 398). This garbage does a great injustice to the borough and spoils its principal attraction, which is the beach front, and also Shark River, which is the southerly boundary of the borough. The people will not use the bathing grounds on account of the garbage, and serious injuries have been caused from glass and broken bottles in the water. People cut their feet (R. 399). After the storm in February, 1929, he found a lot of theatre tickets from New York City, bills of fare of various hotels and restaurants, boxes and crates and bottles, all with New York City addresses on them. Lots of these bottles come from New York City drug stores. Some of the bottles are labeled "Poison" and have some of their contents in them. The situation is serious, especially if a child should happen to pick up such a bottle (R. 400).

Walter Rowe lives at Monmouth Beach. The garbage condition along that beach is very bad. He has been familiar with it (R. 310) for eighteen years. He identified a card, which was marked Exhibit 44, which he picked up in a bottle on the beach just south of Valentine Street, Monmouth Beach, on June 4 or 5, 1929, and mailed it to Mr. Smack (R. 311). It was stamped June 2, 1929, and was put in the bottle and deposited in the garbage by Smack on that date (R. 313). The bottle was found among the garbage on the beach among tin cans and various kinds of vegetables, bottles and (R. 314) wood and is often in a very odoriferous condition. It comes in very heavy with northeast, east or southeast winds (R. 315).

Harry B. Ayres (R. 331), a carpenter foreman for eleven years, and is familiar with the garbage conditions on the beach. He has seen it in windrows on the beach pretty thick after a northeast or east storm (R. 332). It

stops the bathing. He has seen it floating in the water in patches 50 or 100 yards square. He has seen it in the undertow. Sometimes the garbage is pretty soft and bad and has a smell. It contains grease and oil (R. 333).

W. D. Franklin has lived at Ocean Grove for thirty-seven years; chief of police. He is familiar with the beach conditions (R. 334). The garbage on the beach is a filthy mess at times and contains all kinds of decayed vegetables and fruit, dead cats and dead dogs and other articles which he mentions. It litters the beach and men have to be employed to clean it off. It is a nuisance and interferes with the use of the beach (R. 339).

Walter P. Fahy resides in Philadelphia in winter and in Spring Lake in summer from the beginning of June to the end of September. He lives within a block and a half of the beach and is on the boardwalk every day in summer. He is familiar with the garbage problem. The beaches are terribly littered with all sorts of garbage, which he describes, including rotted fruits and vegetables (R. 386), bottles, crates, old mattresses, bed springs, dead dogs and cats. At times the beach is impossible. You cannot walk there without getting into a whole lot of dirty filth (R. 387). His children have to be kept away from the beach at times on account of filthy conditions. Last summer (1929) the Improvement Association, of which he is president, spent \$700, in addition to the money spent by the municipal authorities, to keep the beach clean of garbage and refuse. It employed two men for that purpose, in addition to those employed by the municipality (R. 387). It is ordinary garbage and if allowed to remain it rots and gives off a very unpleasant, offensive odor. He has seen the garbage in the water, both on the surface and in the undertow, and at times the water is so filthy that it is unsafe to bathe in it (R. 388). Everybody complains about it and people say that if the beach is not improved they will not come any more. They come there for the beach and if the conditions are unsanitary they won't remain. His Improvement Association, in co-operation

with the municipality, have people constantly on the beach trying to keep it free from garbage. A dozen men, and sometimes more, are required to rake up and carry away the garbage. Tin cans and bottles make it unsafe at times to walk on the beach. This garbage and refuse all comes from the sea (R. 389).

Dr. James A. Fisher lives in (R. 326) Asbury Park and is an eye, ear, nose and throat specialist. He is familiar with the conditions of garbage on the beach and believes they play a part in his professional work. He has prepared a summary of the diseases of the ear and the sinuses for the months of June, July and August to see if there has been an increase in those diseases during those months. In 1928 he had four cases of furunculosis; in 1929 he had twelve cases. In 1928 he had one case of external otitis, which is a swelling and inflammation of the ear canal. In 1929 he had eleven such cases (R. 327). In 1928 he had eleven cases of middle ear infection, including the reddening of the eardrum, which required the drum to be opened. In 1929 he had fourteen such cases. In 1928 he had eight sinus infection cases. In 1929 he had eleven such cases. In each of those cases bathers came in with the remark that they had gotten something from the sea bathing. Judging from the conditions he found he could not form any opinion as to what they got from the sea bathing, except that there was some particular reason why they should pick up an infection. They did pick up such infection. Pure sea water has a high chlorine content and is quite antiseptic; infection is therefore quite contrary to the natural condition of sea water. The cases which he mentions were only those that appeared in his records under A, B, C and D. His records were too numerous to complete the investigation for all the letters of the alphabet in his records (R. 328).

C. H. Roberts lives at Sea Girt, New Jersey and is Superintendent of Public Works of that borough. He has charge of cleaning the beaches and has had experience with garbage (R. 552). It comes with east or northeast

winds. Large quantities come on the beach and they have to clean it up and cart it away. In 1929 they spent \$242.14 to remove garbage in addition to the garbage that was cleaned up by private parties. The lifeguards helped out the work and kept about 300 feet of beach clean. He presented Exhibits 87, 88 and 89, showing the garbage on the beach on February 8, 1929 (R. 553). On that day he walked the whole length of the beach and made a list of articles he saw and read the list in the record (R. 554). That occasion is merely an illustration of numerous occasions. He came to Sea Girt on August 13, 1907, as superintendent of the Sea Girt company, and has had charge of the beaches for that company and the city ever since. When he took the pictures there were large quantities of garbage floating on the water and in the undertow, consisting of the same material he has described. It was also on the beach as far as he could see, an awful quantity of it, tons of it (R. 555). The garbage not only comes to the beach, but it also gets into Wreck Pond through the inlet, and he has seen tons of it in there lodged along the shore. It becomes putrid with a bad odor and they have to gather it up and cart it away. There are constant complaints about it (R. 556). A lot of garbage came in on the 23rd and 24th of November, 1929. In it came theatre stubs from the Criterion Theatre, New York City, dated November 20th. He picked them up on the 25th, five days after they were issued. Another paper was a ticket from the Italy Trading Company, 200 Spring Street, New York City, picked up the same day (R. 557). During the last week in May, 1927, he picked up a bundle of material in the garbage, containing various papers that had been discarded by New York business houses, the names and addresses of which are given in the record (R. 558). The Criterion Theatre stub was offered as Exhibit 90, and the ticket of the Italy Trading Company was offered as Exhibit 91 (R. 560). He also presented other papers that were picked up in the garbage on February 8, 1929, from different companies and addresses in New York City, which

are described in the record (R. 561). The tide at times brings in so much garbage that it is impossible to find a place to walk along the north shore (R. 566). Usually Sea Girt is a popular fishing resort for surf anglers, but the garbage is so thick in the undertow at times that fishing has to be stopped. Lines get entangled in garbage and trash and destroy this attraction of the beach. On January 13 to 15, 1930, a quantity of garbage came in. He picked out of this garbage papers which he presented at the hearing. He also presented papers which he had picked up from the garbage within an hour before he testified. One bundle came from the New York Navy Yard and was dated August 2, 1929 (R. 567). He picked out of the garbage papers which are described in the record from institutions or places in New York City, with names, addresses and dates on them (R. 570).

Frank Durand lives at Sea Girt and has been its Mayor for over four years. He has been connected with the municipal government since 1921. He is familiar with the garbage conditions on the beach at Sea Girt. The beach becomes littered with garbage, trash and broken wood (R. 574) and sometimes dead animals. The frequency of the garbage depends on the northeast or east wind. It piles up in continuous streaks and is in the undertow. He describes the things it contains; it is mostly decayed material. It affects the development of the community and retards its progress because it makes the beaches unfit for use (R. 575). Sea Girt is a seashore resort and the beach is its only attraction. The garbage produces unsanitary and unhealthy conditions which prevent the use of the beaches and make them objectionable to the people. The bottles that float in break in the waves and strew the beach with broken glass. On some days the water is literally filled with the garbage and bathing is prevented; then the garbage washes up on the beach and prevents its use (R. 576). During some seasons there is not a week when they do not have garbage. Other times they are free from it for three or four weeks; it depends upon the wind. In order to preserve the use of a section of

the beach they have men to clean the beach every morning; the remainder of the beach is cleaned as soon as possible after garbage accumulations (R. 577). He receives a good many complaints about the garbage (R. 580), particularly from summer visitors, because they cannot use the beach on account of the refuse and garbage that comes in from the sea. Complaints are made to the Municipal Council. Immediate action has to be taken in order to clean the beaches. Owners of ocean front property are particularly affected because they live next to the beach and have to suffer the objectionable sight and appearance and odor until it can be cleaned. If the garbage lies on the beach twenty-four hours in the summertime it smells bad (R. 581). He has picked up bundles of papers on the beach that came in with the garbage (R. 582); they contained papers, memo slips, sales slips, etc., from New York City addresses, which he describes in detail (R. 583, 586).

C. Alva Bond, Jr., lives at Sea Girt, is City Clerk, and engaged in the real estate and insurance business. He has spent the summers at Sea Girt for eighteen or nineteen years, and lived there continuously since 1923. He has seen the beach littered with garbage up to the high water line (R. 596). He describes the articles he has seen in the garbage. It affects his real estate business because the conditions are so bad at times that bathing is prevented (R. 597). The garbage condition affects the development of the community. He sold a piece of property and the owner was dissatisfied because of the garbage. Some of the renters of his property complain and have refused to go back another year. It is a positive hindrance to the growth of the community (R. 598).

Frank C. Borden, Jr., lives at Bradley Beach and has been Mayor of the borough since May, 1919. Bradley Beach is a purely recreational community. There are no industries and its people all come there for the seashore (R. 603). Its principal business as a summer resort consists of summer homes, hotels, boarding houses and rented cottages (R. 604). Fishing pounds in the ocean offshore

represent an investment of \$50,000, and the actual catch is about \$60,000 worth of fish per year. Twenty-five men are employed in connection with the fishing pound. Bradley Beach has nothing to offer the public except its ocean front, boardwalk and beach; those are the sole attractions. The garbage condition is a serious detriment to the borough (R. 607). It interferes with the pleasure for which the people come. With garbage over the sand of the beach during the summer when the bathing is at its height people cannot go in bathing or visit the beach; it deprives the borough of its only attraction. When the garbage comes in they put as many men as possible to work on it so as to get it off the beach as quickly as possible. Sometimes they are not able to remove it fast enough to avoid the terrible smell which comes with it. The conditions were bad the day before he testified. He has recognized names and addresses, indicating that articles in the garbage came from New York City. The garbage was particularly bad last summer (1929) (R. 610).

Joseph R. Megill has lived at Bradley Beach since September, 1916, and is Borough Solicitor. He is familiar with the garbage on the beach during the past four or five years. In the summer there is a great deal of garbage on the beach when it is being used for recreational purposes (R. 612). On the Sunday before he testified he saw great accumulations of garbage and refuse at Avon Beach. The day before he testified he went to the Bradley Beach beach front and saw the same conditions there. There was garbage, trash and refuse over the entire length of the beach in a strip from 15 to 20 feet wide, consisting of the same articles he has described. He saw articles bearing the names and addresses of New York City people or concerns (R. 613). The garbage on the beach causes a great deal of complaint; summer visitors talk about it because it is impossible to use the beach at times. You cannot walk on or sit down on the beach because of the garbage, tin cans and broken bottles. Bradley Beach is a summer resident community to which people come for the use of

the beach and bathing (R. 614). When this use is interrupted or destroyed the pleasure of the visitors is interfered with and they do not come back. Some people have sold their properties and moved elsewhere on account of those conditions (R. 615).

Leon McLaughlin is a letter carrier and has lived at Bradley Beach for twenty years. He is familiar with the garbage conditions on the beach and has taken photographs of it (R. 620). He identified pictures which he took in February, 1927, offered in evidence as Exhibits 93 to 101, inclusive. Others taken February 7, 1929, offered in evidence as Exhibits 102 to 107, inclusive. Another group were taken January 13, 1930 (R. 621), offered in evidence as Exhibits 108 to 112, inclusive. Exhibit 92 shows the removal of garbage by a horse and wagon as far as the street and there loaded on motor trucks. Articles contained were described (R. 622). Exhibit 94 is a picture of a pile of garbage ready for removal. Exhibit 95 shows the garbage on the beach as left by the water. Exhibit 96 shows garbage on the beach and one of the bathing pavilions (R. 623). Exhibit 97 shows a section of the beach covered with garbage. Exhibit 98 shows a section of the beach and boardwalk and one of the pavilions. It also shows garbage on the beach from low water mark to the boardwalk. Exhibit 99 shows horses and wagons carting garbage away. Exhibit 100 shows the garbage as it was washed up by the waves; likewise Exhibits 101 to 112, inclusive (R. 624). He bathes daily in the summertime except when the garbage conditions prevent. There are times when it is so bad that he will not permit his family to go to the beach. It is usually decayed matter. He has observed articles which bore names and addresses from New York City (R. 627). He has encountered garbage in the sea when he has been out in a boat fishing. He has frequently had to slow down in order to get through the garbage masses in the water. The areas are sometimes as large as an acre or two. Other times they are in strips. It contains wood large enough to injure a boat or break a propeller (R. 628).

George W. Smith (R. 633) lives at Bradley Beach and is a laborer employed in cleaning the beaches when garbage accumulates. It sometimes takes a week at a time to clean the beaches from this garbage. It is frequently so thick that it has to be gathered up and carted away with horses and wagons (R. 634). Some of them have New York City addresses on them (R. 635), including a ticket to the Elks Club Ball in Brooklyn, New York, dated January 4th, and picked up on the beach in garbage January 12th. Other tickets and cards of New York names and addresses are described in the evidence (R. 636), which were received as Exhibits 113 and 114. These articles were found in a mass of garbage consisting of vegetables and fruits and decayed chickens. He has carted garbage off the beach at the rate of four loads an hour for a week in 1927, and again in February or March, 1929. It contained bottles, tin cans and driftwood. This stuff comes in whenever there is a northeast wind (R. 638). The garbage is also in the undertow of the waves, and the waves drive it up on the beach under the boardwalk. The stuff is sour and stinks. If it is left until noon or night it becomes very offensive. It is decayed and sticky and slippery (R. 639).

William Fitzgerald lives at Bradley Beach and works for the Street Department of the city (R. 643). He works on the beach in the summertime cleaning up garbage. He has worked on the beaches for five years. He is familiar with the garbage. There is quite a lot of it. In February, 1928, he worked on cleaning the beaches and carting away the garbage; they had between forty-five and fifty loads for a Ford auto at that time. The garbage comes every time when the wind is from the northeast (R. 644), sometimes worse than others. He describes the articles contained in the garbage as including dead animals, chickens and fruit, and vegetable matter, in a decayed or decaying condition, some of it, including the animals, in a very bad condition. Sometimes its condition is so bad that it falls apart when they attempt to handle it with forks, and they

have to gather it up with a shovel. He has seen articles which had New York City names and addresses on them (R. 645). He recognized papers in an envelope which he had picked up the day before he testified, containing a number of papers with New York City addresses on them (R. 646). He has picked up cancelled checks on New York City banks, drawn by New York City firms; they had a New York City brokerage firm name on the end and were drawn on a New York City bank (R. 648).

John G. Gruetzmer lives at Asbury Park and is superintendent of the beach front of the city. He identifies certain pictures of beach front conditions which were marked Exhibits 115 to 118, inclusive. He was present when the photographs were taken on December 13, 1929. From the mass of garbage shown in the picture he made a list of the articles which it contained (R. 651), which was offered in evidence as Exhibit 119. Exhibit 115 shows a lot of garbage and trash on the beach at Seaside Heights (R. 653). Exhibit 117 shows the garbage on the beach, including dead chickens. 90 per cent. of the mass was garbage and 10 per cent. driftwood or broken wood. Exhibit 118 is another view of the same location. He also presented pictures of garbage on the beach at Seaside Park (R. 654), which were offered as Exhibits 120 to 124, inclusive, taken on December 13, 1929. The material consisted chiefly of driftwood, bottles, tin cans, toys. Out of this garbage he picked up several articles which he presented at the hearing. It included a group of pictures from the Academy Club, Broadway and 217th Street, New York City (R. 655), about 100 in number. There are other papers from New York City business houses which are described in the record at pages 657 and 658 (R. 657). Seaside Heights is about ten miles south of Asbury Park and adjoins Seaside Park. Exhibits 120 to 124 are pictures of the conditions described on that day by coast guard witnesses at the hearing in this case (R. 660). The pictures were taken within two hours after the coast guards gave their testimony. The garbage was ankle deep on the beach. In places it was piled at least 2 feet high.

George W. Bostwick lives at Bradley Beach and has been a health inspector there for twenty-five years. He is familiar with the garbage on the beaches. It comes after a northeast wind (R. 663). It is his duty to get it off the beach because it is a menace to the health of the community. It is decayed material and liable to create fevers. He receives hundreds of complaints about the garbage on the beach. People are impatient to have it removed immediately (R. 664). The municipality gets it cleaned up as soon as possible. Sometimes it takes a whole week to clean the beach. The garbage comes in every time they get a storm from the northeast (R. 665).

Dr. Arthur Kenneth Graham lives at Sea Girt, New Jersey. He is a chemical engineer and a member of the faculty of the University of Pennsylvania at Philadelphia. He spends the summers and week-ends at Sea Girt, and has been there every year for thirty-three years (R. 669). He lived for a time one block from the beach and now lives two blocks from it. He is familiar with the garbage on the beach. It comes in after northeast winds. It is very unpleasant to go down to the beach when the garbage is there (R. 670). The beach is the greatest attraction, but the garbage spoils it. That condition has existed quite definitely for the past few years. It affects the development of Sea Girt because a great many people who go there object to the garbage. It causes universal complaint and remark; it is a source of objection (R. 671). The garbage does not come with the southerly winds. It is most noticeable after a storm from the northeast direction (R. 672). Even when it is not deposited on the beach it is found in the sea, in the undertow, and interferes with bathing (R. 673).

Margaret Landon lives at Bordentown, New Jersey, but spends her summers at Sea Girt, three blocks from the beach. She has been at Sea Girt for fifteen years and goes to the beach every day. She is familiar with the garbage conditions. At times the beach is littered with garbage up to the high water line. The garbage contains everything that will float, principally vegetables and

fruits; it is very unpleasont (R. 674). It not only interferes with the use of the beach, but also interferes with bathing, because it is in the undertow; the water is filled with it and it is disagreeable. The attraction at Sea Girt is the beach, but when the garbage is on the beach the pleasure of being there is spoiled (R. 675).

Mary V. Graham lives in Sea Girt about two blocks from the beach (R. 676). She has been going to the beach almost every day for the past forty-eight summers, and is familiar with the garbage conditions. At times the accumulations of garbage, consisting of articles which she describes, is so great that they cannot use the beach, and makes it very unpleasant not only to go to the beach, but to bathe in the water, which contains floating particles of garbage. The beach and the bathing is the chief attraction of Sea Girt (R. 677). The garbage is a matter of common complaint and is very objectionable (R. 678).

Edmund R. Willets lives at Sea Girt on the ocean front six months of the year and is in business in New York City. The beach and the bathing is the attraction. There is invariably some sort of garbage on the beach and it has to be cleaned up constantly. At times it gets so bad that people cannot bathe. That occurs quite often (R. 679). It consists of disintegrated garbage and filth which floats on or in the water and makes it impossible to go swimming (R. 680).

Mrs. R. B. Patch lives in Philadelphia, but has spent three or four months at Sea Girt (R. 681), about three blocks from the beach, for the past fifteen years. The beach is the attraction of Gea Girt for herself and her child. She has encountered garbage conditions on the beach and describes the material of which it consists. It is very disagreeable, not only because of its presence, but because of the things which the small children pick up from it (R. 682). It affects the bathing and at times bathing is forbidden and prevented because of the garbage in the water (R. 683).

Richard T. Parker lives at Sea Girt in the summer (R. 683) and is Mayor of Highland Park. He has spent his

summers at Sea Girt since 1916, about two blocks from the beach. The attraction at Sea Girt is the bathing. He has encountered the garbage conditions (R. 684). After a northeast storm the beach is littered with garbage consisting of articles which he describes. It destroys the bathing and people cannot sit on the beach. It is in the water and makes it dirty and thick; it is a nuisance (R. 685).

John Hillig lives at Yonkers, New York, and has spent his summers at Belmar for the past nineteen years, where he has been engaged in the hotel business as a summer proposition. He has encountered the garbage on the beach (R. 688). He has seen piles of garbage of all descriptions and has helped gather it up. He has picked up papers with the names of New York City firms and addresses on them and also from Brooklyn and the Bronx (R. 689). The garbage condition has been more acute during the last five or six years. The guests at his hotel complain about it. They come to the shore for the bathing, which is the chief attraction, and they frequently have to change their plans. It reacts on his business. He has had occasions when people came to the shore for a short period and finding the conditions of garbage on the beach were compelled to pack up their baggage and go somewhere else. Most of his guests are vacationists who have a limited period of time (R. 690). He has seen the garbage in the water and on the beach. It is sometimes very rotten. It simply kills bathing because people will not bathe in garbage (R. 691).

E. L. Mix lives in New York City (R. 693) and has spent his summers at Belmar for twenty-five years. He is familiar with garbage on the beach. He describes the contents of it. He took some pictures (R. 694) on the Sunday before Labor Day, 1929. They were offered in evidence as Exhibits 124 to 146, inclusive. The purpose of the pictures was to show the crowds on the beach and the extent to which the beach was used during the height of the summer season at Belmar (R. 693). Exhibits 142 and 143 show the automobiles parked on the east side of

the avenue, showing the automobile traffic to Belmar during the summer. He has encountered the garbage conditions and heard many complaints about them. One of his patrons, who is used to going to Belmar for the summer, recently called upon him at his New York place of business and told him that the garbage conditions on the beach were so horrible that they would have to leave the place (R. 697). He has heard lots of other such complaints (R. 698).

Alex Steel lives at Belmar and is familiar with the beach conditions. Has been President of the Improvement Association for two years (R. 699). His attention has been called to the garbage situation on more than one occasion through members of the association, who complain about the garbage conditions. He complained to the commissioners. On or about August 10, 1929, he examined the garbage on the beach and describes its contents in the evidence (R. 701). There was another occasion earlier in the same year, about the first week in August, when the conditions were the worst that he has seen. He has seen the garbage floating in the water for the whole length of the borough and he has seen it in windrows on the beach. He picked up some articles from the garbage on the day he testified (R. 701), consisting of milk bottle caps and containers, a bundle of papers containing the names and addresses of New York City concerns. Also a card from the New York City Department of Parks in the Borough of Bronx, dated December 19, 1928. These articles were identified as having New York City addresses and (R. 702) were picked out of a collection of garbage and pieces of wood (R. 703).

Joseph H. Vaughan lives at Bradley Beach and has been a captain of lifeguards for nineteen years, and has worked on the beach for twenty-three years every day from April to October, and has encountered plenty of garbage on the beach. He has seen it in windrows 15 to 25 feet wide, 6 inches deep. He describes the articles that he has seen, including fruit, vegetables, chickens and animals

(R. 708). The garbage interferes with bathing conditions. It prevents people from bathing. The garbage comes in about ten or twelve hours after a northeast wind starts, and the condition lasts until the tide changes or a couple of hours afterwards. It makes the water discolored and dirty (R. 709). The odor of it is offensive and people complain to him about the garbage on the beach and go back home without bathing. Sometimes on a single day 500 or 1,000 people come down to the beach and go back without going in on account of the garbage. About five or six years ago he and five or six other lifeguards at Bradley Beach and Asbury Park suffered a rash on their bodies from the garbage in the ocean. From thirteen to twenty-one persons are employed at times at Bradley Beach to clean up the garbage (R. 710). He has records of as many as 25,000 people bathing at Bradley Beach on a summer Sunday (R. 711). Within the distance of a mile of beach front he has seen the garbage on the bathing suits of people who have been in the water. It brings a scum and filth on the ocean consisting of dissolved particles. It is dirty and it smells. It is disintegrated vegetable matter (R. 712). In addition to vegetables and fruits, he has seen dead dogs, and he was required to bury almost a whole calf at one time. It had been cut up in a butcher shop and was rotten. No one else would approach it. The garbage contains pieces of wood and big sticks. These pieces of wood make bathing dangerous (R. 713). He frequently has to stop the bathing and clean out the wood from the water. He has identified articles with names and addresses from New York City (R. 714).

Claude A. Birdsall is (R. 716) Borough Engineer of Belmar and four other municipalities. He is familiar with the garbage conditions. After every northeast storm the beach is littered with garbage and trash, consisting of materials which he described, including dead chickens. It becomes obnoxious on the beach; it smells and prevents bathing (R. 717). People complain about it and will not use the water when such conditions exist. He has iden-

tified crates and hotel menu cards from New York City addresses and a few days before he testified he saw restaurant checks and other papers in the garbage containing New York addresses (R. 718).

Joseph H. Cook lives in Belmar and works for the borough (R. 719). He helps to clean up the beaches when the garbage comes in. He was so engaged on the Monday of the week he testified. He found papers and things with New York City addresses (R. 720), which he described in his testimony, consisting of containers and sales slips and sheets of paper from New York City dealers with lists of customers' names on them (R. 721).

William Neuhausen lives at Bradley Beach and has been a police officer for five years. He has been familiar with the beach conditions and particularly with the garbage situation (R. 723). He describes the articles which he has seen in the garbage. In August of the preceding year he gave a hardware dealer permission to collect the bottles that came in with the garbage and they gathered up two or three loads in one morning. The hardware dealer told him that he got between 3,500 and 4,000 bottles after one storm. He has seen restaurant checks from the Hotel Astor in New York City in the garbage (R. 724), there was a whole bundle of them, with lists of articles that had been delivered to the Hotel Astor, and the sheets were signed by the steward or someone for the hotel. There are many complaints of children being cut by broken bottles. Bottles are broken by the waves (R. 725). He found some on the beach the day before he testified; also some papers with New York City addresses on them. These are described in the testimony (R. 726). There were lots of them there (R. 727).

Charles Poland lives at Bradley Beach and is Supervisor of Streets and Public Works, and a police officer. He has charge of clearing up the garbage and has been engaged in that work for sixteen years. It is very bad four or five times during the summer (R. 728). Sometimes it takes a week or ten days for four or five men and two

teams to clean it up. It consists of everything from vegetables and livestock and chickens up to hogs; all kinds of garbage (R. 729).

Lewis J. Ferry lives at Bradley Beach and is familiar with beach conditions for the past seven years. Garbage comes with the current or a wind from the northeast, and comes in in large quantities at times (R. 730).

Allan L. Powell has been Mayor of Brielle for two years, and has lived there for five years (R. 735). He has never seen the ocean rough without bringing in garbage (R. 736). There are two large hotels and quite a number of restaurants. When the garbage comes in there is no bathing. The chief attraction of Brielle in summer is the bathing. The garbage hurts the growth of the community (R. 737). One of the largest real estate dealers complained to him and asked if something could not be done about the garbage as it was preventing the sale of real estate. The owner of the Sea Girt Grand Hotel built a fine place, but was willing to sell it because there was so much complaint about the garbage he could not maintain his business. He has seen papers and packages in the garbage containing the names of the Imperial Hotel in New York City, Wallabout Market and other places (R. 738). The Wallabout Market paper was a slip showing commodities that had been sold by some concern in that market in Brooklyn (R. 739).

William J. Orchard spends his summers at Bay Head and is President of the District Improvement Association there, composed of property owners to improve the conditions of the community. Bay Head is a high grade strictly residential summer community (R. 742). The beach is everything to their community and without it the property would have no value (R. 743). 90 per cent. of the people use the beach. The water front is their sole attraction and the only reason for the existence of the community. He has had a good deal of experience with the garbage since the association of which he is president has undertaken to keep the beaches clean (R. 744). When the wind

comes from the west or south the water is clear and bathing is good. If the wind comes from the east or the north-east it fills up with garbage within a few hours. The bathing is then stopped. They call it "garbage soup," and the common complaint is that they do not want to bathe in garbage soup. It piles up on the beach and is left by the receding tide. It creates such a nuisance through its odor and stench that they have to get busy and clean it away (R. 745). The effect upon the community is very unpleasant and upsetting. It deprives them of the only playground they have. He has seen in the garbage shipping crates and tags and other articles which bore the names and addresses of New York City parties. Some of the cases by their marking showed they came from Washington Market, New York City. He has never seen an occasion when there was any quantity of garbage washed ashore that it did not contain names and addresses indicating that it came from New York City (R. 746). It is municipal offal and not sewage. It is material that is gathered up by the garbage and ash trucks and consists of domestic waste and street sweepings. It contains bottles and cans and animals and things that you see in the city dump (R. 747), left-over victuals and kitchen waste (R. 749).

Frank Ferry lives at Bay Head and has been Mayor for twelve years. Whenever the wind is east or north of east they have plenty of garbage on the beach. It washes in in windrows; he has seen it 6 inches thick and 15 feet wide for the entire (R. 762) length of the town, consisting of everything that will float. He describes the articles, including greases of all kinds. Bathing is the main attraction or pastime at Bay Head, and it is impossible to bathe for two or three days at a time on account of the garbage. A number of people have sold their places and have left the place because of the garbage. It is a matter of constant complaint (R. 763). He has identified objects with New York City names and addresses on them (R. 764).

D. H. Hills lives at Spring Lake and has been Mayor for seven years (R. 768). It is a residential community where

a great many people spend the summer, some in cottages of their own, others in cottages that they rent, and others in the hotels of which there are two especially fine ones which cater to high class people (R. 769). He gave the names and the residences of a number of prominent men from different cities of the country who spent the summer at Spring Lake. The attraction is the ocean and the beach with its bathing (R. 770). The improvements are all for the benefit of the summer visitors and to attract the people to the seashore (R. 771). He has had experience with the garbage on the beach and the condition has been worse during the last five or six years. It comes up in windrows after every northeast blow. It has disgusted their people for several years; it is offensive and smells to the sky unless removed as fast as it comes in. Sometimes they have to let it remain for a day or two to dry it out so they can burn it, or get rid of it, otherwise it would be impossible to cart it off (R. 772). Several years ago he made a collection of articles and took the matter up with the Governor in order to secure some relief. He did so again later with another governor. Both governors assured him that something would be done about it (R. 774). That was from five to eight years ago. The only report he received was that New York City was building incinerators and intended to stop the dumping at sea (R. 775). He made complaint to the War Department in 1924 against the garbage. He had many complaints from families concerning their children and women (R. 776). They were much alarmed and were afraid their children would contract diseases from it (R. 777).

Frank Marucci lives in Spring Lake and is President of the Borough Council (R. 778). He has been connected with the government for fourteen years and has lived there for thirty years. He is familiar with the beach conditions. About thirteen years ago the officials of the different municipalities had a meeting at Deal Beach to do something about the garbage situation. Senator Copeland, who was then the Health Inspector of the city, came

to the meeting (R. 779). He stated that the city was building incinerators and promised to go back and take the matter up with Mayor Hylan, but that was as far as they got (R. 780). On two other occasions he complained to the City Solicitors or Corporation Counsel of New York about the garbage and they promised to adjust matters. The garbage is a menace, especially in the summertime. It comes on the beach whenever there is a northeast wind (R. 781). It piles anywhere from ankle deep to 12 inches. In April, 1929, it took a whole week with nine men to clean the beach after one accumulation. There were three loads of bottles alone. He has frequently examined the garbage to identify its source, and has found many articles which show that it came from New York City. He produced at the hearing a bundle of papers (R. 782) containing papers from the files and records from a number of New York City merchants or business houses, which are enumerated in the testimony (R. 783). When this garbage and trash comes in all kinds of sports and amusements along the seashore are stopped (R. 785).

Myron O. Morris has lived in Spring Lake twenty-eight years and has been Borough Clerk for the past five years. He has had plenty of experience with the garbage on the beach. He took some pictures in April, 1929, which he presented in evidence as Exhibits 170-A to 170-G, inclusive (R. 786). One of the pictures shows a truck entirely loaded with glass bottles picked up on the beach from one garbage accumulation. The other picture showed the litter and garbage conditions as they existed at that time. He also presented other pictures taken in February, 1929 (R. 787), showing conditions at Spring Lake beach from garbage and trash. They were admitted as Exhibits 171-A to 171-E, inclusive, and another set of pictures which were admitted as Exhibits 172-A to 172-D, inclusive, showing the Monmouth and the Essex & Sussex Hotel, with adjoining cottages, and a portion of the beach front (R. 788). He identified Exhibit 173, which is an air picture showing the hotels and water front (R. 789). For the

past three years he has been particularly interested in seeing just where the garbage came from, and has noticed particularly that after almost every storm he has been able to find among the garbage papers and articles which he could identify as coming from New York City, including cancelled checks, sales slips and other articles belonging to New York City business places (R. 790).

J. G. Newman has lived at Spring Lake for sixty years and has been Borough Superintendent for six years. He is familiar with the beach conditions and had experience with the garbage continually during the past six years (R. 793). Every time there is a northeast wind for three or four days the beach is littered with trash and garbage of all kinds. He enumerated a number of articles which are included in the garbage and described particularly conditions that had existed for the week prior to his testimony. His job is to get the garbage cleaned up and to pick up the bottles and to carry them away. They break up in the waves and on the beach, and children and people cut their feet badly. There is an awful amount of complaint about it. He has seen six Ford truckloads of bottles gathered up on the beach after one blow in 1929 (R. 794). Combustible material is burned, but the animal stuff has to be buried. It has to be cleaned up as soon as possible on account of the stench. It is impossible to go to the beach in the summertime when the garbage is there. He has had as high as twenty men working at a time to clean up the garbage from the beach (R. 795). He has identified many articles, boxes and barrels as coming from New York City. On October 29, 1929, he made a list of articles which he found in the garbage, including several bundles of papers, which were discarded orders or sales slips (R. 796) from different New York City places of business, which he described in detail in his testimony at pages 797 to 799, inclusive. They were evidently the accumulated records of those business places which had been tied up in bundles and disposed of. The garbage is not only an expense but a detriment to the community. People con-

tinually find fault that it is a detriment to health. People come to Spring Lake for the pleasure of the beach and bathing, and the garbage interferes with these uses three or four days at a time (R. 797). He has seen occasions when the garbage prevented the use of the beach for a week at a time. He presented some articles which he had picked up the day before he testified, showing their sources as New York addresses, including a pole or shovel handle with New York City's initials burned into it (R. 800). The burned initials were "D. P. and S., N. Y. C." He presented other papers from New York City sources, described in the testimony at pages 801 and 802 (R. 801). The initials on the pole referred to the "Department of Plants and Structures of the City of New York" (R. 802).

Horatio Clayton has lived at Spring Lake all his life and is in the real estate business. He has been a member of the municipal council for fifteen years and has had experience with the garbage on the beach. He rents summer cottages and houses (R. 803). He has had many complaints on account of the beach conditions from his tenants and others. The garbage on the beach has a decidedly bad effect on the development of the community (R. 804).

Dr. Robert D. Patterson is a physician living at Spring Lake and is the Health Officer of the borough; he deals with the complaints that come to the Board of Health (R. 805). The sanitary aspects of the garbage come under his supervision. Many people complained to him in the summer of 1928. It was one continuous complaint. There were so many northeast storms and garbage littered the beach almost all summer. As soon as it was cleaned up another batch came. There is a terrific odor from it after it has lain in the sun for a while. He described the articles he had seen, including dead animals (R. 806). This condition comes when the wind blows from the east or northeast (R. 807).

Edward E. Hayes has lived at Spring Lake for ten years, where he manages the Allaire Hotel, which is a summer resort. He has had many experiences with the

garbage on the beach and many complaints from his guests on that account. His hotel accommodates 200 guests and (R. 807) during the summer season they accommodate from 1,000 to 1,200 different people. His hotel represents an investment of \$150,000. The beach is the only attraction. He has many complaints and different people stop coming to the hotel on account of the garbage. It is a matter of frequent complaint (R. 809). It absolutely interferes with the pleasure of the people and makes it impossible to go to the beach or to bathe (R. 810).

Frank S. Bennett lives in Spring Lake and is a member of the council. He has been connected with the municipal government for six years (R. 810). He has lived in Spring Lake for twenty-nine years and is familiar with the conditions of the beach. Immediately following a northeast storm they usually have a great amount of garbage and refuse on the beach; it is a detriment to the borough; there is a great deal of complaint about it (R. 811), so much so that they cannot clean up the beach fast enough to suit the people and summer residents have requested the privilege of helping by employing and paying men to aid the municipal forces (R. 812).

William B. Stubbs lives in New York City (R. 812) and operates the Warren Hotel at Spring Lake and the Stockton Hotel at Sea Girt. The Warren Hotel has a capacity of 300 guests and he accommodates about 1,500 different persons there each season. The principal attraction is the ocean bathing. He is familiar with the garbage conditions and it has affected their business there through unfavorable criticisms by numerous guests who frequently bring his attention to the garbage on the beach. It is repulsive and disgusting (R. 813). His hotel at Spring Lake represents several hundred thousand dollars in investment, and they have no other attractions but the beach. The Hotel Stockton at Sea Girt represents another investment of several hundred thousand dollars, with no attraction except the beach and the ocean bathing. It accommodates 400 guests and entertains about 1,500 different people during

the season. These hotels are a mile apart and the garbage conditions are practically the same at both of them (R. 814) and affect them both alike. He has identified articles in the garbage as coming from New York City on account of the addresses they bore (R. 815).

George B. Goodrich is the Mayor of Avon. He presented Exhibits 167 and 168 as pictures of the beach as it was at the time he testified, covered with garbage and trash (R. 816). Among this garbage was an invitation to a marriage ceremony to be held January 5, 1930, in which all of the parties and the place of the wedding were in New York City. At the time he testified the beach was in a serious condition. The northeaster then prevailing had not only littered the beach, but had also filled in the stones around the jetty with garbage and decayed matter; he did not know how they were going to get it out, but if it was allowed to remain it would be a serious menace (R. 817). They have built two jetties to protect their beach; they pay the bonds from the revenues of the swimming pool. The accumulation of this garbage among the rocks of the jetties after each northeast wind threatens them with the necessity of selecting a new location for their pool (R. 818). The majority of the garbage is composed of decayed fruits and other matter, including five dead chickens (R. 820). While most of the material is garbage, it contains wood and timber (R. 821).

Joseph Mayer (R. 822) has lived in Belmar for twenty-five years and has been Mayor on two different occasions and is now Mayor (R. 823). Belmar is principally a residential, hotel and boarding house community (R. 824). The principal attraction that brings people to Belmar is the beach for bathing purposes (R. 825). The accumulations of garbage on the beach is a nuisance which deprives the people of the use of the beach until it gets cleaned up. With the growth of the community it has become more of a nuisance and more serious each year as more people come to the beach (R. 828). The garbage is removed by the street cleaning department; it is gathered up and

carted away. The city officials have been trying to get something done about it. They have sent evidence to their Senator and to the War Department. He identified pictures taken at Belmar beach February 9, 1929, under his direction (R. 830). The garbage is a serious detriment to the town. Many people will not go to the beach, or permit their families to go, when the garbage is serious. Many of them object even if there is only a small amount of garbage there. The principal complaints come from the hotels, and there are constant complaints coming to the city officials urging them to clean the beaches or to hurry the cleaning. At times they have to use the whole department for that purpose. The hotel guests usually come for a limited period, and if they cannot enjoy the beach while they are there they pack up and go away (R. 831). The hotels are seriously affected because the season is short and their whole business depends upon the beach. People will not pay the hotel rates if they cannot enjoy the beach. The garbage comes with a northeast blow; it is out there in the ocean, and where it goes depends upon the direction of the wind. When it does not come on the Jersey shore somebody else gets it. The photographs he referred to were Exhibits 174 to 181, inclusive. He has frequently identified articles in the garbage bearing names and addresses indicating that it came from New York City and Brooklyn. He made complaint to the War Department, which asked him to watch the condition of the beach and to get what information he could. He sent photographs to the War Department (R. 832), and received an acknowledgment with a statement that the War Department was trying to do what it could to bring relief. This complaint did not result in the discontinuance of the garbage (R. 834). Last year the First Aid Squad was called out almost daily to treat someone who had cut their feet on broken glass from the bottles in the garbage on the beach (R. 836). Sometimes the garbage is carried over the boardwalk into Ocean Avenue and the street has to be cleaned. It even goes across the street onto private property on the other side (R. 839).

It comes up to the Yacht Club a mile and a half up the river. The garbage carries bottles over into the avenue along with the garbage (R. 840).

E. Donald Sterner lives in Belmar and is the State Senator from Monmouth County. He has encountered the garbage in sailing his boat and also on the beach (R. 841). He has been injured by broken bottles and by nails and pieces of driftwood in the garbage. He has seen great quantities on the beach, including dead animals. It affects the whole beach front of Monmouth County and he has sponsored resolutions in the legislature for relief. He has identified articles in the garbage, including hotel menus, restaurant bills of fare (R. 842), sales slips and other articles described, by New York business places. He has found the garbage offshore when he was sailing his boat, in large areas; they have to sail around it. On one occasion he bent a propeller blade as a result of coming in contact with garbage containing driftwood (R. 843). He owns land along the inlet in Belmar about one-half or three-quarters of a mile from its mouth. High flood tides and a northeast wind brings bottles, trash, garbage on the rear end of his property and also into the public street nearby. He has seen the garbage washed into Ocean Avenue, and has encountered the bottles in the street when driving his automobile (R. 844).

Inslee M. Minard lives at Point Pleasant and is in the grocery business (R. 859). He presented an accumulation of papers which he gathered out of the garbage on the beach on November 18, 1929. He described the articles that were in the garbage. The papers were tied up in a bundle and are described in detail on pages 860 to 864, inclusive. All of them are papers from New York City business places (R. 860). He fished these out of the water from among the garbage that was just coming ashore (R. 865).

Alonzo Haley lives in Belmar and is Street Superintendent in charge of cleaning the beaches. He has been so employed for four years. He supervises the cleaning

of the garbage from the beaches and they have large quantities of it three or four times during the summer. Last summer during July and August (1929) there were so many bottles in the garbage that they had to gather them up and carry them away in trucks. Even on Sunday he has had eight to twelve men employed in that work, with two trucks carting about ten loads a day. After one storm it took two and a half days, with both trucks, to clean up the beach (R. 873). They clean up the garbage and carry it back into the country and dispose of it about three miles from town (R. 875). The trucks hold about a ton and a half—are ordinary dump trucks (R. 876).

Anthony E. Wickham lives at Seaside Park (R. 876), and is Mayor of the borough. He has been connected with the borough government for four or five years and has lived at Seaside Park for ten years. It is a community of summer residents and hotels; there are six hotels (R. 877). The chief attraction is bathing and boating. The boardwalk covers their entire beach front. They have a good deal of difficulty with the garbage after every storm; a gang has to go to work to clean it up. They regularly appropriate \$600 a year for that purpose. The lifeguards help to clean it up (R. 879). The part of the beach where the people bathe—the garbage greatly interferes with the bathing because people cannot go in when the garbage is there. The bottles and electric light bulbs break in the waves and produce considerable glass along the shore. He identified Exhibits 115 to 118, inclusive, as pictures of garbage conditions at Seaside Heights and Seaside Park (R. 880), taken December 13, 1929. They have often had the same conditions. The garbage conditions greatly depreciate the property values and hold the town back; people keep away; it is the only drawback they have (R. 882). The garbage has a tendency to drive fish away. When the garbage is in the water the fishing is not good. It tangles up the lines in the crates, boxes and other things in the garbage, otherwise fishing is carried on considerably along their shore. People come from all over the State to fish. There are twenty-five fishing clubs in that municipality (R. 883).

Aaron Wilbert lives at Seaside Park (R. 884) and has been Borough Superintendent since 1915. He has charge of cleaning the beaches and is familiar with the garbage conditions for the past ten years. It is increasing all the time. They cart off the garbage and burn the wooden stuff that is in it (R. 885). People will not bathe under such conditions. They have no other attraction but the beach, and people come principally for the bathing (R. 886).

Margaret D. Pyle has lived in Allenhurst for twenty-five years and has been Borough Clerk for six years (R. 894). Allenhurst is a strictly residential community of summer homes, exclusively, except for two hotels (R. 895). Municipality has built boardwalks and jetties, during the past four or five years, to protect the beach. There is no business conducted along the beach; it is strictly residential (R. 898). Beach 1200 feet long and, with the bathing, is the only attraction. She presented some photographs to show the crowds and class of people who occupy their beaches in the summer time. Others which show the garbage conditions as they were on February 7, 1929 (R. 899) (Exhibits 26 to 28, incl.). All showing garbage conditions on that day. Employees clean up the garbage in winter and the lifeguards do it in summer (R. 900). Witness identified an air picture of Allenhurst showing swimming pool and casino and character of residences in neighborhood of the typical section in the borough (R. 901) (Exhibit 25). Nearly all of the development in town has occurred during past fifteen or twenty years. Pictures of crowds on the beaches were offered as Plaintiff's Exhibits 189 to 202, inclusive (R. 902), taken in 1928 (R. 903). Numerous times during the summer the beach cannot be used on account of the garbage. She hears the people complain about the garbage (R. 904). The garbage is a nuisance three or four times a season during the summer. Every time a northeast storm comes in the winter the garbage comes in (R. 905).

Ennis Kittell lives in Bradley Beach (R. 906), and has managed the Allenhurst Bathing Pavilion and pool for

the past thirteen years. He comes in contact with the garbage on the beach. It creates a menace in every respect and people refuse to go into the water when the garbage and trash is floating into it (R. 907). The pool is used primarily for bathers in rough weather when the ocean is rough and also when the ocean contains garbage. They have trouble with garbage on the beach every time the wind is in the east or northeast. It frequently occurs during each season (R. 908). Frequently people come into his office who have cut their feet on the glass from the broken bottles. The garbage contains broken crates and pieces of wood. The quantity increases all the time (R. 910). Bathing is the chief attraction at Allenhurst and the people come there for that purpose. Presence of garbage suspends the entire purpose and function of the community (R. 912). The garbage comes with the wind, even though there is no storm (R. 917). The question of garbage is one of direction of wind (R. 919). If the wind is blowing from the garbage dumps they get the garbage, whether there is a storm or not; the harder the wind blows the faster and the more garbage they get. On one occasion in 1928 it took five days to clean the beach and when the task was completed he looked around and there was another batch of garbage coming in and the job had to be done over again (R. 920).

James William Jones lives at Long Branch and is Mayor of the city (R. 995). It has two miles of boardwalk and has spent considerable money for bulkheads and jetties. There is a paved ocean bulkhead with ornamental lights (R. 996). The boulevard is four and a half miles long. They have a lot of trouble with garbage (R. 997). It becomes so bad at times that it entirely stops bathing. It has been the subject of complaint for years. Removal of the garbage would help to develop the coast. The garbage retards the development of ocean-front property (R. 998). He describes the condition of the garbage. The ocean front is used for bathing purposes. The garbage and refuse floats in the undertow where people bathe.

It produces an unhealthy condition, a very dangerous condition. Bathers step on nails in the boards and get tangled up in garbage. Almost everything comes in, broken bottles, etc. (R. 999). Complaints from visitors about the garbage are too numerous to record. They clean up the beaches and do everything that is physically possible to keep the beaches clean. Complaints have been made to the Mayors of New York City (R. 1000).

Aubrey Porter lives in Long Branch, and manages a swimming pool in summer (R. 1014). Many people have received cuts from the glass and injury from the nails in the garbage (R. 1015). It comes mostly from a northeast wind. Inspectors from New York City have come down to look at the beach and they have seen garbage that has washed up. These inspectors wore identifications from the New York Street Cleaning Department. They usually carried letters informing him who they were (R. 1016). He has had such visits four or five times during the last four years. One of these inspectors came in August, 1929. He said he had been travelling all the way up the coast and had found the same condition all the way. There was garbage on the beaches. He has observed boxes and crates and other things with names and addresses indicating that they came from New York City (R. 1017). The inspector who came last summer said he came from the New York City department having charge of the disposal of the garbage (R. 1019).

Garret I. Johnson presents photographs as Exhibits 212 to 221, inclusive (R. 1007). Exhibit 212 is an air photograph taken three or four years ago showing the ocean front at Long Branch, including the West End Casino and the bathing clubs. Exhibit 213 is an air picture of the same section showing more territory with summer homes and the Hollywood Hotel. Exhibit 214 is a picture of Ocean Avenue, Long Branch, near the pier showing a Hollywood crowd. Made in 1927. Exhibit 215 is an air picture showing the West End Casino at Long Branch. Exhibit 216 is a photograph of Long Branch beach show-

ing a typical summer scene on a good bathing day. Exhibit 217 is a similar picture showing bathers in the water at Long Branch (R. 1008). Exhibit 218 is a bathing scene at Long Branch. Exhibit 219 shows bathers at Long Branch and a small section of the beach giving a good idea of the crowds that bathe there. Exhibit 220 is a picture of Long Branch showing a section of the beach south of the pier, made June 10, 1929. It shows some garbage and loads of driftwood on the beach. Exhibit 221, made the same day as Exhibit 220, is a view of the beach farther south, showing garbage and driftwood (R. 1009). He also took pictures which were admitted in evidence as Exhibits 206 to 211, inclusive. They were taken by himself and his brother, who operate the Credit Air View Company. Exhibit 206 shows the Monmouth Beach Club and garbage littered on the beach, which is used by the club for bathing purposes (R. 967). These pictures were made at the request of the borough officials to be presented to the State authorities to show garbage conditions and to get some action taken to prevent it. Exhibits 206, 207 and 208 all cover the same general location and condition. Exhibit 209 shows the New Jersey shore in the vicinity of Shark River and the real estate development called "Shark River Hills" (R. 968). It shows Shark River inlet and Shark River.

Exhibit 210 is an air photograph of the northeastern part of Long Branch and a part of the ocean front, including the beach, the ocean, Ocean Drive and some hotels and summer homes. It shows the pier and various pavilions and casinos on the shore. Exhibit 211 is an air view of the northeastern part of Monmouth County (R. 969). It shows Long Branch, Monmouth Beach, Seabright, Highland Beach, Sandy Hook, north and south Shrewsbury Rivers, part of the bay, Staten Island, Long Island and the Atlantic Ocean. Another one is at Long Branch made about three years ago (R. 970).

Langdon Coles has lived in Long Branch all his life (R. 1019). And has been in the bathing business for

twelve years. For the past ten years he has had numerous experiences with garbage, including articles which he described which leave a terrible smell on the beach, and have a bad effect on his business. People will not go in bathing under such conditions. He has four or five men engaged in cleaning up the beach at times. It costs from \$200 to \$300 a season to keep his bathing beach clean from garbage. He has made numerous complaints. He has 700 bath houses altogether (R. 1020).

C. Fred Carr is a dentist living in Long Branch, and is the Commissioner of Beaches and Parks of that municipality. Has been connected with the city government for six years and in his present capacity since May, 1928. His duties relate particularly to the beaches and that they are kept clean and to make the necessary repairs to jetties and other beach-front property. He has charge of the men employed on the beaches (R. 1023). Five men work on the beaches, but two of them are constantly employed cleaning up the garbage and rubbish that comes from the sea. It is household garbage with boxes, barrels, dead animals, poultry, bottles, cans and animal matter, decayed matter and things like that (R. 1024). One man is employed constantly during the winter months for that purpose. They do not attempt to keep the beaches clean in the winter unless it gets very bad, as it does at times, and they have to bury the material because of the smell. The city has a park for 500 feet along the beach, which provides free bathing, and they have another free bathing beach in front of the Arcade. Altogether they have 800 feet of bathing beach (R. 1025). The rest of the beach front is taken care of by private owners or private bathing establishments. The summer season is from June 1st until after Labor Day. Two men who devote their time exclusively to cleaning up the garbage during the summer season are paid \$48 a week each. The one man who is thus employed during the remainder of the year is paid \$30 a week. The beaches are used principally for bathing (R. 1026). A good many people come to sit on the beach and

have sun baths. The entire beach is maintained as a public park for recreational purposes. It is extensively used during the summer months. His habit was to bathe daily in the ocean, but he has found garbage on the beach and in the water so often lately that he has given up the habit entirely. The garbage leaves a grease and scum on the shore (R. 1027). For the last couple of years it has been particularly bad. The garbage interferes with bathing and they will not go down to the beach when it is there. It interferes with the renting of bath houses. He has many complaints. Sometimes they get the garbage for three or four days (R. 1028). He presented some papers picked out of the garbage on the beach at Long Branch (R. 1029), consisting of bill heads, sales slips and other records from New York City enumerated in the testimony at pages 1030 to 1034, inclusive. At the time they were picked up the beach was in very bad condition. All kinds of garbage and rubbish was mixed up (R. 1030).

Thomas M. Gopsill lives in Red Bank and is a member of the legislature from Monmouth County (R. 1038). He and his family bathe at the shore and have done so for three or four years at Seabright. It is impossible to bathe (R. 1039) when the wind is from the east because it brings in garbage and debris which makes it impossible for the children to go into the water. It would injure their bodies and be a menace to their health (R. 1040). It has a deterrent effect upon the use of the beaches. It is a matter of common experience among those who go to bathe to call each other up on the telephone to ascertain whether the garbage is coming in or whether they can go bathing. There are many complaints about it (R. 1041). The average mother recognizes the possibility of typhoid fever in floating garbage of this character and there has been typhoid fever at Red Bank where this witness lives (R. 1046).

William L. Sandlass lives at Seabright and runs a bathing pavilion (R. 1058). Has been in the bathing business with his father since he was twelve years old.

Has encountered garbage in the water and along the beach. Plenty of it. In connection with his bathing business, he has seen garbage, including dead animals and other things he mentioned. All kinds of dead animals (R. 1059). Wooden boxes, tin cans, electric light bulbs, bottles, some of them have New York City addresses on them. Some of the material comes from a sick room and has to be buried or burned. Inspectors have been there from New York City to see him (R. 1060). They try to get the beaches cleaned up early in the morning so their patrons will not see the garbage. It hurts business. Many people drive fifty or sixty miles to bathe in the ocean and when they find garbage and refuse along the beach they do not come again very soon. Some people call up on the telephone in advance to inquire whether there is garbage on the beach. Sometimes they tell them it is all right and the garbage comes on the beach the same afternoon. There is seldom a morning that they do not have to clean up the garbage from the water line of the high tide (R. 1061). The garbage contains grease and fat which becomes rancid in the sun and smells for quite a distance. The odor is bad. The stuff is rotten and smells like greasy garbage. Conditions have been so bad that he has given up living at his bathing place. The odor is offensive in his house. He has complaints from his customers. When the garbage comes in he shuts up the place because there is no use trying to do business when the garbage is there. There are regular fields of garbage in the water and it piles up in windrows along the beach (R. 1062). The fields of garbage in the water look almost as if you could run an automobile on them as far as you can see in the water, boxes, tin cans, bottles sticking up out of the water and other classes of garbage in the undertow churning back and forth, including bottles which come together in the waves and break. People walk on this glass in the water and cut their feet. That frequently occurs. They have to provide first-aid equipment to take care of such cases. Pieces of boxes containing rusty nails

come in and if they get mixed up with the sand by the action of the water, leaving the nails sticking up in the sand (R. 1063). People's feet are frequently injured by these nails. He has seen articles with New York City names and addresses on them (R. 1064). He owns riparian rights for 275 feet on the ocean side and 200 feet on the river side of his bathing pavilion (R. 1066).

Charles Howland has lived at Long Branch for twenty-one years (R. 1066). He has been engaged in the building of bulkheads and jetties for about thirty years. He has seen all sorts of animals, vegetables, fruit, grease, shavings, boxes and various other things in the garbage (R. 1067). He is in contact with it all the time and saw it during the preceding summer (1929). The quantity has considerably increased from year to year. He has seen garbage on the water 300 or 400 feet from the shore when it looked like a field of fruit growing out there covering an area of 200 or 300 feet. He has seen it in the undertow (R. 1068). It grinds up in the waves and forms a grease in the water. He has seen it in regular rows on the beach for a distance of 200 or 300 feet where the receding tide left it. They drive their piles with a jet of water which they pump from the ocean and many times they have to shut down because the garbage gets into the pump and blocks it. The garbage is detrimental to the beaches for bathing (R. 1069). His business has given him work from Sandy Hook to Mantoloking building jetties to protect and build up beaches and stop the inroads of the sea. Much of the beach is used for bathing altogether. He has identified objects in the garbage (R. 1070) containing New York City addresses. Has picked up bundles of papers from different New York business houses, possibly a couple of hundred tied up with string containing discarded letters, and other papers from New York City and Brooklyn places of business (R. 1071).

William H. Jordan lives at North Long Branch and has been familiar with the beach for forty-one years and has had experience with the garbage in various ways (R. 1072). People leave the hotels on account of the "horri-

ble" condition of the beaches caused by the garbage. It is the subject of constant complaint (R. 1073). The amount of garbage on the beach has constantly increased. It decomposes in warm weather and makes it unpleasant to go anywhere near the beaches on account of the odors (R. 1074). The distance at which the garbage is dumped does not have any effect. Wind and sufficient time will bring it in. Complaints have been made for the last five or six years to the City of New York (R. 1075). Hollywood Hotel at Long Branch has suffered the loss of patronage on account of the garbage (R. 1077).

John W. Flock lives at Long Branch and has been in business there for thirty-four years. He had charge of the beach from 1912 to 1920 as one of the commissioners of the city government. He is vice-president of the Chamber of Commerce (R. 1080). He employed six men to keep the beach clean. They went out early every morning and cleaned the beach. With a northeast wind the garbage comes in in abundance. He describes articles it consisted of. It included dead chickens, cats and dogs (R. 1082). It is a matter of general complaint in the community. Complaints come to the city officials and to the police department every year (R. 1083). When the garbage comes in it is impossible to bathe. It is in the undertow and is chopped backward and forward. The wood contains nails. There are orange crates and strawberry crates. They break up in the waves and produce a dangerous condition (R. 1084). People come to the beach to bathe. That is their recreation and pleasure and to sit on the beach in their bathing suits. The children paddle around. The visitors are there on account of the ocean, which is their attraction (R. 1085). It makes the place a summer resort. If you cannot use the water for bathing, it deprives them of the pleasure for which they came. These conditions existed throughout the entire time (R. 1086). That he was Commissioner of Parks and Public Places at Long Branch. Whenever the wind was in the northeast they got lots of garbage (R. 1087).

Walter H. Jarden lives in Philadelphia and spends the summer at Mantoloking. After each northeast storm large quantities of litter come in, broken crates, boxes, table refuse, fruits and dead animals. Bottles containing medicine with corks in them (R. 1102). Many bottles. It is offensive and perilous for people who go bathing. The stuff floats in the water and bathers take a chance of striking objects. The garbage makes it highly unsanitary. There is an objectionable odor. It is disagreeable to tread on. It makes the beaches an unpleasant place for children to play. It is actually unsafe at times to bathe because of the large amount of refuse in the water (R. 1103). It is a matter of common complaint. He has identified objects from the garbage bearing New York addresses (R. 1104).

Mrs. Walter H. Jarden. They bought a summer home at Mantoloking without realizing the conditions on the beach. If they had to do it over again, they would buy further south, where the beaches are clean and sanitary for children (R. 1105). A mother wants a clean, safe, sanitary beach for a child to play on. These conditions are absent at Mantoloking because of broken glass, dirt and debris and disgusting dirt, old mattresses, etc. She has seen boxes with New York City addresses on them. The odor from the garbage is very disagreeable. It is intolerable. The guests make fun of their place. Garbage is terribly offensive. She objects to the rags and mattresses. She fears that the children will get cut or pick up things (R. 1106).

William B. Kirsch has lived in Long Branch fifteen years and been in the real estate business seven years. He has seen a great deal of garbage on the beach. It is impossible to bathe at times on account of the garbage (R. 1122). He receives a great many complaints from people to whom he rents houses for the summer. They complain that the beaches are filthy—they are afraid to have their children go into the water because of the boxes and nails, garbage “and various other things which I do

not care to name at this particular time, which are more offensive. Some of the articles in the garbage are so offensive that I prefer not to name them." It affects the bathing a great deal. People tell him that (R. 1123) if the conditions are not removed they will go elsewhere. People spend \$2,000 to \$4,000 for a summer home at the shore. If they are confronted with this condition, they go elsewhere. It has a bad effect on the real estate and business generally (R. 1124).

Charles H. Sherman lives at Long Branch and has been in the bathing business since 1887 on property which he owns (R. 1125). He has had experience with the garbage in the water and on the beach (R. 1126). It is getting worse from year to year. He has to remove dead animals from his bathing beach, dogs, cats (R. 1126). Fat and suet which makes the water greasy. It has to be buried—sometimes it takes two men all day to clean the garbage off this bathing beach, before he can allow anyone to go in bathing. It is really dangerous. It comes with the northeast wind (R. 1127).

Sidney H. Rhodes lives in New York City and spends his summers at Deal, where he is one of the three commissioners. He has charge of streets and parks, which includes the beaches. He has been connected with that work for three years (R. 1132). He has had experience with the garbage—it is the greatest menace they have with respect to health—his wife will not permit their children to go to the beach until she ascertains what the garbage conditions are; that is the general practice in the community. It is always a question of garbage before they go to bathe. They have to clean the beach up nearly every morning (R. 1134). The chief attraction is bathing. It is a beach resort (R. 1135). People come there for the ocean. He has seen the beach covered with garbage, including dead animals, fruit, meat, boxes, things wrapped in newspapers, every kind of garbage (R. 1136). Four men are employed for about two hours each day to clean the beaches. It hurts the beaches a great deal. Many of

their people desire to bathe early in the morning before they go to business. They are frequently prevented from doing so by garbage accumulations (R. 1137). It is the subject of general complaint and has been going on for years. It has materially increased in the last few years. It interferes with the growth of the community. He knows of three families that have moved away on that account (R. 1138). He mentioned one person who owned one of the largest houses in Deal with a private beach. The garbage interfered so much with the use of his beach that he has not been there for three years (R. 1139).

Clem Conover has been Borough Clerk at Deal for fourteen years. He is responsible for keeping it clean. Employs four men during summer beginning 1st of June to clean beach (R. 1147). Has seen garbage in undertow. It gets in around jetties, interferes with bathing. People are afraid to send children to beach, afraid they will be poisoned by picking up things (R. 1148). He can smell the odor from garbage. Picked up theatre tickets and other papers bearing New York City addresses. Matter of common complaint (R. 1149).

Charles D. Layton has been Clerk and Assessor of Deal and secretary of Casino for the borough for seven years (R. 1150). They have two beaches—the big Casino and a beach at Phillips Avenue. During last summer the garbage condition was so bad they had to close that place. At that time they removed four 1 $\frac{1}{4}$ -ton Dodge truckloads from that beach. Beach is 75 feet wide. There had been a northeast storm and garbage was washed from undertow clean up to bathing houses (R. 1151). Condition has been going on ever since he was there; 1929 was worst year (R. 1152). Children are cut up in undertow. He has seen garbage a foot and a half deep (R. 1153).

George C. Andrews lives at Ship Bottom-Beach Arlington, in summer; New York in winter. Ship Bottom Beach is sixty-four miles from lower New York Bay in an air line. It is down along coast about half-way down to the Cape (R. 1155). Has been Mayor of borough since 1926.

The chief attraction is beach for bathing, fishing and hunting (R. 1156). Has seen garbage floating on surface of water. It is driven up by the curb onto the beach. Four or five loads is most they have had at one time (R. 1157). They have a yearly contract for removal of garbage from beach. The principal menace are the bottles—children break them and grown ups cut their feet. They have had several severe accidents—people cutting their feet upon those things (R. 1158). About three years ago near where they dump, garbage, consisting of rags, bed springs and the like caused the loss of all his gear, which cost him \$1,500. Only heavy garbage hurts his boats (R. 1169).

Mahlon R. Margerum lived at Ocean Grove fifty years, eight months of year. He is a member of State Board of Taxes and Assessments, and for eighteen years a member of Governor's staff at Sea Girt (R. 1173). Stopped bathing. The effect of pollution upon beaches very detrimental. During past six or eight years he has been identified (R. 1175) with attempts of Governors Silzer, Moore and Larson to clean up beaches (R. 1176).

C. E. F. Hetrick (R. 1176), Mayor of Asbury Park since 1915, believes beach is entire industry of Asbury Park. Have no industrial plants. For many years city has provided appropriations for direct advertising. During past four or five years approximately \$600,000 was used. This year advertising fund was doubled (R. 1179). They have a privately owned radio station. They reach out all over country through medium of newspapers, cards and advertising matter, inviting people. They are building a convention hall at cost of over \$2,000,000 to accommodate conventions, etc. They just completed Casino (R. 1180), which cost over million and a half. More buildings are being erected for convenience of visitors which will require about two or three millions more (R. 1181). The boardwalk is slightly less than one mile long. At some points it is now 40 feet wide and at other points it is 50 and 60 feet wide (R. 1181). They are now building stone jetties to protect beach, as could be seen from

courtroom windows. Between 50,000 and 60,000 tons of rock was required to protect the foot of Deal Lake. This is done to protect the coast and to accumulate sand for bathing beaches (R. 1182). The Third and Fourth Avenue group of bath houses are to be rebuilt in a larger way. Within next three years they plan to put at foot of Deal Lake one of finest bathing establishments in the world, including salt water bathing, pools, tub bathing, electric bathing, Russian baths, Casinos, etc., to accommodate visitors. They have acquired 300 acres of land westward, where there is a Municipal Golf and Country Club. They are preparing to develop Wesley Lake, which is the (R. 1183) southerly boundary line of Asbury Park. Sunset Lake is practically completed. Pryor's Band is provided in summer at a cost of approximately \$40,000 yearly. There is no charge for concerts. The Casino is provided with an orchestra costing between \$25,000 and \$30,000, which is open to visitors. Carnivals at a cost of between \$25,000 and \$30,000 are provided yearly and many other social activities (R. 1184). Mayor Hetrick described in detail other existing and contemplated improvements, which need not be repeated here (R. 1186 *et seq.*).

Many complaints have come to this office about the garbage conditions on the beach and in the water. They have received complaints and editorials and news articles have appeared in the papers. The government of the city has realized that it must do something to alleviate the evil or the patronage of the city as a seashore and bathing resort will be affected. He is personally familiar with the garbage on the beach. By way of illustration, he referred to a conversation he had with a New York Supreme Court judge, who complained about the conditions, and said he could not bathe there (R. 1193). He has engaged over a period of time in a campaign to get rid of this garbage. He presented his files and correspondence, and a summary of what they contain on the subject (R. 1194).

The report of the Publicity Bureau of Asbury Park for 1929 was presented (R. 1205) and admitted as Exhibit 256 (R. 1206).

Daniel J. Maher has lived in Long Branch eight years and is president and director of an amusement and bathing establishment on the beach (R. 1206). He has been familiar with the beaches for eight years. At times the garbage is a serious problem. There is a great deal of danger involved (R. 1207). Last summer a gentleman cut his foot severely on a broken bottle in the surf, requiring seven stitches. Similar accidents have occurred to children. The garbage is very detrimental to their business and to the growth of the community. The garbage is repulsive and people refuse to patronize the beach (R. 1208). He is interested in an investment of over a million dollars in Long Branch. That amount of money has been spent by him and his associates for shore facilities (R. 1209).

Joseph J. Kiernan has lived in Long Branch for twenty-five years and is in the real estate business. He was formerly Superintendent of Beaches and Parks of the city (R. 1209). For twelve years he has been familiar with the beaches at Long Branch. For eighteen years he has encountered the garbage on the beach in his official capacity, as well as personally. They have two miles of beach to take care of and a mile and a half of boardwalk. They have twelve men working and when the garbage came in it was necessary not only to employ all of these men, but to hire extra men to clean up the beaches, so that they could be used by the public. At times it was impossible to keep the beaches clean or to dispose of the garbage fast enough (R. 1210). The difficulty with the garbage has continued since 1924 and is increasing. The real estate business is affected because people become disgusted with the garbage and refuse to renew their leases for summer homes at the shore. It occurs fifteen or twenty times a season in his business and has occurred every year since he has been in business (R. 1212).

J. William Proctor lives in Long Branch and for the past thirty years has been in the business of building bulkheads, jetties and other ocean-front protection. His business keeps him on the water front. He has seen the garbage after it has been dumped from the scows out in the vicinity of the dumping grounds. It is a solid mass of floats (R. 1218). It contains vegetable and animal matter and wood all mixed together. He has seen the same classes of material on the shore. He also installs filters for bathing pools. These are required because in an east wind the unfiltered ocean water is unfit for use in the swimming pools (R. 1219). It is cloudy, dark and full of vegetable matter. Unless the water is filtered, people will not bathe in it. When the wind is west that condition does not exist. Vegetable matter and garbage comes with easterly and northeasterly winds. The garbage causes the sand to smell bad so that people do not care to sit on it. It obstructs the use of the beaches and interferes with his contract work (R. 1220). They pump water from the ocean to the jetty. He has frequently been required to use strainers because, when the wind is east, the water contains vegetable and animal matter, including dead cats and dead dogs, which get into the pump. They find these things in their pumps. He has identified names and addresses of New York City on articles found in the garbage. This garbage drives people away and makes the beach undesirable. It smells bad in the sunshine (R. 1221).

J. Shubert Barton lives in Asbury Park and identified a paper bag filled with papers, etc., which he delivered to the offices of the city (R. 1250). They were fifteen yellow covered pamphlet examination books of students of Hunter's College in the City of New York, covering the examination given on June 3, 1929. In one book the student's name was Henrietta Rosenberg and the instructor's name was Mrs. Julia Sutherland. Each book bore a different student's name and there were different dates, but all were examination papers from Hunter's College

(R. 1252). Two of them were received as Exhibits 259-a and 259-b (R. 1253). Defendant counsel admitted that Hunter's College was a part of the public school system in the City of New York and was a girls' college. He found these on the beach on January 5, 1930 (R. 1254). Exhibits 115 to 118, inclusive, which had previously been offered for identification, were here admitted in evidence (R. 1269). Exhibits 260 and 261 are pictures taken on December 13, 1929, showing garbage and debris on the beach at Seaside Heights (R. 1270).

James Durkin lives in northwest Asbury Park. He identified a card which he found on the beach in a bottle at Asbury Park (R. 1275). He put his name and date of finding upon it. The date is June 4, 1929. He mailed it to Mr. Smack, the person to whom it was addressed (R. 1276). There were all kinds of garbage and litter on the beach where he found the bottle, including some big dead dogs and cats (R. 1277). The card was admitted as Exhibit 262 (R. 1278).

H. S. Ward lives at Point Pleasant Beach and has been in the real estate business for eight years. It is a summer community, consisting mostly of summer residents (R. 1282). The attractions are bathing, fishing and water sports. That municipality has about a mile and a half of beach front. He is familiar with garbage conditions on the beach and describes the articles which come in the garbage (R. 1283). It comes on the beach in its worst form in a northeast storm and practically litters the beach. The people contribute sums of money to keep the beach clean. Garbage interferes with the use of the beach to such an extent that parents will not permit their children to go bathing, or go themselves (R. 1284). People who come for the summer are much put out because they cannot bathe. They rely principally upon this. One family from Elizabeth who rented a house through him for three years informed him in the summer of 1929 that they would not be back the succeeding summer unless the garbage conditions were remedied so that they could enjoy

the water (R. 1285). The complaint is general (R. 1286). It is dangerous because of the bottles which are smashed in the surf (R. 1286). People injure themselves on glass when bathing in the water. A great many instances of that kind have occurred. A great many cases have been taken to Dr. Deniston's Hospital, some of them of a serious character. He has to keep his own children away from the beach when the garbage is there. The doctor ordered it because he did not want the children to run the risk of contracting disease from the garbage, or gain any infection from it. The summer atmosphere is very distasteful, especially with an east wind coming in and the odor of garbage on the beach. It draws flies—"salt flies"—and other kinds of flies. He has gone out fishing early in the morning (R. 1287). At sunrise the flies were there in swarms. The garbage is in the undertow and on the beach. When the tide starts to go out, it draws the garbage back in the undertow and it is impossible to fish or bathe. Surf fishermen from all over the State and the East come to that beach for surf fishing for bass and bluefish (R. 1288).

Ralph Borden lives at Point Pleasant Beach, where he has a store for the sale of fishing tackle and sporting goods. Surf fishing is an important pastime on that beach (R. 1291). He has had considerable experience with garbage. There is plenty of it at times. It interferes with the use of the beach (R. 1292). He hears frequent complaints because the beach is not clean. The garbage comes in from the sea. He has seen streaks of it in the surf as far out as he could see. It floats in the water in streaks. Sometimes it works to the shore and sometimes it disappears with the shift of the wind (R. 1293).

Charles Havens lives at Point Pleasant Beach and operates a bathing pavilion. In business ten years. Identified two pictures taken in July, 1928 (R. 1294), for the borough, showing conditions at that place (R. 1295) (Exhibits 263 and 264), showing the use made of the beach by the public (R. 1296). He has difficulty with the garbage at his beach. Extra help has to be employed to clean

it up. It affects his business. It comes in largely at times and piles up in wind rows along the beach, 15 feet wide and as far as you can see. They have to rake it up and bury it or burn it and sometimes cart it away. He has seen crates with New York City addresses on them (R. 1297).

Harry Duffield has lived at Asbury Park for thirty years (R. 1298), and is president of the Asbury Park Hotelmen's Association. He has been in the hotel business for thirty years. Garbage has entered into their business program to a great extent. Has lots of complaint (R. 1299). Was also Beach Commissioner of the city and had a great deal to contend with on account of the garbage on the beach. Guests will not bathe in the kind of water they have when the garbage comes in. It is the most discouraging thing they have to deal with in their business. If they can get rid of the garbage nuisance, it would be a great benefit to the city and greatly improve the hotel business (R. 1300).

J. Walter Butcher is proprietor of the Asbury-Carlton Hotel (R. 1302), which accommodates 200 guests and serves around 15,000 different guests during the year. Has encountered garbage on the beach to a considerable extent. Sixty or 70 per cent. of his guests go bathing in July and August. For periods as long as a week or ten days they have not been able to go in on account of the garbage. Guests complain they have been affected by it. Several guests have been injured by refuse mixed with the garbage. One lady in July, 1929, was laid up for over three (R. 1303) weeks by being hurt with a piece of wood that was floating in the water. Bathing is the chief attraction for his guests. His hotel relies upon the beach to the extent of 75 to 80 per cent. It is all they come for in the summer time. He has seen the beach literally covered with garbage and refuse, which means all kinds of produce (R. 1304). It is the same thing as the garbage that would be turned out by any ordinary kitchen. He has seen boxes with New York City addresses, mostly ad-

dressed to produce men in the Washington Market, New York City (R. 1305).

William H. MacElroy lives at Asbury Park and operates the Albemarle Hotel, which accommodates 100 guests and serves about 800 different persons a season. Most of the people stay long periods (R. 1306). Has a great many complaints from his guests about the garbage on the beach. They come to the shore for bathing and if they cannot go in they find fault. It is a matter of common complaint among hotel guests. It keeps some people from coming to the shore (R. 1307). There is a general advertising program of hotels to attract people to Asbury Park (R. 1308).

Weslie Potter lives in Asbury Park and is superintendent of the Deal Casino, which is the municipal bathing pavilion (R. 1308). Their bathing beach is between 300 and 400 feet long between two jetties. They have difficulty with the garbage. He has seen it 6 inches deep on the beach, with bathing absolutely stopped. They have to get a gang of men and with shovels and rakes gather it up and bury it. Garbage comes in the worst with a northeast wind (R. 1309). His establishment accommodates 800 to 1,000 people a day. The beach in front of the Casino is cleaned every day. The rest of the beach at Deal is cleaned by the borough. They have a pool, but the water has to be filtered in order to keep the garbage out. They have twelve filters (R. 1310). Without filters, they have to play a fire hose into the water around the intake pipe to keep the garbage away. He has done that himself and still it would not keep all the garbage out (R. 1312).

T. F. Burley lives at Asbury Park and is executive secretary of the Asbury Park Chamber of Commerce. Has been in that kind of business for eleven years. The Chamber conducts municipal advertising, promotes resort and carnival (R. 1313) activities, and baby parades, places newspaper advertising, directs publicity, secures conventions, issues pamphlets and literature and generally pro-

motes the activities of Asbury Park. They answer inquiries. They have spent \$615,069.50 in the past four years for advertising, publicity, literature, etc. They collect clippings which refer to Asbury Park and have clippings from 2,335 newspapers. During the past few years they have had 106 conventions, with an aggregate (R. 1315) attendance of 78,105 persons. Their record of excursions, which is only a small part of the business, runs to 560,010 persons. They have issued 10,301 different types of literature to attract people to Asbury Park. The beach is the chief inducement. The garbage embarrasses them very much. It drives people away in spite of all they can do by advertising and other means to attract people. Asbury Park investment in beach front can be justified only by recreational use and without bathing they would be no playground for the people who visit the hotels (R. 1316). If they have no bathing beach, there will be no business. They are gaining a reputation for an undesirable beach as a result of this garbage and it is doing untold harm. It has to be cleaned up. It is unhealthy and will destroy the usefulness of the place. Surf bathing is the chief attraction (R. 1316). The difference between Asbury Park and Atlantic City on the question of development is that as a result of filth and unmentionable refuse which comes on the beach from the garbage at Asbury Park, people are driven to places where they can find a clean beach. Numerous complaints of garbage come to him, especially from people who rent cottages, and real estate men cannot rent the houses (R. 1317). People who must bathe in refuse and dirt and unmentionables will not come back (R. 1318).

Selah H. Van Ness (R. 1319) operates the Lakelyn Hotel at Asbury Park and has been in that business for twenty-seven years. Accommodates about 125 guests at a time, about 25 per cent. of whom come from New York. Has seen garbage on the beach and has had complaints that people cannot bathe in the ocean, but are obliged to bathe in pools. The complaint is in the ascendance (R. 1320).

Edith W. McConnell is with the City Director of Information for Asbury Park (R. 1322). The department sends out literature, keeps records of excursions, and things of importance to the city. The yearly report of the department for 1928 shows the number of inquiries for hotel booklets (R. 1323). The department supplies travel bureaus in the United States and Canada with literature. According to the 1928 annual report it supplies eighty-two travel bureaus with 34,205 booklets (R. 1325). In 1928 1,852 carloads of people came to Asbury Park on excursions run by the Central R. R. of N. J. and the Pennsylvania (R. 1326). The figures for other years are as follows:

1924.....	2,564 carloads	256,400 people
1925.....	2,633 "	263,300 "
1926.....	2,705 "	270,500 "
1927.....	2,082 "	208,200 "
1928.....	1,852 "	185,200 "
1929.....	1,605 "	160,500 "

Beginning with 1924, there were fifteen conventions, as follows:

1925.....	21 conventions	6,230 people
1926.....	23 "	23,975 "
1927.....	25 "	8,800 "
1928.....	27 "	6,900 "
1929.....	31 "	38,850 "

(R. 1327).

A carbon copy of the report to the Mayor for 1929 was marked Exhibit 265, and the report for 1928 was marked Exhibit 266 (R. 1330). Folders issued by the department marked Exhibits 267 to 272, inclusive (R. 1332).

Havell Keyler (R. 1341) lives in South Belmar and is a foreman for Asbury Park. His duties include keeping the beach in shape. Has been engaged in that work for past eight years. Removes garbage which collects

around the jetties (R. 1342). Garbage consists of vegetables, grapefruit peels, rinds, cats, dogs, a pig, chunks of fat. Garbage leaves a greasy streak on the beach (R. 1343). The garbage is raked and carted to the dump in Neptune Township, where he has identified objects in it with names and addresses on them (R. 1344). Has required two days to clean the beaches after storm (R. 1345).

John G. Gruetzner lives in Asbury Park and is superintendent for the city. Has been serving in that capacity since 1918. Was Chief Engineer from 1914 to 1918. Has worked on the beaches of Asbury Park for twenty-five years. Has charge of the removal of garbage from the beaches, east of Ocean Avenue (R. 1346). City has spent \$1,516,400 for jetties (R. 1347). City has spent \$250,000 for boardwalks; the valuation of boardwalks is at present \$250,000 and an additional appropriation of \$210,000 is available to widen the present walk to the extent of 60 feet. The walk is seven-eighths of a mile long and will be 60 feet wide throughout (R. 1347). Convention hall, theatre, Casino and the heating plant under the three buildings now under construction will amount to \$5,000,000 (R. 1348). The present buildings on the boardwalk represent \$1,200,800, in addition to the convention hall, theatre and Casino. The aggregate of the city's investment—outside of land—to improve the beach front is between \$7,000,000 and \$8,000,000. Facilities are open the year around, except the Eighth, Third and Fourth Avenue bathing groups, which are closed for the winter (R. 1348). There are fifteen major buildings along the boardwalk. After a northeast or southeast blow garbage is deposited on the beach. Exhibits 273 to 278, both inclusive, are photographs of the beach which were taken on June 10, 1929, after the northeast storm. Garbage on the beach includes wood, tin cans, bottles (R. 1349). Exhibits 279 to 285, both inclusive, are pictures taken at Asbury Park on February 6, 1929. They show garbage, bottles, cans, boxes, fruit peelings, wood, dead animals (R. 1350). He took a letter from a bundle found on the beach which

was addressed to Thomas Bender, 350 West 47th Street, New York City, and registered by Nardin Meyers Motor Corporation (R. 1351), 639 West 125th Street, New York. The letter was dated August 15, 1928, and was stamped at the registry division in New York on that day. It was found on August 24, 1928—nine days after it was mailed. The above letter and envelope were marked Exhibits 286-a and 286-b, respectively (R. 1352). Exhibits 279, 280, 281 were pictures taken August 24, 1928, and show fruit peelings, bottles, cans and boxes (R. 1353). Exhibits 287 to 297, both inclusive, show garbage on the beaches and were taken March 2, 1927 (R. 1353). Exhibit 295 is a picture taken between First and Second Avenues and is a picture of the stuff contained in a bundle of papers picked up there (R. 1354). June 8 to June 22 they spent \$475.73 to clean the beach front. The two weeks previous they spent \$131.80, and that was the average for each two-week period back to January 5th of that year. The cost of cleaning the garbage off the beach was \$350 plus; hired four trucks at \$10 a day each, which was \$40 a day, \$390. That is just to clear off that one storm. They had three trucks of their own and hired four, and they averaged ten loads, sixty loads were taken off that day from one blow (R. 1519). He wrote a letter on March 22, 1923, to the Street Cleaning Department of New York, and he read the reply from Commissioner Taylor dated May 23, 1923 (R. 1520). On October 5, 1926, he wrote to the Supervisor of Harbors of New York, enclosing pictures taken during the summer of 1926, which showed the deposit of garbage washed up on the beach front. He commenced the complaints May 22, 1928 (R. 1524). In 1927 they were sued by a bather (the city and the bathing lessee), who got a bad cut in his knee. The complaints went right on to February 13, 1929. He sent a letter to Commissioner Taylor on February 14, 1929, and read his reply (R. 1526). "However you can rest assured that every effort is being made to hasten the construction of incinerators, and to eliminate the dumping of garbage * * *

(R. 1527). During the close of August, 1929, Mr. Munder, a representative of New York City, who called on him, told him by the close of the year there would be only about 25 per cent. of the garbage dumped at sea (R. 1529). The stuff on their beach is the same as shown on Exhibit 119. They have complaints and it keeps people from enjoying the surf bathing. He identified articles on Exhibits 117 and 118 as a broken pail, chickens, ducks (R. 1530).

J. Lyle Kinmouth is publisher of the Asbury Park Press. Has published that paper for about thirty-five years. He has been Beach Commissioner of Asbury Park from 1903 to 1905 (R. 1356). Has had experience with garbage on the beach. Ever since he has been familiar with the beaches, it has been necessary to make arrangements to have them cleaned. If the wind or tide was high, garbage or wreckage would wash up on the beach. During the time he was Beach Commissioner they took the matter up with New York City and he was invited to inspect a new incinerator plant that had been installed on Staten Island, and was in operation at the time of the inspection. He came from the inspection with the idea that it was only a question of a few years when the incinerators would be installed and the nuisance abated. This was probably in 1905 (R. 1358). That inspection was made on account of the numerous complaints in Asbury Park and they were told that New York had one plant in operation and would build other plants to handle the entire output (R. 1359). When McClellan was Mayor of New York City, we had an unusually bad condition, especially at Bradley Beach. Mr. Somers, builder of Lorraine Hotel in Bradley Beach, complained of the conditions there (R. 1359). Has fished from Barnegat to Asbury Park and has found the same condition. Has heard people say they came to the shore for the ocean bathing and that it was not fit to go in and they were not going to stay. The city depends upon the ocean and its beaches for its existence (R. 1361). He is interested in the Monterey Hotel in Asbury Park and a year ago last July a group of seven who had been long-seasoned guests there for several

seasons told the manager that the beach was a mess; that they would not put up with it; and they left (R. 1362). The beaches have been polluted since 1905. It seems to be increasing in quantity at a pretty good rate. New York City has discontinued the use of the incinerator plant (R. 1363). He has seen scows piled mountain high with garbage (R. 1364). June 8 to June 22 they spent

Percy N. Daniels, Sanitary Engineer of the City of Trenton, specified that in 1924, as Senior Sanitary Engineer of the New Jersey State Board of Health, he made an investigation for Governor Silzer of the garbage conditions on the New Jersey beaches (R. 1414). His report, dated May 22, 1924, is included in Exhibit 298 (R. 1415). Reference to that report is respectfully made rather than to recite its contents here (R. 1385).

Victor Gelineau lives in Tenafly, N. J., and is director and chief engineer of the New Jersey State Board of Commerce and Navigation, which carries out coast protection work, makes leases and grants lands under water, etc., of the State of New Jersey (R. 1417). The department operates a boat which was sent out to make investigations. Every year there is a series of complaints about the garbage on the beaches. He feels that it operates detrimentally on the value of the riparian rights (R. 1418). His observation is that the garbage pollution is increasing (R. 1419). He makes inspections, and has almost always seen the garbage in the course of his inspections (R. 1420) floating offshore and right in the surf, and laying the windrows on the shore. He has seen it working in on the northeast winds. When it is on the shore it is offensive (R. 1421).

Thomas Mathis lives in Toms River and is State Senator from Ocean County (R. 1421). The portion of the coast embraced in his county is from Manasquan River to Little Egg Harbor Inlet and includes the municipalities from Point Pleasant to Beach Haven, inclusive. He has seen the beaches literally covered with garbage (R. 1423). He was captain of a vessel for about twenty-five years running in and out of New York. Has seen the scows

towed out of Sandy Hook and dumped and has seen the material floating on the surface of the water (R. 1424). When it is first dumped it is quite a solid mass, but immediately spreads out and covers more of the surface (R. 1425). Has seen scows dump after dark away inside of Ambrose Lightship (R. 1426). He indicated on a map where the lanes of ocean travel are (R. 1428). Garbage at times makes bathing almost impossible; it affects hotel business, real estate business, and all business, in a general way. The amount of garbage has increased in the last few years (R. 1428). In a strong northeast wind the garbage travels rapidly (R. 1431).

Runyon Colie lives in South Orange and has a summer home at Mantoloking. Has been going there since 1888 or 1890. Has had experience with garbage on the beach. Proportion of garbage to driftwood has greatly increased. The last ten years has been appreciably worse. Northeastern tides are higher than other tides and it always leaves garbage (R. 1434-1436). Of late years tremendous numbers of lamp bulbs, broken dolls, driftwood, an occasional dead animal. There is a sort of tallow substance that gets into the garbage now and then. He usually buries it forthwith (R. 1436). Last summer he saw the stuff collected in front of his place, until the beach had become invisible (R. 1437). Any wind that blows east or northeast, brings garbage in. In his opinion, it retards the development of the community. It is a matter of common complaint (R. 1438). Has heard people refer to their neighbors as the "Garbage King" when their front yards happened to be particularly covered with garbage (R. 1439). The ocean is spotted after a northeaster, which makes bathing absolutely dangerous (R. 1441).

Walter Fetzer (R. 1441) lives at Seaside Heights, N. J., and is Tax Collector and Treasurer of the borough. Is in the amusement business in the summer time in Seaside Heights (R. 1442). People come to go in the ocean. Their bathing beach is about 100 feet wide. They are making plans to spend \$25,000 on it. To date it has cost about

\$50,000 (R. 1443). The borough has just paid \$40,000 to the then owners of the riparian rights, which it has purchased (R. 1444). Another \$150,000 will be invested in a pier to be erected. They have trouble with garbage on the beach (R. 1445). He depends upon people to go in and bathe; otherwise his bathhouse suffers a loss. They have people employed to clean up the beach. They give the work to a contractor at an expenditure to the borough of \$500. Garbage comes when the wind comes in a northerly or easterly direction. He encounters garbage of all types—fruits and skins, dead animals, carcasses of dead animals, some driftwood, etc. (R. 1447). Exhibit 117 represents frequent conditions of their beach. Exhibit 118 is similar (R. 1448). Exhibit 115 was taken a little below their pier. Exhibit 116 fairly represents their beach (Exhibits 301 and 302 (R. 1449). Exhibits 301 and 302 were taken this past summer. They represent a fair daily use of the beach, but the Saturdays and Sundays will double that. He hears many complaints from people who come to the beach to go bathing (R. 1450)

Gottlieb Mannschuer lives at Seaside Heights and is in the hotel business; has been a member of the common council of the borough for seven years; has been in the hotel business four years. His hotel accommodates seventy-five guests. During the summer he has about 1,200 to 1,500 customers (R. 1454). The main attraction for people is coming down to spend time in the ocean (R. 1455). In northeast storms there is all kinds of garbage comes in. When the garbage is there it is impossible for people to walk along in there. The offensive features are the odor and the danger of walking on broken glass. People cut their feet on it; we have had numerous cases of that kind (R. 1456). His guests complain that they cannot go in the ocean (R. 1457).

Lloyd C. Riddle lives in Manasquan; has been Mayor there for eight years (R. 1460). They have fishing industries which employ twenty-five or thirty men during the summer, and ice and cold storage places that take care

of the cold storage business along the shore for fish (R. 1462). They have trouble with garbage on the beach. It covers the whole front of the beach. The beach is from 200 to 300 feet deep. The garbage prohibits using the water for bathing purposes. It is an annoyance and expense to clean it up (R. 1463). He offered photographs showing the beach front during the month of June, 1929 (R. 1467) (Exhibits 303 to 307) (R. 1470).

Patrick McDevitt (R. 1484) picked up a bundle of Christmas cards on his beach. The address of one is Mrs. Carlino and Family, 271 West 89th Street, Bronx, New York. There are forty-six of these separate letters and all post-marked the City of New York with dates in the month of December 2nd, 19th and 24th and all are addressed to the same family. He also picked up carbon copies of what is called a cost statement of William T. Goldman & Bros., Inc., 12-16 East 14th Street, New York, dated March 4, 1927 (R. 1485). He had a postcard addressed from the Grand Central Station, 1929, addressed to Mrs. Sylvester, 639 West End Avenue, New York, advertising a sale from Shoecraft Salon, 714 Fifth Avenue, New York. He had a prescription signed by Dr. Ball and from Neuheim Pharmacy, 2081 Broadway, at 72nd Street, New York. The number is given as 58091 and the date is November 29, 1929. He also had a bundle of check stubs from the Traube Dry Cleaning Company, 17 Russell Street, Brooklyn, N. Y., and a bundle of store slips (R. 1487). He also offered an article containing the name Levy Brothers, House of Progress, and the address is 1917 South River, 756 East Tremont Avenue, and 1989 University Avenue, Bronx, New York (R. 1488).

Joseph Ulrich lives at Seaside Heights and is in the parking business. Has been there close to ten years (R. 1492). He has seen garbage on the beach. They have had several men working there to clean it up (R. 1494). Sometimes it is so bad that when he plows through with his tractor, the odors from the garbage were so strong you could not stand it. It would get in the mechanical

parts of the tractor and had to be cleaned off before he could get across (R. 1495).

Stanley Tunney lives in Seaside Heights and Seaside Park. He is in charge of the labor around the amusement company and in charge of the beach, and proprietor of a fishing pier. Has seen all sorts of garbage on the beach (R. 1497). When it has laid in the sun, there was some of it smells terrific. It is dangerous to go on the beach when the garbage is there. A northeast storm always brings garbage (R. 1498).

Daniel J. Klee has lived in Seaside Heights for eleven years and is Borough Superintendent. He has encountered garbage on the beach. For three years he handled the work of keeping the beach clean (R. 1501). The garbage has been increasing at all times. The community relies upon the beach to attract people. The working class of people come down there. They come mostly from June to October (R. 1502). They have constant complaints about the garbage (R. 1503).

C. A. Francis has lived in Long Branch for fifty-seven years. He is County Treasurer, and has been Senator from his county, and Mayor of Long Branch (R. 1504), Postmaster and Collector of the Port at Perth Amboy. Long Branch is one of the oldest summer resorts on the coast (R. 1505). They depend upon the ocean for their attractions (R. 1506). He has seen the garbage out at sea as far as he could see, great big splotches of it. He goes fishing three or four miles out. Has seen garbage floating there in the water (R. 1507). There are times when people would not bathe in the ocean on account of the condition of the garbage (R. 1508). It has affected the shore resorts for a long time. He does not see any demand for beach-front property lately. He has had complaints about garbage (R. 1509).

Walter J. Sweeney lives in Seabright and is Tax Assessor (R. 1513). Was on the Board of Health in 1927 and heard very numerous complaints. They took it up with the State of New Jersey. In 1927 he presented the

matter to Governor Moore. In 1928 and 1929 when he went around with his tax book the people said they were not coming down any more, that they were going to sell their property, that their children could not go on the beach. This happened at practically every house along the South Beach (R. 1514). Mr. Reiker and Mr. Sisson showed him where the litter and stuff was on the beach and said they would not let their children go down there and bathe. In the last two years he has cut at least 1½ per cent. from the assessments because they will not let their children go down and they have caused a lot of places to be closed and sold (R. 1515).

Henry L. Finch lives in Middletown Township in the summer, and uses the Seabright Beach Club (R. 1536). He is familiar with floating garbage on the beach. The conditions are absolutely repulsive at times. He goes to the beach with his family and it is so repulsive they can't go into the ocean. He goes back and forth quite frequently on the Sandy Hook boats, which carry people between New York and Atlantic Highlands. Has seen the garbage scows many times. He has seen garbage in the water as he travels along (R. 1538). He has seen barges stacked with everything and some falls over the sides. He sees garbage throughout the whole distance to Atlantic Highlands (R. 1539).

Charles S. McVeigh lives at 40 East 71st Street, New York City, and in the Borough of Rumson in the summer time (R. 1545). He is a member of the Seabright Beach Club and has been its president for two years. The club has ninety-five season members and 210 stockholding members. The purpose of the club is to supply bathing facilities to members. He has had experience with garbage on the beach (R. 1546). The garbage interferes with the use of the beach to a very material extent (R. 1547). He has noticed it on the way down to Atlantic Highlands on the boat. He has seen garbage floating on the water. He has seen scows go out and the garbage falling off of them (R. 1548). He travels on the boat practically every day during the week, and has done so for over fourteen years.

The garbage has given a tremendous amount of trouble at Seabright (R. 1549).

Van Rensselaer Halsey lives at 139 East 79th Street, New York City, and is a member of the firm of C. D. Halsey & Company, 43 Broad Street (R. 1550). He has a summer place at Rumson and has spent his summers there for the past fifteen years, and is a member of the Seabright Beach Club (R. 1551). He has had experience with garbage. He has noticed it on the beach, sometimes in the rivers and sometimes in the bay. He has seen the scows going in and out when he travels on the Sandy Hook boat to Atlantic Highlands (R. 1552). He has noticed great piles of garbage heaped on the scows. When there is a strong wind and the scows are not covered, some of the garbage is lifted off the top or the sides and distributed in the water (R. 1553). He has noticed garbage from the Narrows to the turning point of Ambrose Channel. Garbage interferes with the enjoyment of the seashore. It is a matter of common conversation or discussion (R. 1554). He has been garbage on the water in the lower bay (R. 1556).

Joseph C. Hoagland lives at 19 East 66th Street, New York City, and is in the real estate business (R. 1559). He spends the summer at Rumson. He is a member of the Seabright Beach Club and chairman of the beach and pool committee. He has general supervision of the cleanliness and care of the beach and pool. Every day they have trouble. They have three or four men employed a greater portion of the day cleaning the beach after the tides. High tides leave a deposit of garbage (R. 1560). They have to keep a cart on the beach (R. 1561). He has seen scows on their way in or out in past years. Garbage is a detriment to bathing and an expense to the club (R. 1562). The garbage condition is a matter of general conversation in his vicinity. People say if they cannot join the Seabright Club where considerable effort is spent to clear the beach, they do not want to bathe there (R. 1563).

George E. Joline lives at Eatontown and works for the

Long Branch Daily Record. He went with Mr. Johnson to take some pictures on the beach on February 24th (R. 1580-1581). Photograph 2686 made at the Monmouth Beach Club from the end of the jetty, showing garbage mass in ocean, received as Exhibit 308. Photograph 2687 at the same location, showing garbage on ocean surface about one-tenth of a mile from shore, received as Exhibit 309. Photograph 2688, made on Monmouth Beach Club beach, showing garbage on surface of water in bathing area, received as Exhibit 310. Photograph 2689 at the same location as the last, looking diagonally downward from left to right, showing garbage on beach and in the water, received as Exhibit 311. Photograph 2690, same as 2689 (R. 1582). Photograph 2690 received as Exhibit 312. Photograph 2691 is from the same location, showing the garbage on the beach up nearer the jetties (R. 1583). The jetty is just north of the Monmouth Beach Club bathing beach. Photograph 2691 received as Exhibit 313. Photograph 2692 was made in front of the Monmouth Beach Bathing Pavilion, showing details of garbage mass on the beach (R. 1584). Photograph 2692 received as Exhibit 314. Photograph 2693 is taken from same location as 2692, and shows garbage and refuse on the beach and in the surf. Received as Exhibit 315. Photograph 2694 was made in front of the Monmouth Beach Bathing Pavilion, and shows water in bathing area. It shows garbage in the bathing area (R. 1585). There is so much garbage the waves couldn't break. They just spread out. The picture was taken about 12.15. Received as Exhibit 316. Photograph 2695 was taken from the pier at the foot of Seaview Avenue, Long Branch, and shows garbage in the ocean about 30 feet from the beach (R. 1586). Photograph 2695 received as Exhibit 317. Photograph 2696 was taken from the same location as No. 2695 and shows garbage in the ocean 50 feet from the beach. Received as Exhibit 318. Photograph 2697 was made from a pier between Cooper Avenue and North Broadway, Long Branch, looking vertically downward on the ocean surface. Received as Exhibit 319 (R. 1587).

Photograph 2698 was taken from the same location as No. 2697 and shows garbage in the bathing area. Received as Exhibit 320. It was a very clear day. There was a gentle breeze. You could see two or three hundred yards to sea a streak all along the shore line, all along the Long Branch beach and Monmouth Beach front. He could see articles further out than that glisten in the sun (R. 1588).

He picked up articles at the time he took these pictures. One is a Blue Bird Dairy Company milk bottle cap from 910 Longwood Avenue, Bronx; another is a Home Laundry Service ticket from the Bronx, 1010 East 173rd Street, and the address on the ticket, 1288, looks like Hoe Avenue; another is from Bristol, Meyers Company, Hillside, Elizabeth post office, New Jersey. It is a part (R. 1590) of a post card that was addressed to R. L. Gould, M.D., 340 West 29th Street, New York City; another is a business card from Isaacs, 871 Ellsmere Place, Bronx; another is a National Laundry ticket from 2 West 111th Street, near Fifth Avenue, 41st Street, and a Bronx address at 147 Wilkins Avenue; another is a Bond Laundry Service ticket, 405 East 175th Street, Bronx, and addressed to Rato or Roto at 675 Coster Street; another is a card of the United Association of Journeymen Plumbers and Steamfitters of the United States and Canada, weekly sick and relief certificate, John Meighan, 62 West 124th Street; another is Hurtig & Semons, Apollo Burlesque, New York, a season pass for the theatre; a happy new year card in the form of a check drawn to blank for 365 happy days, Oscar Glass, 1145 Longfellow Avenue, Bronx (R. 1591).

The Defense.

There is a wide variance between the defendant's answer and proof. Technically, the proof is of such a nature as to be inadmissible under an answer of general denial such as that filed by defendant. Whether the answer remains as it is, or is amended to conform to the proof, is

of little consequence, since the proof fails entirely to show a good defense.

The defendant answers the plaintiff's case by interposing the following defenses :

1. Permits of the Supervisor of the Port. (This has been fully considered and disposed of by the discussion under point (3) of this brief.)
2. That the pollution complained of comes from passing ships.
3. That the pollution complained of comes from the discharge of sewers of municipalities of the plaintiff.

The last two of these defenses will be dealt with forthwith.

Pollution from Passing Ships.

In the reports of the Supervisor of the Port and in the testimony of Capt. Anderson reference is made to condemned foodstuff, vegetables, etc., disposed of by outbound vessels at points not less than twenty-five miles from shore (R. 1610), but Capt. Anderson testified that the amount of these condemned articles deposited at sea is relatively negligible compared with the amount that goes into the garbage scows (R. 1611).

Defendant's witness Gainard testified to the number of vessels entering and clearing the Port of New York between December, 1928, and January, 1929 (Defendant's Exhibit 4, R. 1659-1662). He testified that about twenty vessels take the southerly course in and out of New York City each day; that every vessel dumped considerable material in the sea (R. 1664), which is accumulated on the decks during the stay in port and from cleaning out the galley and crew quarters, including articles which he mentioned (R. 1665).

He testified that one ship dumped fifty tons overboard, approximately, representing the accumulation of ten to

fifteen days (R. 1686). He thought fifty tons of garbage would occupy a space of fifty cubic feet to the ton (R. 1689). He has seen 2,500 cubic feet of refuse and garbage on the deck of a vessel (R. 1691). This is dumped in the sea lane about two and one-half miles from the New Jersey shore (R. 1694).

Defendant's witness Bergsten testified that he operated ships out of New York Harbor (R. 1856) and that they threw off their refuse after leaving Scotland Lightship (R. 1860). On one occasion he dumped overboard 2,000 cases of lemons and onions at not less than twenty-five miles southeast of Ambrose Lightship (R. 1861).

Defendant's witness Lawrence testified to the course of coastwise vessels (R. 1761-1762). He testified that these vessels discharge their refuse, ashes and dirt which is accumulated while they are in port (R. 1763). They throw their containers overboard at sea (R. 1765). Vessels leaving New York dump their rubbish as soon as they get to the lightship (R. 1784). He has dumped as much as twenty-five and thirty tons of accumulated garbage from his vessel (R. 1788).

Called in rebuttal, Capt. Anderson testified that he has no knowledge or information of vessels dumping their garbage accumulations at sea after they leave the channel as testified to by Gainard, Lawrence and Bergsten (R. 1908). He maintains inspectors and pilot boats to enforce their regulations against such a thing (R. 1910). He produced notices forbidding the dumping of such materials at sea, including a quotation from the Act of 1888 (Exhibits 342, 343, R. 1914-1915). The first notice was issued in 1921 and the second in 1929 (R. 1911). He produced another notice of a similar nature (Exhibit 344, R. 1915). It is his duty to enforce the requirements of the law to prevent the dumping of garbage from vessels in New York Harbor and adjacent waters (R. 1917). In this work he has two patrol boats (R. 1918) and the cooperation of the custom guards, prohibition units and coast guards, and the informer receives part of the fine

imposed for violation (R. 1919). The city garbage barges have been offenders and he had to communicate with the city authorities about it. If it were the ordinary practice in New York Harbor for vessels to accumulate garbage and rubbish to the extent of fifty tons, or other quantities testified by defendant's witnesses, and shove it off into the sea as soon as they leave the channel, his inspectors would have been likely to have discovered some instances of it (R. 1922). He goes out himself twice a week (R. 1923). If those conditions were prevalent, they certainly would come to his notice (R. 1924). An occasional violation might escape detection, but not a prevailing practice. Such action is a distinct violation of the law and regulations of the War Department (R. 1925).

The following testimony was given by plaintiff's witnesses on this subject:

Frederick Bailey (R. 465) testified that there is too much to come from any passing vessels (R. 467). He has been able to identify the garbage that he has seen on the beach as being the garbage that came from the sea dumps. It is too much to have come from any passing vessel. Passing vessels might throw a little overboard (R. 473). But it wouldn't come in in any such quantities as they have it on the Jersey shore. If it came from passing vessels, it would come on a southeast wind as well as on other winds, but it does not come that way. It usually comes on an east or a northeast wind (R. 474-475).

Mr. Smack says that the masses of garbage he saw at sea did not come from passing vessels. He saw it come from the New York Street Cleaning Department. He has observed them going out over a period of years (R. 54).

Mr. Howland says that it is impossible for the garbage to have come from passing ships. There is no reason why garbage from passing ships should be blown away and not that which New York City barges dump at sea. They would not go in opposite direction in the same wind (R. 108).

Frederick I. Voorhees says he has seen steamers throw out garbage but never more than a pailfull or a bucket-

full at a time. The quantities of garbage that he has seen floating on the sea no steamer would be able to carry. He has seen quantities larger than a steamer could carry. He has never seen anything on the ocean except these garbage scows that could account for the garbage which he has seen. If there was anything else out there big enough to carry it, he was in a position to see it (R. 154, 155).

Alfred Schweitzer testified that he has seen passing vessels throw out garbage but it is always in very small quantities. It would be impossible for the quantities of garbage he has seen in the ocean to come from passing vessels. He recognized material floating in the ocean as being of the same class that he sees dumped from the scows (R. 171).

William Park is superintendent of the Clyde and Mal-lory Lines and has been in the steamship business as captain, superintendent of line, etc., for thirty or thirty-five years (R. 1967-1968). He operates twenty-one ships out of New York (R. 1968). His lines have three times as many sailings as any other line. They do not feed their crew in port (R. 1970-1971). There is no garbage accumulation in port except for one-half day, which amounts to about a regular ashcan full, which is dumped overboard when we get to sea. Cleanings from the holds are carried on to the piers and carted off by a garbage company (R. 1972). There is no room on the vessel to accumulate fifty tons of garbage and refuse, as testified to by Gainard, Lawrence and Bergsten (R. 1973). Ships could not make any money if they stayed in port ten days, as those witnesses testified. Garbage from the ships is dumped at sea little by little as it occurs (R. 1974). He has never seen vessels dump in quantities (R. 1975). Garbage is disposed of piece by piece and everything edible is immediately disposed of by fish or gulls (R. 1977). Their freight vessels have crews of thirty men and are usually in port for two days. In that time they accumulate four or five cans of garbage, which is dumped at sea (R. 1979).

Harry P. Snow is the chief officer of the steamship "George Washington." He has sailed in the coastal service, and has been in the steamship service for thirty years (R. 1983). Garbage accumulated in port is kept in cans and dumped overboard at sea. Boats remain in port about twenty-two hours, but some lay over for forty-eight hours on week-ends. They have crews from thirty to ninety men (R. 1984). They feed the crew but not the passengers in port. During such a lay-over the garbage will amount to two, and not more than three, ten-gallon cans. This is dumped at sea (R. 1985). It is almost immediately consumed by gulls. He never saw any quantity of garbage dumped at sea by any vessel. He has sailed through the garbage at sea (R. 1987), in spots, 200 feet in area and larger. He does not think it could come from vessels (R. 1988). The New York City garbage dump is nowhere near the coastal lane (R. 1989). He has never seen accumulations of garbage and material on vessels such as defendant's witnesses testified to (R. 1994). No good sailor would cover his deck with slippery, slimy garbage (R. 1996).

The only testimony in support of the contention that passing ships dump into the sea any substantial amount of garbage and refuse comes from defendant's witnesses Gainard, Bergsten and Lawrence. It is vague and indefinite as to time, place and frequency. It is grossly exaggerated as to quantity. Gainard's fifty tons would amount to one hundred pounds per day each for a crew of one hundred men for a ten-day stay in port. That is impossible. It is the testimony of confessed violators of the law, since the Act of 1888, above cited under point (3), makes it a misdemeanor to do the things they boast of. The testimony of Capt. Anderson, whose duty it is to enforce that law, and of plaintiff's witnesses Capt. Park and Capt. Snow show that the testimony of these witnesses is not only improbable, but entirely incredible.

However, if all that they said is true, it would not excuse the defendant, as we shall observe in the later discussion of the law on this subject.

Pollution from Municipal Sewers.

Defendant attempts to show pollution by municipal sewers was confined to the cities of Long Branch and Asbury Park, which represents only five and one-half miles (R. 1179, 996) of the more than fifty miles of shore front involved in this case.

Long Branch Sewer.

Defendant introduced a plan, entitled "Sewage System of the Long Branch Sewer Company," which was admitted as Defendant's Exhibit No. 14. It bears no date and there is no information in the record as to when it was made or as of what time it speaks (R. 2111).

The notation at the top and right-hand side of the map reads: "White line existing sewers." A number of white lines are shown. Other lines are also shown which seem to indicate sewer lines, but if only the white lines are the existing sewers, then the other lines, if that is their indication, may be future extensions. The only sewer outlet indicated by a white line is that shown on the right-hand side of the map as emptying into "Branch Port Creek" which, in so far as the map shows, does not empty into the Atlantic Ocean, at least in the vicinity of Long Branch. As a matter of geographical fact, Branch Port Creek empties into the Shrewdsbury River, which flows into the Atlantic Ocean between Atlantic Highlands and Sandy Hook.

The only outlet into the ocean, whether it be present or future, is at Broadway, at the bottom of the map, about one-third of the distance from the left-hand side. No testimony is given to show whether any of these outlets are used or how.

Certainly this map proves nothing. It has not been identified, authenticated or proven by anyone.

Defendant produced as a witness David C. Bowen, Director of the State Department of Health of the plaintiff, and by virtue of a process of subpoena *duces tecum* required the production of a resolution of that department

dated September 14, 1926, respecting the sewer system of the Long Branch Sewer Company at Long Branch (R. 2095). That resolution (which turned out to be three resolutions of the same date) was introduced as Defendant's Exhibit 9 (a, b, c) (R. 2096). Resolution (a) recites that the department has found that the waters of the Atlantic Ocean are being polluted by insufficiently treated sewage discharged from the outlets of the treatment plant of the Long Branch Sewer Company so as to cause and threaten injury to the inhabitants of Long Branch, in their health, comfort and property, and to summer residents and transients using for recreational purposes the waters of the Atlantic Ocean at that place.

The resolution gives notice to the sewer company that prior to the 15th of June, 1927, the company must cease such pollution and make other disposition of its sewage to be approved by the department.

Resolution (b) shows that thereupon the Long Branch Sewer Company made an application on the same day for sewer extensions and changes according to the standard specifications of the department. Thereupon the department resolved that it approved that application and gave permission to carry out the project on or before June 15, 1927, for the construction and operation of "a sewage treatment plant satisfactory to this department."

Resolution (c) shows that on the same day another application was made by the Long Branch Sewer Company for other improvements and extensions in accordance with the standard specifications of the department. Thereupon the department on the same day resolved to approve the plans and grant permission as requested for the completion by June 15, 1927, of the construction and operation of "a sewage treatment plant satisfactory to this department."

Concerning these resolutions, Director Bowen testified that in response to the notice of the department, September 14, 1926, the Long Branch Sewer Company appeared the same day and a hearing was held and resolutions (b)

and (c) were the result (R. 2097, 2099). There is no record of any complaint since.

Defendant also produced Otis R. Seaman, City Engineer of Long Branch, who was required by subpoena *duces tecum* to produce a copy of the document entitled "Report for the City of Long Branch, New Jersey. The Valuation of the Plant of the Long Branch Sewer Company and Recommendations for the Disposal of Sewage. George L. Watson and Marshall R. Pugh and Harry N. Lendall, Consulting Engineers, 150 Nassau Street, New York, N. Y., 1928," which defendant offered in its entirety (R. 2100) as Defendant's Exhibit 10 (R. 2102).

That report shows on its face that it was made for the City of Long Branch for the purpose of valuation of the plant of the Long Branch Sewer Company, the purchase of which the city then contemplated. It is a voluminous report and its relation to the case is so slight as to justify no extended discussion thereof. Representing the prospective purchaser, the investigators left unsaid nothing that would tend to depreciate the value of the plant or deprecate its efficiency. In spite of their opinion of its insignificant value, they recommended its purchase "at the price asked by the company" (pp. 1, 2). In that report there are general statements of unfavorable action by the State Department of Health (p. 33), but no reference is given as to time or nature of the action of "the state authorities," and the only evidence before the court relating to this sewer plant is that in Exhibit 9 (a, b, c), which shows that the criticism of the board in the resolution of September 14, 1926, was on the same day cleared up and the deficiencies complained of eliminated by plans of the sewer company submitted to and approved by the department on that day. There is no other evidence in the record of any deficiency in the Long Branch Sewer Company's system, and there is no evidence whatever to the effect that any effluent from its sewers pollutes in any degree the waters of the Atlantic Ocean.

It is probably superfluous to add that the criticisms of the efficiency of the Long Branch Sewer Company plant contained in Defendant's Exhibit 10 (pp. 16, 31, 32) evidenced the natural tendency to beat down the value or disparage the quality of an article about to be purchased. If this sewer system was as bad as some of these statements would indicate, it is strange that these engineers recommended to the City of Long Branch the purchase of the plant at the "asking" price and did not recommend a lower price commensurate with their opinion of its value.

However, since this is a report made by and on behalf of the City of Long Branch, which is not a party to this suit, it is in no way binding upon the plaintiff. Nor is the defendant excused from creating a public nuisance if it appeared that a private sewer company did pollute the ocean by sewage, which, of course, does not appear from the evidence in the case.

Asbury Park Sewer.

Defendant's witness Worthing testified to an examination on March 11, 1930, of the sewage system of Asbury Park which empties into the ocean (R. 1850). On March 19th, he made an examination of the outlet of the sewer as indicated by a slick on the surface of the water (R. 1851). He says he observed particles of decomposed fecal matter and pieces of orange peel, celery and other objects floating in the current of the water; also toilet paper (R. 1852). He does not say that these vegetable matters came from the sewer. Indeed, it is impossible to conceive of such matters passing through a municipal sewer, at least in any appreciable quantity.

The sewer outlet was between 1,000 and 1,200 feet from shore (R. 1853).

John Bergsten testified that he accompanied Worthing and others to inspect the Asbury Park sewer outlet (R. 1869). He saw all kinds of vegetables, green material, lettuce leaves, orange peel, paper, foreign matter and human filth in that sewage (R. 1870). Again we observe

the incredibility of such testimony since most of the material he describes could not pass through any sewer equipment.

In answer to this testimony of defendant, Robert Bartley, Superintendent of Sewers of Asbury Park, described the method of sewer treatment. The condition of the effluent is fairly good. No fecal or solid matter goes out into the sea (R. 1998-1999). The effluent is not of the character that will pollute the water on the beaches (R. 2000). During a short period every winter they open the valve, by-pass the sewage and clean out the system. That is a regular practice, and it happened to be in operation on March 19, 1930, when the defendant's representatives inspected it (R. 2001). He had not heard of any complaints from the State Board of Health (R. 2003). There is no necessity for by-passing the sewage in the summer time (R. 2005). An unbroken orange or an article of that kind could not get through the sewer system, although small pieces might possibly do so during the time they are by-passing the sewage (R. 2006).

Defendant offered in evidence, as Defendant's Exhibit No. 11, a bill of complaint in the New Jersey Court of Chancery in a proceeding brought by the Department of Health of the plaintiff against the City of Asbury Park, filed November 10, 1930, with resolution and notices annexed thereto (R. 2103).

It recites the statutes under authority of which the department acts to prevent the pollution of waters of the State of New Jersey, and for other purposes not pertinent to this brief (pp. 1-5). It recites an investigation of the waters of the Atlantic Ocean showing that they "were being polluted so as to cause and threaten injury to the inhabitants of this State, to wit, the inhabitants of Asbury Park and adjacent territory * * * in their health, comfort and property by the action of said Asbury Park in permitting sewage and other polluting material to flow into said Atlantic Ocean" (p. 5). Reference is made to a resolution of the department, adopted May 6,

1930, which is annexed to the complaint and to a notice, also annexed to the complaint, to the City of Asbury Park directing and commanding it to "cease to pollute the waters of said Atlantic Ocean by the discharge of improperly, inadequately and insufficiently treated sewage and other polluting matter therein" prior to August 21, 1930. The bill recites that Asbury Park did not appeal from said resolution in the time required by law and did not comply with the resolution within the time required therein. The complaint alleges "that said Asbury Park owns and maintains the sewage treatment works through which improperly, inadequately and insufficiently treated sewage and other polluting material is discharged into the waters of the Atlantic Ocean, being waters of this State, in such a manner as to cause and threaten injury to the inhabitants of this State, to wit: the inhabitants of Asbury Park, in their health, comfort and property" (p. 6).

The complaint prays for a mandatory injunction to compel Asbury Park to cease polluting the waters as alleged and to make such disposition of its sewage and other polluting material as shall be approved by the Department of Health (p. 7).

The resolution of May 6, 1930, recites the statutes under which the department acts and the same allegations as to pollution as are contained in the complaint "due to the inadequate, improper, and insufficient *capacity* and unit design of said sewage treatment works" (p. 1 of Res.). It recites the same menace to health, comfort and property as alleged in the complaint and resolves that notice be given to Asbury Park requiring it prior to August 21, 1930, to cease the alleged pollution. (*Italics ours.*)

The notice attached to the complaint contains the recitals and body of the resolution of May 6, 1930, and gives notice accordingly.

On December 30, 1930, the City of Asbury Park filed its answer denying these allegations. The procedure and practice in the New Jersey Court of Chancery is the same

that prevailed in England at the time of the adoption of the New Jersey Constitution. It is for this reason that public nuisances, such as that alleged in Defendant's Exhibit No. 11, can be abated only by suits in equity instituted by the state through its duly designated officers or departments. The suit of the Department of Health against Asbury Park stands in the same position before the New Jersey court as this suit stands before this court, and the procedure for the determination for that litigation is the same in both cases. The Department of Health has the same burden of proof as the plaintiff has here and whether the allegations contained in Defendant's Exhibit No. 11 are true will depend upon the degree to which it sustains its burden of proof, and upon the proof offered in defense by the City of Asbury Park, at the hearing on the merits before a Vice-Chancellor, who performs the same function in that court as the Special Master performs here. After hearing the testimony of both sides, the Vice-Chancellor presiding at the trial of that case decides all questions of fact and law and advises a decree which, in the ordinary practice, is signed by the Chancellor and thereon the judgment is entered. Under such circumstances it is impossible to assume that the allegations contained in the complaint are true, any more than it is permissible to assume, in the face of a denial and without proof, the truth of the allegations contained in the complaint in this case.

However, if the allegations of Defendant's Exhibit No. 11 are assumed to be true, it is a useful exhibit for the purpose of showing, as do the resolutions of the State Department of Health of September 14, 1926, with respect to Long Branch, that plaintiff has clothed its government agencies with power to prevent the pollution of its beaches and shore waters, and that the same diligence is exercised to that end through its State Department of Health against its own municipalities and citizens as plaintiff has exercised in this case. Plaintiff has not undertaken to protect its own municipalities or citizens in

conduct which it deems detrimental to the purity of its beaches and waters.

The cause of action therein stated arose May 6, 1930, some months after the close of the hearings of this case, and therefore the subject matter of that complaint has no relevancy to this complaint.

It was because none of its duly constituted departments, agencies or courts could obtain jurisdiction over defendant that plaintiff was compelled to bring this suit.

Since Defendant's Exhibit No. 11 recites and quotes the acts which confer powers upon plaintiff's Department of Health, and under which it has acted in the proceedings against Asbury Park, it is unnecessary to recite them in this brief. The powers of that department, however, are confined to sewage plants and sewage disposal. It is not empowered to deal with the disposal of garbage, rubbish and other solid matter in the waters of the state.

Right to Discharge Sewage Into the Ocean.

Aside from the question discussed later of the right to restrain a public nuisance committed by one person even though there may be other offenders, it will be borne in mind that the discharge of sewage and the deposit of solids in the public waters are two different matters. The chlorine content of sea water is highly antiseptic and readily disposes of the liquid effluent of sewer systems while its effect upon garbage dumped in the sea is quite different.

The statute of the plaintiff which forbids the disposal of solid material in the waters of this state expressly exempts from its application "the emptying of any sewage * * * by any city" (*P. L. 1882, p. 155; 3 N. J. Comp. Stat. 3958*). The acts of Congress which forbid the deposit of refuse matter in the navigable waters of the United States, quoted under point (3), apply only to materials "other than that flowing from streets and sewers and passing therefrom in a liquid state" (*U. S. C. A., Title 33, Sec. 407, p. 427; Sec. 441, p. 455*).

That the plaintiff recognizes the right of municipalities to discharge their sewage effluent, after proper treatment, in the Atlantic Ocean, is shown by the fact that the jurisdiction of its State Department of Health over sewage disposal extends to all of the waters of the states, which are defined as follows:

“‘Waters of this state,’ as used in this act and the act to which this is a supplement shall include the ocean and its estuaries, all springs, streams, and bodies of surface or ground water, whether natural or artificial, within the boundaries of this state or subject to its jurisdiction” (*N. J. P. L. 1907, Chap. 135, Sec. 3, p. 361*).

In *Darling v. Newport News* (249 U. S. 540), plaintiff sued in equity to enjoin the discharge of sewage into the tidewaters of Hampton Roads in such a manner as to pollute his oyster beds held and used under leases from the state.

Following are extracts from the opinion of this court delivered by Mr. Justice Holmes:

(p. 542) “The ocean hitherto has been treated as open to the discharge of sewage from the cities upon its shores. Whatever science may accomplish in the future, * * * we are not aware that it yet has discovered any generally accepted way of avoiding the practical necessity of so using the great natural purifying basin. Unless precluded by some right of a neighboring state, such as is not in question here, or by some act of its own, or of the United States, clearly a state may authorize a city to empty its drains into the sea. Such, at least, would be its power unless it should create a nuisance that so seriously interfered with private property as to infringe constitutional rights. And we apprehend that the mere ownership of a tract of land under the salt water would not be enough, of itself, to give a right to prevent the fouling of the water as supposed. The ownership of such land, as distinguished from the shore, would be subject to the natural uses of the water. So much may be accepted from the decisions in Virginia and elsewhere as established law.”

In *Hampton v. Watson* (89 S. E. 81; L. R. A. 1916 [f] 189; 119 Va. 95), the Virginia Supreme Court of Appeals reviewed a judgment of the court below in favor of the plaintiff in an action to recover damages for injury to plaintiff's oyster bed caused by the pollution of a creek by defendant's sewers. The judgment below was reversed in an opinion delivered by Mr. Justice Harrison. The court said (L. R. A. references) :

(p. 191) "It is for the state to say what uses shall be made thereof and by whom, subject always to the right of the public, and for the state, through the legislative branch of the government, to say how much pollution it will permit to be emptied into and upon its waters, so long as the owners of the land between low-water and high-water mark are not injured, and there is no such claim in this case.

Since the state holds its tidal waters and the beds thereof for the benefit of all the public, we are of opinion that the city of Hampton has the right to use the waters of Hampton creek for the purpose of carrying off its refuse and sewage to the sea, so long as such use does not constitute a public nuisance, and as such be discontinued by the legislature, which has control over the extent to which these waters may be so used. The sea is the natural outlet for all the impurities flowing from the land, and the public health demands that our large and rapidly growing seacoast cities should not be obstructed in their use of this outlet, except in the public interest. One great natural office of the sea and of all running waters is to carry off and dissipate, by their perpetual motion and currents, the impurities and offscourings of the land.

* * * * *

In *Sayre v. Newark*, 60 N. J. Eq. 361, 48 L. R. A. 722, 83 Am. St. Rep. 629, 45 Atl. 985, it is said: 'Indeed, the history of sewers shows that from time immemorial the right to connect them with navigable streams has been regarded as part of the jus publicum. * * * And, whenever tidal streams could conveniently be reached, they have been employed as the medium of discharge to the sea. Such

a use of public waters must necessarily entail some defilement. The degree of pollution to be permitted is a matter over which the legislature has full power of control.' ”

It therefore appears that sewers which empty into the sea are not nuisances *per se*. It also appears that if any along the plaintiff's seaboard threaten to become so, its Department of Health will not hesitate to institute the necessary actions to abate them.

Other Testimony of Defendant.

Additional testimony was presented on behalf of defendant which is noted and discussed as follows:

Defendant's witness LaSalle presented a picture alleged to have been taken of the side of a steamship "La France" (R. 1837-1838) as it approached the Statue of Liberty (R. 1839) purporting to show garbage and water coming from the boat (R. 1841). The picture was taken while the vessel was anchored and tied up to the tug "Macon" (R. 1845; Exhibit 8, R. 1848).

This exhibit was offered for the purpose of showing that vessels dumped garbage. Whether the garbage in the water shown in this exhibit came from the "La France" or from some other source is of little importance. If it came from that vessel, the exhibit merely proves that a quantity of garbage, which appears to represent a bucket full, was discharged in New York Harbor at quarantine (R. 1843), which proves nothing so far as this case is concerned.

Defendant's witness Duggan, Permit Clerk and Deputy Inspector, in the office of the Supervisor of the Port of New York (R. 1640), produced the records and testified to seven different companies to whom permits had been issued for dumping materials at sea (R. 1641-1645), but he does not state, and the record does not show, whether they are the contractors who haul the city's garbage to sea, or what or where they dump. There is no evidence that any of them ever dumped any garbage at sea. Our

answer to this testimony is, as will be later discussed, that if, which the record does not show, there are other parties contributing to the nuisance which plaintiff suffers, the facts affords no defense to another *tort feasor*, and will not justify a public nuisance created by defendant.

Defendant's witness Colleton testified as to the location of private dumps in New York City and described the material that he saw at those places (R. 1803-1809). He produced various articles which he claimed to have found at those places (R. 1811-1812). He described other dumps and gave the names of the scows and the description of some of their contents (R. 1813-1817). There was no testimony offered to show that any of those scows or that any of those articles were ever dumped at sea.

There is no proof as to where they dump. Moreover, plaintiff's witnesses have identified the scows which they have described as Department of Street Cleaning Scows, and none of the names mentioned by this witness were ever identified as dumping material off the New Jersey coast. Moreover, if it were proven that others were contributing to the nuisances complained of, it would not excuse defendant. The same is true of the testimony of the defendant's witness Greenwall, who describes material that was dumped at different docks (R. 1823-1824), but the few articles which he describes are inconsequential as compared with the vast volume of material shown in the record, and no proof was offered as to the dumping of any of those scows.

Defendant's witness Green is Superintendent of Final Disposition of garbage and refuse (R. 1700). The city dumped its garbage at sea from 1903 to 1906 and resumed dumping at sea in October, 1918 (R. 1707). A committee appointed by the city decided that complete incineration was the better method (R. 1710). All of the garbage has gone to sea since 1918 (R. 1712). He described the construction of certain incinerating plants (R. 1713-1716) and the amount of garbage now incinerated (R. 1717-1718). Some of the enterprises have been abandoned be-

cause of court injunctions (R. 1717, 1719). The dump scows average from 1,200 to 1,300 cubic yards (R. 1727). Ashes are included with the garbage dumped at sea (R. 1728). All of the garbage from the Bronx and the garbage from one-fifth of the area of New York City is dumped at sea (R. 1732). *The Federal Government has requested them to eliminate dumping at sea. He has had complaints of garbage reaching the beaches on Long Island and New Jersey* (R. 1739). The monthly average of garbage dumped at sea is about 50,000 yards (R. 1747), but last summer (1929) they dumped as much as *192,000 cubic yards in a month* at sea (R. 1748).

Summary of Facts.

It is difficult to adequately describe the nature and extent of the development of the plaintiff's seashore resorts or the extent to which they are used for bathing, recreation and other useful purposes. There is probably no place in the world where people resort in such large numbers to the seashore for the primary purpose of beach and bathing pleasure as in New Jersey, and the resorts along the section in question are second to none in their aggregate importance, value and extent of patronage.

The only adequate conception which the record affords of this phase of the case is given by the pictures which were offered in evidence as exhibits numbered 25, 30-32, 37-43, 45-57, 76-82, 125-146, 173, 210-220, 241-255, 263, 264, inclusive.

These exhibits and the testimony of the witnesses from the several municipalities as to their summer population and visitors and the extent to which they have made expenditures to provide recreational facilities, boardwalks, bathing and other facilities, as shown on Appendix "D" annexed hereto, show that these shore municipalities, which adjoin each other and stretch along the shore for a distance of more than fifty miles, constitute what is probably the greatest park and playground, in point of numbers of visitors and users, in the world. They serve the

people of the adjacent municipalities, the people of the entire state, and people from all parts of the United States and some from abroad. In addition to the general use for recreational purposes which plaintiff undertakes to preserve, there has developed in the twenty-nine municipalities involved property values aggregating more than one hundred thirty-nine and one-half million dollars (Plaintiff's Exhibit 69), which depend for their maintenance upon the preservation of these recreational advantages.

Those municipalities have a permanent population of over 160,000 people, whose support and welfare depend upon these recreational enterprises (Appendix "B"). In addition to that, there are large accretions in the population in the summer of people who operate summer hotels, shore-front concessions and business enterprises and those who assist in the general work of lodging, feeding and entertaining the many thousands of guests or residents who come in the summer.

The record shows that here is a large and important industry, one of the most valuable in the plaintiff's state, which suffers constantly in annoyance and expense from the public nuisance caused by the defendant's dumping of garbage at sea.

Plaintiff's testimony respecting the effect of the garbage along the shore was not answered or contradicted by any testimony offered on behalf of the defendant. It contented itself with a general denial of all plaintiff's allegations respecting this subject.

The foregoing summary of the testimony shows conclusively that an intolerable public nuisance is inflicted by the dumping of defendant's garbage at sea. The results contain all of the objectionable features which the text writers and the courts have condemned, irrespective of whether defendant dumped its garbage at sea under any authority of law. The testimony shows that the effect of this garbage ashore is to retard the development and growth of the seashore communities, to depreciate the value of real estate and the rental value of real property, to

reduce and impair the development of commercial enterprises and retard the general prosperity of twenty-nine municipalities extending along an ocean front of more than fifty miles, to impair and at times destroy the use and enjoyment of the advantages of valuable public beach front and of the shore waters for bathing purposes, to create a menace to life and limb of persons, many of whom suffer injury on the beach and in the water from nails in boards, floating wood and broken glass brought in with the garbage, to expose the frequenters of the beach to infection and disease from decayed and putrid vegetable and animal matter and from disgusting, repulsive and unmentionable unsanitary articles therein contained, to expose the people in public places and in their houses to the annoyance of foul odors emanating from the decayed vegetable and animal matter in the garbage, to incur what amounts in the aggregate to a very large annual expense for cleaning the public and private beaches and removing the offensive material from streets and public places, to expose the people about the beaches, streets and other public places and in their houses to infections and disease carried by the vast swarms of flies which feed and breed in the putrid masses of the garbage. No essential fact remains to complete a most powerful indictment against the defendant for creating a public nuisance within the territorial limits of the plaintiff by reason of the dumping of its garbage at sea, whether the dumping grounds are within or without the territorial limits of plaintiff or whether defendant dumps with or without lawful authority, which for the purpose of this point are of no consequence whatever.

The situation here is clear. The dumping by the citizen of one state creates a nuisance in another state, and the effect is so widespread as to constitute a public nuisance which even affirmative authority, either state or federal, could not justify.

Pennsylvania v. West Virginia, 262 U. S. 553.

Wisconsin v. Illinois, 278 U. S. 367.

The Law of Nuisance.

With these facts before us, we will review the authorities and decisions for the purpose of their application to this case.

7 *Bacon's Abr.*, "Nuisance":

"A common nuisance is an offense against the public, either by doing a thing which tends to the annoyance of all the King's subjects, or by neglecting to do a thing which the common good requires" (p. 223).

"The erection of anything in the upper part of a stream of water, which poisons, corrupts, or renders it offensive and unwholesome, is actionable" (p. 228).

"Buildings for making acid spirit of sulphur, whereby the air was impregnated with noisome and offensive stinks in a parish, near the King's highway, and near several dwellinghouses, were declared a nuisance, and it is not necessary that the smell should be unwholesome; it is enough if it renders the enjoyment of life and property uncomfortable" (p. 229).

"It was immaterial how long a practice had prevailed, for no length of time would legitimate a nuisance" (p. 230).

"It seems to be the better opinion, that the court of King's Bench may, by a mandatory writ, prohibit a nuisance, and order that the same shall be abated" (p. 233).

"The question is whether the annoyance or inconvenience is such as materially to interfere with the ordinary comfort of human existence; or whether the injury arising from the matters complained of is such as visibly to diminish the value of the property, and comfort and enjoyment of it."

Attorney-General v. Sheffield Gas Co., 32 English Chancery Rep. 304, Note.

21 *Am. & Eng. Encycl. of L.* (2nd Ed.) :

(p. 682) "A nuisance is literally an annoyance, and signifies in law such a use of property or such a course of conduct as, irrespective of actual trespass against others or of malicious or actual criminal intent, transgresses the just restrictions upon use or conduct which the proximity of other persons or property in civilized communities imposes upon what would otherwise be rightful freedom."

* * * * *

(p. 683) "A common or public nuisance is one that affects the people at large, and is a violation of a public right, either by a direct encroachment upon public property or by doing some act which tends to the common injury."

* * * * *

It does not necessarily mean one affecting the government or the whole community of the state; it is public if it affects the surrounding community generally, or the people of some local neighborhood, as, for instance, the inhabitants of a village. Nor is it necessary that all persons in the community, or in fact that any individual whatever, should be actually annoyed or injured, but it is sufficient if there is a tendency to the annoyance of the public by an invasion of a right which all are entitled to exercise if they see fit.

* * * * *

A nuisance *per se* is an act, thing, omission, or use of the property which in and of itself is a nuisance, and hence is not permissible or excusable under any circumstances.

* * * * *

It is therefore considered unnecessary to notice them further here than to lay down the general rule that they usually, if not invariably, arise from personal misconduct, such as the commission of offenses against the public morals or decency; or from the physical invasion of public rights, as the unauthorized obstruction or unlawful use of navigable waters or other public highways; or from acts endangering the health or safety of human beings;

* * * ?"

(p. 688) "The mere fact that the nuisance is not continuous, but the injury is occasional only, is no defense.

* * * * *

If a nuisance, either public or private, is proved, it is no defense to show that reasonable care was taken to prevent it, as that the business from which the nuisance arises is conducted according to the most approved methods."

(p. 689) "When a nuisance actually exists it is not excused by the fact that it arises from a business or erection which is of itself lawful or that it is necessary to the operation of the business."

* * * * *

(p. 689) "The law will not, as a general rule, either in civil or criminal suits for nuisances, balance conveniences, and when the violation of the public or private right is clear, it will be no defense to show that the thing occasioning the nuisance may be of benefit to the public. Nor, as a general rule, will the courts, either in a civil or criminal action, undertake to estimate the difference between the injury sustained by the plaintiff and the loss or expense that may result to the defendant by having the thing complained of declared to be a nuisance."

* * * * *

(p. 690) "It is no defense to a charge of maintaining either a private or a public nuisance, that similar nuisances are tolerated elsewhere in the same neighborhood or in other parts of the country and this though the similar nuisances are maintained by the plaintiff himself."

* * * * *

(p. 692) "It may be laid down broadly as a general rule that any act, omission, or use of property which results in polluting the atmosphere with noxious or offensive effluvia, gases, stenches, or vapors, thereby producing material physical discomfort and annoyance to those residing in the vicinity, or injury to their health or property, is a nuisance."

* * * * *

(p. 703) "A court of equity has discretionary jurisdiction to enjoin the creation or erection of either a public or a private nuisance, or a purpresture. This jurisdiction is founded upon the ability of equity to prevent irreparable mischief and vexatious litigation and to furnish a more complete remedy than can be had at law. The remedy by indictment for a public nuisance is not an adequate remedy at law precluding the remedy by injunction; nor is the right of a private person to call upon the public authorities to abate a public nuisance after its erection such a remedy.

* * * * *

Ordinarily an injunction will be granted when the act or thing threatened or apprehended is a nuisance *per se*, or will necessarily become a nuisance."

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(p. 705) "An injunction to prevent a threatened public nuisance will be granted at the instance of the state upon a clear showing that there will be an invasion of a public right, no matter how slight, the question of pecuniary damages, or of the extent of the injury, being of no importance."

* * * * *

(p. 711) "A municipal corporation or, it seems, the state even, may be enjoined from creating a nuisance on its own land."

1 *Wood on Nuisances* (3rd Ed.) :

(p. 34) "Sec. 14. *Kinds of nuisances. Public, what are.*—Nuisances are either public or private. Public nuisances, strictly, are such as result from the violation of public rights, and, producing no special injury to one more than another of the people, may be said to have a common effect, and to produce a common damage. Of this class are those intangible injuries that result from the immoral, indecent and unlawful acts of parties that become nuisances by reason of their deleterious influences upon the morals or well-being of society. * * * Of this class also are most purprestures, which are a class of public nuisances that result from the ap-

propriation by one person to himself and to his own use of public property that should be common to all.”

* * * * *

(p. 41) (Sec. 19) “Neither is it a defense in any measure that the business is a useful one, that it is necessary, or that in its products and operations it is a public benefit, and contributes largely to the enhancement of the wealth, prosperity and commercial importance of the community, for if it is really a nuisance, or operates as such upon the public no measure of necessity, usefulness or public benefit will protect it from the unflinching condemnation of the law.”

* * * * *

(p. 43) “Sec. 20. *Public character and effects of nuisance must be established.*—It is not necessary to establish the fact that the ill effects are applicable to an entire community, or that they are the same in their effects upon all who come within their influence, or that the same amount or degree of damage is done to each person affected by it, for in the very nature of things this would be impossible. Those in the immediate vicinity of the erection or thing complained of might sustain a special injury and damage for which they could maintain a private suit, while others might sustain no special injury apart from the rest of the community, and thus would have no redress, except through the intervention of a public prosecution. It is sufficient to show that it has a common effect upon many as distinguished from a few. Where the thing complained of is in a city or town, or upon a public highway or street, little difficulty can be experienced in establishing its public character and effects, for anything which can produce a nuisance that extends over a highway, street or other public place, where people pass and repass, and have a lawful right to be or congregate, and produces material annoyance, inconvenience, discomfort and injury to those exercising those rights, is a public nuisance, and punishable as such.”

* * * * *

Gould on Waters (3rd Ed.) (Sec. 21, p. 43) :

(p. 46) "A common nuisance is abatable at suit of the Crown by virtue of its power of superintendence and control over public rights, and the attorney general, on the part of the Crown, may proceed by information in equity for the protection of either the *jus privatum* of the king from the purpresture, or the *jus publicum* of his subjects from the nuisance. The terms purpresture and nuisance are sometimes used interchangeably."

* * * * *

(p. 175) "Sec. 92. Same—Public nuisances.—All annoyances and impediments to navigation are *prima facie* public nuisances, whether created by the riparian owners or by strangers. The public may enforce their abatement or removal by indictment, or by an information in equity, and individuals to whom they cause special damage may recover damages at law against those who have created them. * * * Lord Hale instances the following nuisances, among others, that may be common to all having occasion to frequent ports: (1) Silting or choking up the port, either by the sinking of vessels in the port, or throwing out of filth or trash into the port, whereby it is choked * * *."

(p. 178) (Sec. 93) "Any unauthorized invasion of the soil of the seashore between high and low-water mark, or of the shore or *alveus* of a tidal river, or of the bed of an estuary or arm of the sea, while these remain the property of the Crown, or, in this country, of the State, is a purpresture."

1 *Spelling on Injunctions* (pp. 330, 331) :

"Sec. 373. An excellent definition of a nuisance is 'anything which is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin, or any public park, square, street, or highway.' * * *"

It is not necessary that an act should be unlawful to constitute it a nuisance. One may exercise a lawful right in such a way as to entitle another to an injunction against its continuance * * *.”

(pp. 332, 333) “Sec. 374. The distinction between a public nuisance and a purpresture for the present purpose is of but little importance. A purpresture becomes a nuisance where it becomes an annoyance to the public, and as such its further continuance will be enjoined at suit of an individual when special injury is shown, as in other cases. * * *”

In *Northwestern Fertilizing Company v. Hyde Park et al.* (97 U. S. 659) this court considered on writ of error a judgment of the Supreme Court of Illinois to restrain a public nuisance in the form of the operation of a chemical works located in Hyde Park, about three miles from the City of Chicago, to which was carried, through that village, the offal from the slaughterhouses.

The company claimed the right to carry on its business by virtue of its charter.

The court below found:

“An examination of the evidence in this case clearly shows that this factory was an unendurable nuisance to the inhabitants for many miles around its location; that the stench was intolerable, producing nausea, discomfort, if not sickness, to the people; that it depreciated the value of property, and was a source of immense annoyance. It is, perhaps, as great a nuisance as could be found or even created; not affecting as many persons as if located in or nearer to the city, but as intense in its noisome effects as could be produced. And the transportation of this putrid animal matter through the streets of the Village, as we infer from the evidence, was offensive in a high degree both to sight and smell.”

This court, in an opinion delivered by Mr. Justice Swayne, held:

“That a nuisance of a flagrant character existed, as found by the court below, is not controverted.

We cannot doubt that the police power of the State was applicable and adequate to give an effectual remedy. That power belonged to the States when the Federal Constitution was adopted. They did not surrender it, and they all have it now. It extends to the entire property and business within their local jurisdiction. Both are subject to it in all proper cases. It rests upon the fundamental principle that everyone shall so use his own as not to wrong and injure another. To regulate and abate nuisances is one of its ordinary functions. The adjudged cases showing its exercise where corporate franchises were involved are numerous.

* * * * *

In such cases, prescription, whatever the length of time, has no application. Every day's continuance is a new offense, and it is no justification that the party complaining came voluntarily within its reach. Pure air and the comfortable enjoyment of property are as much rights belonging to it as the right of possession and occupancy. If population, where there was none before, approaches a nuisance, it is the duty of those liable at once to put an end to it. *Brady v. Weeks*, 3 Barb. 157.

* * * * *

‘In our opinion, *Mr. Justice Bradley*, speaking for the court, said: “Whatever differences of opinion may exist as to the extent and boundaries of the police power, and however difficult it may be to render a satisfactory definition of it, there seems to be no doubt that it does extend to the protection of the lives, health and property of the citizens, and to the preservation of good order and the public morals.” ’ ’ ’

In *Georgia v. Tennessee Copper Co. et al.* (206 U. S. 230) this court entertained an original bill in equity filed in the State of Georgia to enjoin the discharge of noxious gases from the works of the defendants in Tennessee. In that case, as in ours, the suit was instituted in pursuance of a resolution of the legislature and by direction of the governor of the state.

The allegations of the complaint were that in consequence of the discharge of gases by the defendants in Tennessee, destruction of forest, orchards and crops, together with other injuries, resulted in five counties in Georgia.

Following are extracts from the opinion of the court, delivered by Mr. Justice Holmes:

(p. 237) "The case has been argued largely as if it were one between two private parties; but it is not. The very elements that would be relied upon in a suit between fellow-citizens as a ground for equitable relief are wanting here. The state owns very little of the territory alleged to be affected, and the damage to it capable of estimate in money, possibly, at least, is small. This is a suit by a state for an injury to it in its capacity of quasi-sovereign. In that capacity the state has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air. It might have to pay individuals before it could utter that word, but with it remains the final power.

* * * * *

When the states by their union made the forcible abatement of outside nuisances impossible to each, they did not thereby agree to submit to whatever might be done. They did not renounce the possibility of making reasonable demands on the ground of their still remaining quasi-sovereign interests; and the alternative to force is a suit in this court.

* * * * *

Some peculiarities necessary mark a suit of this kind. If the state has a case at all, it is somewhat more certainly entitled to specific relief than a private party might be. It is not lightly to be required to give up quasi-sovereign rights for pay; and, apart from the difficulty of valuing such rights in money, if that be its choice it may insist that an infraction of them shall be stopped. The states, by entering the Union, did not sink to the position of private

owners, subject to one system of private law. This court has not quite the same freedom to balance the harm that will be done by an injunction against that of which the plaintiff complains, that it would have in deciding between two subjects of a single political power. Without excluding the considerations that equity always takes into account, we cannot give the weight that was given them in argument to a comparison between the damage threatened to the plaintiff and the calamity of a possible stop to the defendants' business, the question of health, the character of the forests as a first or second growth, the commercial possibility or impossibility of reducing the fumes to sulphuric acid, the special adaptation of the business to the place.

It is a fair and reasonable demand on the part of a sovereign that the air over its territory should not be polluted on a great scale by sulphurous acid gas, that the forests on its mountains, be they better or worse, and whatever domestic destruction they have suffered, should not be further destroyed or threatened by the act of persons beyond its control, that the crops and orchards on its hills should not be endangered from the same source. If any such demand is to be enforced this must be notwithstanding the hesitation that we might feel if the suit were between private parties, and the doubt whether, for the injuries which they might be suffering to their property, they should not be left to an action at law.

* * * * *

It hardly is denied, and cannot be denied with success, that this gas often *is carried by the wind great distances* and over great tracts of Georgia land. On the evidence the pollution of the air and the magnitude of that pollution are not open to dispute." (Italics ours.)

* * * * *

(p. 239) "Whether Georgia, by insisting upon this claim, is doing more harm than good to her own citizens, is for her to determine. The possible disaster to those outside the state must be accepted as a consequence of her standing upon her extreme rights.

* * * * *

If the state of Georgia adheres to its determination, there is no alternative to issuing an injunction, after allowing a reasonable time to the defendants to complete the structures that they now are building, and the efforts that they are making to stop the fumes.”

In *Kuehn v. City of Milwaukee* (92 Wis. 263; 18 L. R. A. 553) the facts are stated by Chief Justice Lyon of the Wisconsin Supreme Court in part as follows (L. R. A. references) :

(p. 554) “This is an action in equity, brought by the plaintiff against the city of Milwaukee and one Richardson to restrain them from depositing in Lake Michigan the garbage collected in said city.

* * * * *

That at and before the above dates the city collected garbage accumulating therein, and dumped it into the lake near where the plaintiff's nets were located, and such garbage was driven by the winds and waves into and upon such nets, and greatly damaged the same, killing the fish that had been caught therein. And, further, that the depositing of such garbage in the lake drove the fish from such fishing grounds, and destroyed the plaintiff's business, as well as that of all others engaged there in fishing. The complaint contains many averments showing that the dumping of such garbage in the lake created a public nuisance. The answer of the city admits the dumping of the garbage in the lake, but alleges that it was only a temporary expedient to get rid of it until some better plan could be adopted and put in operation.

* * * * *

For reasons stated in a written opinion on file, the circuit court denied the motion. In that opinion, after stating the facts, and holding that the dumping of the city garbage in the lake created a public nuisance of a most grievous character, the court proceeded to give the reasons for denying the motion, as follows: ‘But has the plaintiff shown

himself entitled to have this nuisance abated at his instance?" "

* * * * *

(p. 554) "To be brief, however glad I would be to restrain the continuance of this great nuisance, which is already dangerous, and threatens to become intolerable, and however much I may sympathize with the solicitude of the general public to get rid of it, I must hold that this plaintiff has not shown himself qualified to prosecute this action, and must therefore refuse the injunction prayed for."

In his opinion Chief Justice Lyon says:

(p. 555) "We think the motion for a temporary injunction was properly denied, for the reasons stated in the above extract from the opinion of the learned circuit judge. Those reasons are so clearly and accurately stated therein that but little need be added. Any citizen of the state has a lawful right, in common with all other citizens, to fish in the waters of Lake Michigan. Because the right is common to the whole public, such waters are a common fishery. *Wright v. Mulvaney*, 78 Wis. 89, 9 L. R. A. 807. Any act which interferes with the enjoyment of that right in any particular locality may be a nuisance; but, if it affects all alike who fish in that locality it is a public, and not a private, nuisance, and no private individual can maintain an action in equity to enjoin its continuance."

* * * * *

(p. 556) "Such decision is the more satisfactory in view of the fact that the city has ceased entirely to dump its garbage into the lake, and has made other and permanent arrangements for the disposition of it."

In *Block v. Baltimore* (149 Md. 39; 129 Atl. Rep. 887), the Court of Appeals of Maryland considered an appeal from a judgment of the Circuit Court of Ann Arundel County dismissing the bill of complaint in an action for injunction to restrain a nuisance. The City of Baltimore

had contracted with a private corporation for the disposal of garbage which the city was to deliver on scows at the plant of the contractor at Spit Point on Bodkin Creek in that county.

Plaintiffs filed their bill complaining that the manner of transportation and reduction of the garbage caused a nuisance which affected them on the comfortable enjoyment of their properties.

The question was whether the allegations of the complaint stated a cause for equitable relief. The bill alleged that garbage and dead animals were collected at different parts of the city, put upon scows docked within the city, and when the scows were filled they were moved to the reduction plant without covering and exposed to the air and sun; that the garbage attracted large numbers of flies and insects which fed thereon and propagated therein, which are brought to the property and homes of the complainants; that the garbage and refuse accumulated around the plant afforded a breeding place for myriads of flies which covered the beasts of the field and interfered with the work and management thereof, penetrated the homes of the complainants and persons within two and three miles of the plant in spite of screens, and covered the food on the tables and elsewhere in the houses; that being uncovered the garbage and dead animals become decayed and produced maggots and flies which carry, or were likely to carry, disease; that the reduction plant discharged large quantities of poisonous liquids, oil and decomposed matter into the water which is thereby ruined for pleasure and other useful purposes; that the water was covered with thick oily slime, discolored, and fermented by gasses and liquids therein and decomposed vegetable and animal matter lodged at the bottom thereof; that nauseating odors came from the reduction plant which prevented comfortable living conditions within a radius of from three to five miles from the plant and actual physical discomfort and inconvenience within that radius; that the odor was sickening and disagreeable requiring the windows to be closed;

that they irritate the throat and eyes of persons and interfere with their sleep and the eating of their meals; that this odor was carried by the wind and breeze and was particularly effective in the direction from the plant toward which the wind was blowing at the time.

Following are extracts from the opinion of the court delivered by Mr. Justice Offutt (Atl. Rep. references) :

(p. 891) "It is obvious, from this statement of its contents, that the bill contains some allegations which properly have no place in it, and that it lacks others which it should contain, but nevertheless, if we assume, as the demurrer requires us to do, that the facts alleged in it exist, it would be a reproach to the law if it afforded to the plaintiffs no adequate relief from the burdensome and intolerable conditions shown by those facts.

Those conditions in our opinion constitute an actionable nuisance (N. C. Ry. Co. v. Oldenburg & Kelley, 122 Md. 244, 89 A. 601), but the appellees contend that, while the appellants may, upon a proper showing, recover in an action at law for the damages suffered by them in consequence of that nuisance, its continuance cannot be enjoined, because it has been sanctioned by the Legislature.

* * * * *

That proposition, whatever may be said of the abstract legal principles involved in it, has no real relation to the facts of this case. It nowhere appears in the record that the nuisance complained of has any necessary connection with the contract made by the city.

* * * * *

In dealing with the case made out by the bill, it is not necessary to consider whether the state, acting through the Legislature, has the power to authorize the city or any agency thereof to maintain conditions which must injuriously affect the property, health, and comfort of individuals, without regard to the right of such persons to the quiet and comfortable enjoyment of their property, nor to decide whether, through the operations incident to the transportation and disposal of garbage and dead animals produced in Baltimore city, the appel-

lees have appropriated and 'taken' the property of the plaintiffs, or any interest therein, because in the first place the Legislature has not, so far as the record shows, attempted to exercise any such power, nor has the city claimed any such authority. The general welfare clauses and provisions of the city charter, authorizing it to take such steps as may be necessary to promote the welfare of the city, to insure the security of its inhabitants, and to protect the public health, can scarcely be pointed to as authority for the operation for profit by a private corporation, wholly independent of the city government, of a plant outside of the city limits, for reducing and disposing of the garbage and dead animals produced in the city, in such a manner as to create imminent danger of disease and pestilence in the community in which it is located, to affect the health and comfort of the inhabitants thereof, and to deprive them of their right to the quiet, comfortable, and usual enjoyment of their property."

* * * * *

(p. 892) "The appellees relied upon *Oldenburg v. Kelley*, supra, in support of the principle that the Legislature may legalize what would otherwise be a public nuisance, and that damages resulting from its maintenance or establishment, which do not amount to a taking of property, will not justify a court of equity in restraining its continuance. If that principle be conceded, it does not help the appellees at all, for, as we have already stated, in our opinion the Legislature has not directly or by necessary implication sanctioned the nuisance complained of. There is nothing in the facts stated in the bill which warrant the inference that, in order to dispose of the city's garbage and dead animals, it is necessary to cause the conditions complained of, but, on the contrary, it affirmatively appears that it is not.

* * * * *

Nor can we agree to the proposition that the nuisance complained of is of a public nature, which inflicted upon the appellants no injury different in kind from that suffered by the public generally, and that they are not for that reason entitled to an

injunction restraining its continuance. Some of the acts complained of are of that nature, such as the pollution of the waters of Bodkin creek, which prevents the complainants from boating, bathing, or fishing therein. The right to boat, bathe, and fish is a general and a public right, belonging to the whole public in common, and the damage which the appellants have suffered through the loss of those privileges they have suffered in common with all others enjoying similar rights.”

* * * * *

(p. 893) “That the conditions complained of constitute an unwholesome, dangerous and offensive nuisance is obvious, * * * .

While the Legislature, under the police power, may legalize what would otherwise be a public nuisance, it can only do so when such action is necessary to protect the public health or welfare, and certainly, in the absence of the most explicit expression of its intention, it will not be presumed to have legalized a nuisance due, not to necessity, but to negligence.” (Citing cases.)

* * * * *

(p. 894) “The appellees also contend that it appears from the bill that the appellants have an adequate and complete remedy at law, and that for that reason they are not entitled to relief in a court of equity, but we do not agree with that proposition. It is true that they could bring an action at law for such damages, if any, as they may have suffered as a result of the alleged nuisance, and that they could perhaps have applied to the state board of health for its abatement. But those remedies are obviously insufficient to meet such a case as this. The appellants might, in an action at law, be sufficiently compensated for any depreciation in the value of their property, but it would be difficult, if not impracticable, for them to recover definite and adequate compensation for such intangible injuries as loss of sleep, nausea, or even for the impairment of their health. Such damages would be hard to prove and harder to measure.

* * * * *

The remedy by injunction is certain, prompt, and efficacious, and there is no apparent reason why the appellants should not be entitled to it, merely because the state board of health may also apply for an injunction or take other steps to abate the nuisance.

* * * * *

nor do we think that there is any merit in the defense of laches. 20 R. C. L. 497, etc. In *Woodyear v. Schaefer*, supra, in dealing with the defense, upon the facts of that case, the court said:

‘But the wrong complained of, and disclosed by the evidence, amounts to a public nuisance, for which there can be no prescription. Wood on Nuisances, Sec. 724; *Commonwealth v. Upton*, 6 Gray. 473; *Mills v. Hall* 8 (9) Wend. 315 (24 Am. Dec. 160).’

In *Huffmire v. Brooklyn* (162 N. Y. 584; 57 N. E. Rep. 176), the Court of Appeals of New York reviewed a judgment of the court below in an action for damages to oyster-beds planted in the tidal waters of Jamaica Bay pursuant to permits issued by the state, caused by the discharge of sewage into adjacent waters by the City of Brooklyn.

The city defended on the ground, among others, that the sewer was a public work constructed and operated under legislative authority and that it was therefore not liable for consequential injuries resulting therefrom.

Following are extracts from the opinion of the court, delivered by Mr. Justice Werner. (Pagings refer to N. E. Rep.):

(p. 177) “The plaintiffs contend that the casting of noxious and destructive substances upon their oyster bed was not a consequential, but a direct, injury. The defendant insists that the discharge of the sewer in question into the waters of Mill creek is simply the consequential result of obedience to the legislative mandate, and that, in the absence of negligence on the part of the municipal authorities in the construction and operation of said sewer, the defendant is not liable. Applying the rule which the defendant invokes in all its force and breadth,

we think this case falls directly within the constitutional inhibition against the taking of property without compensation. The plaintiffs were lawfully in possession of a piece of land under water upon which they had planted a bed of oysters. They held their title under legislative authority, which was as ample and unquestioned as that under which defendant's sewer was constructed.

* * * * *

The act of the defendant in pouring its sewage upon this land was not consequential. It was as direct as though it had been discharged upon a piece of land owned or rented by the plaintiffs, and used for farming or gardening purposes. In the latter case a municipal corporation could not successfully defend its trespass because it was acting under legislative authority, or because its sewage had been carried to the lands of the person complaining over the lands of others. The fact that plaintiffs' land was under public water, and that defendant's sewage was discharged upon it, after passing through 300 feet of public water, the land under which was not in the possession or control of the plaintiffs, does not differentiate this case in principle from the illustrative case of a discharge of sewage upon surface lands. In either case the injury is so direct as to amount to an invasion of a private right, which no legislative sanction or direction can justify or excuse."

* * * * *

(p. 178) "We have not lost sight of defendant's contention that the deposit of sewage on the plaintiffs' land was not a taking of their property. We are of the opinion that any direct invasion of a man's land is a taking of his property within the meaning of the constitution. The destruction of plaintiffs' oysters by the casting of sewage upon them was as clearly a taking of their property as the physical removal and conversion of the same would have been."

In *Peck v. Michigan City* (49 N. E. 800), the Supreme Court of Indiana considered the question of a public sewer alleged to constitute a public nuisance by the discharge of its effluent into Lake Michigan. The following discussion in the opinion of that court, delivered by Justice Hackney, is pertinent to this point (the first part of the discussion relates to the decision in *Franklin Wharf Co. v. Portland*, 67 Me. 46) :

(p. 801) "The rights and duties of the city, the general public and the private property owners are there given as follows: 'The right to build the sewer and outlet implies the right to use them for the purposes for which they were intended, to wit, for the collection and discharge of the debris of that part of the city where they should be constructed into the dock below low-water mark. But it is to be borne in mind that the right to do this, being in contravention of the right of the public, at common law, to use the sea as a public highway, should be construed strictly, and made to harmonize, as nearly as may be, with this paramount right of the public; for we do not by any means assent to the proposition of the counsel for the defendants, that the right of navigation is subordinate to the right of sewerage. No authority has been cited to sustain that position, nor is it reconcilable with the well-established doctrine of the common law. The public right to the navigation of the sea is not qualified or limited, at common law, by any private or municipal right of sewerage. "It is an unquestionable principle of common law," say the court, in *Arundel v. McCulloch*, 10 Mass. 70, "that all navigable waters belong to the sovereign, or, in other words, to the public, and that no individual or corporation can appropriate them to their own use, or confine or obstruct them, so as to impair the passage over them, without authority from the legislative power." So in *Com. v. Charlestown*, 1 Pick. 180, Parker, C. J., says: "There can be no doubt that, by the principles of the common law, as well as by the immemorial usage of this government, all navigable waters are public property for the use of all the citizens; and that there must be some act of the sovereign power, direct or deriva-

tive, to authorize any interruption of them." The same doctrine has been repeatedly held and applied in this state to tide waters and navigable streams. In *Gerrish v. Brown*, 51 Me. 256, it was held that navigable rivers are public highways, and that if any person obstruct such a river, by carting therein waste material, filth, or trash, or by depositing material of any description, except as connected with the reasonable use of such river as a highway, or by direct authority of law, he does it at his peril, and is guilty of creating a public nuisance."

In *State of Kansas v. City of Concordia* (96 Pac. 487; 20 L. R. A. (N. S.) 1050), the Kansas Supreme Court reviewed a judgment in favor of the defendant in an action brought to restrain it from committing a public nuisance by discharging sewage into an abandoned river channel. The judgment below was reversed in an opinion delivered by Mr. Justice Burch. In that case the states ought to enjoin one of its cities. The city defended on the ground that it was authorized by statute to construct, maintain and operate its sewage system and that by due process of law it had obtained the lawful right to construct its sewers with the outlet in the Republican River as it then existed, but which had since abandoned that channel. The court said (L. R. A. references) :

(p. 1055) "The disposal of sewage in a city is frequently a serious problem. It may be practically impossible to devise a system adequate to the needs of the city, or within its ability to carry out, which will not occasion inconvenience and discomfort to somebody. The mayor and counsel must meet the situation as best they can. When their candid judgment has been deliberately exercised, and the work has been properly planned and skilfully executed, the rights of individuals must ordinarily be subordinated so far as all incidental disadvantage and loss is concerned. The city is, however, liable for negligence in the plan, construction, and maintenance of sewers as of other public works; and the right to build sewers and drains implies no right to create a nuisance, public or private."

* * * * *

(p. 1056) "The collection and precipitation of water or sewage upon the private property of an owner, in such a way as to constitute a direct invasion of the owner's rights, and in the nature of a trespass upon his property, will create a liability against the city, regardless of the plan upon which the sewer is constructed."

* * * * *

(p. 1056) "The subject is summed up in 2 Dillon on Municipal Corporations, 4th ed. Sec. 1047, p. 1330, as follows: 'Although a municipality having the power to construct drains and sewers may lawfully cause them to be built so as to discharge their refuse matter into the sea, or natural stream of water, yet this right must be so exercised as not to create a nuisance, public or private. If a public nuisance is created, the public has a remedy by a public prosecution; and any individual who suffers special injury therefrom may recover therefor in a civil action.'"

The court cited Joyce on Nuisances (Sec. 284, p. 373) as authority for the statement that the city was liable to equitable restraint in a proper case and that public bodies could not exercise their powers in such a manner as to create a public nuisance because the grant of powers to the city presumes a lawful exercise thereof and the authority to create a nuisance will not be inferred.

(p. 1057) "In Joyce on Nuisances a stricter rule is derived from the decided cases: 'In such cases the statutory sanction necessary to justify such act must be given either expressly or by clear and unquestionable implication from the powers conferred, so as to show that the legislature intended and contemplated the doing of the very act in question. Such statutes should receive a strict construction, and it will not be assumed that the legislature intended to authorize a nuisance unless this is the necessary result of the powers granted.' Sec. 72, p. 114."

* * * * *

(p. 1057) "It cannot be the law that this act authorizes a city to pour the contents of its sewer

mains into any dry ravine it may find convenient to its borders, infect a populous neighborhood with disease, and then, in an action to abate the nuisance, exculpate itself by the simple answer: 'The sewers were connected with a ravine.'

In *Rowland v. New York Stable Manure Co.*, 88 N. J. Eq. 168, a bill had been filed to abate a nuisance claimed to arise from the unloading and storage of horse manure in large quantities at a place near Monmouth Junction, New Jersey. Vice Chancellor Backes in rendering the decision of the Court of Chancery made the following ruling:

(p. 169) "The principles of law applicable to this kind of nuisance have been so often reiterated that I pause before restating Chancellor Zabriskie's pertinent declarations in *Cleveland v. Citizens' Gas Light Co.*, 20 N. J. Eq. 201: 'Any business, however lawful, which causes annoyances that materially interfere with the ordinary comfort, physically, of human existence, is a nuisance that should be restrained; and smoke, noise and bad odors, even when not injurious to health, may render a dwelling so uncomfortable as to drive from it any one not compelled by poverty to remain. Unpleasant odors, from the very constitution of our nature, render us uncomfortable, and, when continued or repeated, make life uncomfortable. To live comfortably is the chief and most reasonable object of men in acquiring property as the means of attaining it; and any interference with our neighbor in the comfortable enjoyment of life, is a wrong which the law will redress.'"

* * * * *

(p. 171) "The evidence makes out a clear case of nuisance to the complainants in the comfortable enjoyment of their homes—denounced by judges and text-writers as among the worst class of nuisances—and of a type similar to many reported in our books, which this court suppressed. *Ross v. Butler*, 19 N. J. Eq. 294; *Cleveland v. Citizens' Gas Light Co.*, *supra*; *Meigs v. Lister*, 23 N. J. Eq. 199; *Pennsylvania Railroad v. Angel*, 41 N. J. Eq. 316; *Rausch v. Glazer*, 74 Atl. Rep. 39; *Laird v. Atlantic*

Coast Sanitary Co., 73 N. J. Eq. 49; *Kroecker v. Camden Coke Co.*, 82 N. J. Eq. 373.”

* * * * *

(p. 173) “I know of no rule, and no authority has been brought to my attention, to sustain the proposition that equity will not grant relief from a constant or recurring nuisance *because of the laches of the complainants* until the question of nuisance is settled by the verdict of a jury. Where the right or title of the complainant is not disputed, or is apparent, and the fact of the injury has been clearly made out by the evidence, and the damage is substantial, a court of equity will in the first instance determine the question of nuisance and grant relief. *Carlisle v. Cooper*, 18 N. J. Eq. 241; *S. C.*, 21 N. J. Eq. 576.”

* * * * *

(p. 174) “In *Higgins v. Flemington Water Co.*, 36 N. J. Eq. 538, Chief-Justice Beasley said: ‘After a court of equity has entertained a bill, and, instead of sending the case to a trial at law, has itself tried the questions of fact involved, and settled the legal right in favor of the complainant, it certainly would be a result much to be deprecated, if, at such a stage of the controversy, it was the law that the chancellor was required to say to such a complainant, “Your right is clear; if you sue at law you must inevitably recover, and after several such recoveries, it then will be the duty of this court, on the ground of avoiding a multiplicity of suits, to enjoin the continuance of this nuisance; still you must go through the form of bringing such suits, before this court of equity can or will interfere.” In those cases in which, to the mind of the chancellor, the right of the complainant is clear, and the damage sustained by him is substantial, so that his right to recover damages at law is indisputable, and the chancellor has considered and established his right, I think it not possible that any authority can be produced which sustains the doctrine contended for by the counsel of the defendant.’

* * * * *

I do not see how the complainants can be charged with sleeping upon their rights, so as to deprive

them of relief. It would be most inconsiderate to hold that having, for the past eight years, lived in a filthy atmosphere, inhaling and enduring the stench from the defendant's business without complaint, they must patiently submit to further discomfort, and as long as the defendant sees fit to impose upon them. Every day's continuance is a new or fresh nuisance. *Board of Health v. Lederer, supra*; *Society v. Low*, 17 N. J. Eq. 19. *Carlisle v. Cooper, supra*; *Brady v. Weeks*, 3 Barb. 157; *Wood Nuis*, Sec. 18, foot-note cases. Nor are the complainants equitably estopped by acquiescence."

* * * * *

(p. 175) "The defendant puts forth considerable effort to cast the blame for the complainants' annoyance upon a nearby manure storage plant belonging to one McGirr, and also upon loaded manure cars standing on sidings of the Pennsylvania railroad at Monmouth Junction, but the evidence points unmistakably to the defendant as the prime and principal offender. Witnesses have traced the odors by the sense of smell, and the gases and vapors by the eye, directly to the defendant's storage plant, and also located their origin by the direction of the wind. The McGirr plant is small and may have, to some extent, contributed to the nuisance of which the defendant is guilty, and so perhaps the railroad company, but either or both neither justify nor excuse the defendant. *Meigs v. Lister, supra*."

(p. 176) "The discretion exercised by courts of equity in refusing injunctions on the ground of greater injury to the defendant, is properly restricted to applications *pendente lite*. *Tichenor v. Wilson*, 8 N. J. Eq. 197; *Higgins v. Water Co., supra*; *Simmons v. Paterson*, 60 N. J. Eq. 385. But, on final hearing, if the nuisance is clearly established, and it appears that it is causing substantial, material and irreparable injury to the complainant, for which there is no adequate remedy at law, the law is settled in this state, and by the great weight of authority in other jurisdictions, that the complainant is entitled to relief by injunction, irrespective of the resulting damage to the defendant. *Higgins v. Water Co., supra*; *Hennessy v. Carmony*, 50

N. J. Eq. 616; *Campbell v. Seaman*, 63 N. Y. 568; *Sullivan v. Jones Steel Co.*, 208 Pa. 540.”

* * * * *

(p. 177) “The defendant relies upon what was said by Vice-Chancellor Pitney in *Hennessy v. Carmony, supra*, as furnishing a distinction between the right to an injunction where the act complained of is a trespass to real estate and where the injury is created by noisome and disagreeable odors interfering with the comfortable enjoyment of habitation. The opinion does not show that the vice-chancellor differentiated the remedy. *Reilley v. Curley*, 75 N. J. Eq. 57. Pure air and the comfortable enjoyment of property are as much rights belonging to it as the right of possession and occupancy. *Fertilizing Co. v. Hyde Park*, 97 U. S. 659.”

In *Board of Health v. Schmidt* (83 N. J. Eq. 35), the State Board of Health instituted proceedings in the New Jersey Court of Chancery to have declared a public nuisance a piggery located in this state. In the decision rendered by Vice-Chancellor Stevens, the following portions are pertinent:

(p. 36) “That the piggery in question, containing throughout the year from fifty to one hundred pigs, large and small, is a private nuisance is proved beyond question. The contention is that it is not a public nuisance—such a nuisance as is indictable. *State v. Du Pont de Nemours Powder Co.*, 79 N. J. Eq. 32. In *State v. Uvalde Asphalt Paving Co.*, 68 N. J. Law 512, it is said that if the indictment lay the nuisance as being committed near a highway and also near several dwelling-houses, it is sufficient. In *Rex v. Neil*, 2 C. & P. 485, in a passage quoted in 1 Russ. Cr. & M. *319, Chief-Justice Abbott said: ‘It is not necessary that a public nuisance should be injurious to health; if there be smells offensive to the senses, that is enough, as the neighborhood has a right to fresh and pure air.’”

* * * * *

(p. 37) “The proof must show a nuisance—not, necessarily, *injurious* to health but likely to, or that may by the operation of chance or hazard become so.

In the case under consideration the odor is perceptible within a radius of one thousand feet under certain conditions of the wind and weather, and it grows stronger as the distance from the pen diminishes. It appears to possess the characteristics of a public nuisance, in that it pervades a neighborhood made up of dwelling-houses; has caused loss of appetite, headaches and nausea to several of the neighbors; is at times perceptible in a public street, and is instrumental in breeding great quantities of flies that at times are seen to swarm upon the fence bordering the highway, and might in case of an outbreak of typhoid fever, cholera or some other kinds of disease, act as carriers."

In *Butterfoss v. State Board* (40 N. J. Eq. 325), the Court of Errors and Appeals reviewed a judgment entered by the Chancellor in the Court of Chancery below to restrain the discharge of the effluent of a canning factory into a stream. The effluent contained juices, seed and skins of tomatoes and vegetables, which the court found consisted of more or less decomposed matter obnoxious to the sense and most likely deleterious to the public health.

The suit was brought by the State Board of Health on the theory that a public nuisance was involved. The chief objection was the offensive smells and odors which emanated from this discharge. The court found that this vegetable matter underwent a process of decomposition after it was released into the stream and that noxious odors and gases came from it. The defendant was held responsible for all of the results of this decomposition even though the matter was not in objectionable condition at the time he discharged it into the stream. It was held that since he liberated this agency he was responsible for the results of subsequent decomposition and its effects. The Court of Errors and Appeals affirmed the judgment of the court below on the opinion of the Vice-Chancellor.

In *Board of Health etc. v. Samuel Lederer et al.* (52 N. J. Eq. 675), the township board of health filed a bill in the Court of Chancery to abate a nuisance. The de-

fendant was in the fat-rendering business in a rural community in which there were not many houses. The court said:

(p. 676) "But in this particular case the judgment of the court is not dependent upon any such question of jurisdiction, for the half dozen or more dwelling-houses within the township of North Brunswick are sufficiently within the reach of the mischief, not only to claim, but to demand the attention of the public authorities. Whether they be many or few, no higher obligation can rest upon the court than to protect them in their health in case it be ascertained that it is in danger."

It was urged on behalf of the defendants that they had maintained their business in that place for the past twenty-eight years and were therefore entitled to remain. On this point the court said:

(p. 676) "Courts will be very slow to yield to such a proposition. An acknowledgment of the principle claimed would practically give to the defendants and others dominion over a very much larger extent of territory than it would be actually necessary for them to own in order to conduct their business, provided they had occupied the premises beyond the prescribed statutory period which prohibits actions to be brought by individuals. (Citing numerous cases.)

* * * * *

(p. 677) In addition to this, very high authority has said: 'In such cases, prescription, whatever the length of time, has no application. Every day's continuance is a new offense, and it is no justification that the party complaining came voluntarily within its reach. Pure air and the comfortable enjoyment of property are as much rights belonging to it as the right of possession and occupancy.' (Citing cases.)

The effluent from the rendering plant was discharged into a brook. It contained solid matter, as well as liquid,

which lodged along the banks upon the stones and on the bottom. Of this the court said:

(pp. 682, 683) "If the presence of such an immense mass of corruption, of decaying animal matter, which process is always hastened by the heat of the sun, be not hazardous to the public health, then all our sanitary legislation and all municipal regulations to that end are simple works of supererogation. While this mass may be, from time to time, carried away with high water, yet when draught continues it accumulates day by day and necessarily for long periods of time the exhalations therefrom are extremely offensive. Therefore, it is manifest that the use made of this brook by the defendants is as certainly subject to the condemnation of the law as the rendering establishment itself, if not more so; and that it will not satisfy the demands of the public to effectually obviate the generation of the odors at the establishment itself, but that such demands extend to the prevention of the use of the brook in question, as a conduit for the refuse matter discharged in the process of rendering."

In *King v. Morris & Essex Railroad Co.* (18 N. J. Eq. 397), a bill was filed in chancery to enjoin a railroad company from operating locomotives not equipped with apparatus that would effectively prevent the communication of fire from the locomotive to buildings along the railroad. The railroad company claim that its franchise give it a right to operate their locomotives and that if sparks escaped from them and caused damage, it was a necessary result of an enterprise authorized by law.

Chancellor Zabriskie held that a case was a proper one for the interference of the court by injunction. He said:

(p. 399) "The position taken by their counsel, that the privilege of running locomotives upon their road having been granted by the legislature, the residents and the owners of property in the vicinity must suffer the consequences without relief, is not tenable. The legislature never intended to grant, and never did grant to them, the right to scatter

fire and desolation along their line to the width over which an engine could be contrived or constructed to throw burning coals. Their right to use locomotives was granted only on the condition imposed by law upon the use of all privileges and property, that is, that they shall be so used as to do no unnecessary damage to others.

* * * * *

Nor is the right of the complainant to relief, affected by the fact that the railroad was laid out and constructed before he erected his factory. No one has the right to erect near the land of another, any nuisance which will prevent the use of such land for any lawful purpose * * *."

In holding that it was a private nuisance, the court took occasion to define a public nuisance as follows:

(p. 399) "The nuisance is public when it affects the rights enjoyed by citizens as part of the public; as the right of navigating a river, or traveling on a public highway; rights to which every citizen is entitled."

In *Southampton Tp. v. Scott* (110 Atl. 587), the township authorities filed a bill praying for an injunction to restrain the defendant from filling up the drain alongside of a public highway and causing the road to be overflowed with water. The New Jersey Court of Chancery held that this constituted a public nuisance. The defendant contended that the nuisance was theoretical and not actual and therefore not within the cognizance of the court. It was also contended that the township had other remedies at law such as indictment, ejectment and for damages. The court held:

(p. 588) "There is actual damage to the public when it is excluded from portions of the public highway, and when the highway is put in such condition as to create dangers in travel on and over it, even if those dangers arise only infrequently. The creation of the dangerous condition is sufficient; it is not necessary to wait until some travel-

ers have actually sustained damage to person or property therefrom.

As to the second contention, the jurisdiction of this court to restrain a public nuisance at the suit of a township or other public authority is well settled, and is not disputed." (Citing numerous cases.)

There is distinction of the cases in which a court of equity refused to intervene by injunction where a remedy at law existed, but the court points out that they all related to applications for preliminary injunction and not to cases on final hearing.

Conclusions on Point (4).

The foregoing facts and authorities show that the dumping of defendant's garbage and refuse at sea creates a public nuisance upon the property and within the territorial limits of plaintiff in the following particulars:

1. It impedes and obstructs the free navigation of plaintiff's waters.
2. It injures and obstructs the free and licenses fisheries of plaintiff's subjects.
3. It hinders, and at times destroys, the public enjoyment of its beaches.
4. It pollutes the public waters, beaches, streets, and other public places of plaintiff and its municipalities.
5. It pollutes the atmosphere of the public places of plaintiff and its municipalities, and the homes of their inhabitants.
6. It menaces the life and health of its subjects.
7. It retards the growth and economic development of its territory and municipalities.
8. It depreciates the value of the property and property rights of itself and its subjects.

9. It injures the general welfare of its inhabitants.

10. It imposes upon its municipalities and inhabitants a constant and considerable expense in removing defendant's garbage and refuse from public and private property.

11. It produces an intolerable annoyance and interference in the enjoyment of the health, comfort and property of its inhabitants.

12. It feeds and breeds vast swarms of flies which are a menace to life and health by reason of their disease carrying power.

(5)

Dumping garbage and refuse at sea by defendant constitutes a trespass upon the property of plaintiff.

Plaintiff's allegations and defendant's denials of plaintiff's ownership of the shore and the bed and waters of the marginal sea adjacent thereto are noted at the beginning of Point (1). It appears from the discussion of Point (1) that the dumping grounds used by defendant are within the territorial limits of plaintiff. Plaintiff's allegations and defendant's denial of the dumping of its garbage and refuse at sea off the coast of plaintiff are noted at the beginning of Point (3), wherein it is contended that such dumping occurs without lawful authority. Other allegations of the complaint, and all the evidence essential to this point, are set forth in Point (4).

Following are the authorities upon which plaintiff relies for the purposes of this point:

1 *Chitty's Pleadings*, 123, 126. Illustrating this form of injury, Chitty states:

"It is chiefly in actions for running down ships, that difficulties occur, because the force which oc-

casions the injury is not in such case necessarily the immediate act of the person steering, for the wind and waves may and generally do occasion force, and the personal act consists in putting the vessel in the way to be acted upon by the wind and the injury might even have happened from the operation of the wind and tide counteracting his efforts" (p. 127).

Stephens' Pleading, 17, 18:

"Actions in trespass on the case originated in the power given by an English statute to the clerks in *Chancery* to frame new writs in *consimili casu* with the writs already known to fit the peculiar circumstances of cases not falling strictly within the purview of the established writs, but which were torts, wrongs or grievances."

The origin of the exercise of equity jurisdiction to enjoin trespass is stated as follows by Justice Story:

Sec. 48.—From the proceedings which have been published by the Record Commissioners it appears that the chief business of the Court of Chancery in those early times did not arise from the introduction of uses of land, according to the opinion of most writers on the subject. Very few instances of applications to the chancellor on such grounds occur among the proceedings of the chancery during the first four or five reigns after the equitable jurisdiction of the court seems to have been fully established. Most of these ancient petitions appear to have been presented in consequence of assaults and trespasses and a variety of outrages which were cognizable at common law, but for which the party complaining was unable to obtain redress in consequence of the maintenance and protection afforded to his adversary by some powerful baron, or by the sheriff, or by some officer of the county in which they occurred" (*Story's Eq. Jurisp.*, Vol. 1, p. 52).

Trespass *quare clausum* lies for an entry on lands covered with water * * * or for entry and use of land between high and low-water mark (38 *Cyc.* 1028).

A person is liable for trespasses of his agents or servants done with his knowledge, or by his consent, given either before or after the act, or by his direction, or instigation, or acting within the scope of their authority conferred by him. So a master is liable if a trespass is the natural and probable result of orders given by him to his servant, or if he ratifies a trespass committed by his servant or agent (38 *Cyc.* 1040).

Every unauthorized entry on land of another is a trespass, even if no damage is done, or injury is slight (38 *Cyc.* 995).

The entry need not be in person, but may be by casting something on the land controlled by the trespasser (38 *Cyc.* 996).

The jurisdiction of equity, in a proper case, to restrain trespasses is now well settled * * * (32 *C. J.* 129).

Nevertheless, injunctions to restrain trespasses are not a matter of course and the jurisdiction is to be exercised sparingly, and is confined ordinarily to cases where from the very nature of the property affected or the frequent repetition of the trespass the injury sustained is not susceptible of remediable damages (32 *C. J.* 130, Sec. 171).

It is well settled that if the bill shows that irreparable injury will result from a trespass, a sufficient ground for the interference of equity by injunction to restrain its commission or continuance is made out (32 *C. J.* 136, Sec. 180).

Where the injury is of such a nature that it cannot be fully compensated in damages, or cannot be measured by any certain pecuniary standard, it is irreparable, and the trespass may be enjoined (32 *C. J.* 136, Sec. 181).

In the exercise of its jurisdiction to prevent a multiplicity of suits, a court of equity will in a proper case enjoin a trespass where a multiplicity of suits would be required to compensate the injured party in damages. If an injury is continuous, and remediable at law only by a multiplicity of suits, it can well be regarded as an irreparable one calling for the interference of equity by the exercise of its

restraining power (32 *C. J.* 138, Sec. 183; 32 *C. J.* 139, Sec. 185).

Spelling on Injunctions, Vol. 1:

(pp. 300, 301, 303) "Sec. 336. *Definitions and Distinctions.*—Trespass is essentially a wrong done to one in possession. * * * Trespass resembles in some respects waste and nuisance. * * * it differs from nuisance in being in itself unlawful, while a nuisance may be lawful in itself, but actionable by reason of the environment or circumstances or the manner of exercising the legal right."

"Sec. 338. *Essential Elements of Equitable Jurisdiction.*—Three conditions have been declared as essential to relief by injunction against trespass: 1. Admission or adjudication of plaintiff's rights. 2. Admission or adjudication of defendant's wrong. 3. Inadequacy of remedy at law. In no case will an injunction lie in the absence of any special equity in the case. Formerly courts of equity rigidly abstained from interfering in any case prior to an admission or establishment of complainant's title to the possession; but in later times that is seldom required. Where the injury resulting or likely to result from the trespass is irreparable in its nature, either in respect of being compensated for pecuniarily, or because from the circumstances, no estimate of the damages can be made with reasonable accuracy, the inadequacy of legal remedies is sufficiently apparent, * * *."

2 *Story's Equity Jurisprudence* (14th Ed.):

(pp. 609, 610) "Sec. 1258. *A Trespass of Irreparable Nature will be Enjoined.*—It is upon similar grounds that Courts of Equity interfere in cases of trespasses, that is to say, to prevent irreparable mischiefs, or to suppress multiplicity of suits and oppressive litigation. * * *

Formerly, indeed, Courts of Equity were extremely reluctant to interfere at all, even in regard to cases of repeated trespasses. But now there is not the slightest hesitation if the acts done or threatened to be done to the property would be

ruinous or irreparable, or would impair the just enjoyment of the property in future. If indeed Courts of Equity did not interfere in cases of this sort, there would (as has been truly said), be a great failure of justice in the country."

1 *Spelling on Injunctions*, Sec. 337, p. 301.

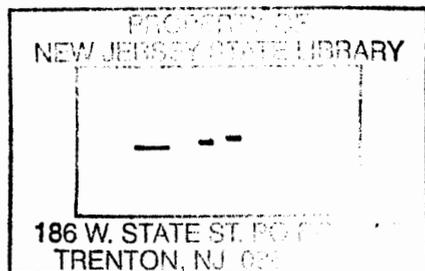
1 *High on Injunctions* (4th Ed.) :

(pp. 661, 662) "Sec. 697. *Origin and nature of the jurisdiction.*—The granting of injunctions against the commission of trespass seems to have grown out of the jurisdiction in cases of waste, to which the relief was formerly confined. Privity of title being the essential ground of the interference in restraint of waste, it was not until a comparatively recent period that the rule was relaxed to admit of the relief against a naked trespass, unaccompanied with privity of title. The jurisdiction may now, however, be regarded as well established, although it is still sparingly exercised, being confined to cases where from the peculiar nature of the property affected by the trespass or from its frequent repetition the injury sustained cannot be remedied by an action for damages, and where it may, therefore, be properly termed irreparable. The foundation of the jurisdiction rests in the probability of irreparable injury, the inadequacy of pecuniary compensation, and the prevention of a multiplicity of suits, and where facts are not shown to bring the case within these conditions, the relief will be refused. Equity will not, therefore, enjoin a mere trespass to realty as such, in the absence of any element of irreparable injury. But where, owing to the peculiar character of the property in question, the trespass complained of cannot be adequately compensated in damages, and the remedy at law is plainly inadequate, equity may properly interfere by injunction. So a trespass of a continuing nature, whose constant recurrence renders the remedy at law inadequate unless by a multiplicity of suits, affords sufficient ground for relief by injunction. So where the acts of trespass are constantly recurring, although each act, taken by itself, would neither be destructive of the estate

nor inflict irreparable injury, and the legal remedy would, therefore, be entirely adequate to redress each act taken alone, equity will restrain such trespasses, basing the relief in such cases upon the utter inadequacy of the remedy at law. So equity may properly interfere to restrain repeated and continuous trespasses where it would be difficult or impossible to ascertain the damage resulting from each act complained of. So also relief may be granted where, from the nature of the case, it will be impossible to estimate the actual damage which the plaintiff will suffer * * *."

(pp. 669, 670) "Sec. 701. *Conditions necessary to relief.*—To warrant the interference of equity in restraint of trespass, two conditions must co-exist: first, complainant's title must be established; and, second, the injury complained of must be irreparable in its nature. And to come within the rule the injury must be of such a nature as not to be susceptible of adequate pecuniary compensation in damages. Nor will equity interfere to restrain a trespasser simply because he is a trespasser, but only because the injury threatened is ruinous to the property in the manner in which it has been enjoyed and will permanently impair its future enjoyment * * *."

(pp. 671, 672) "Sec. 702a. *Further illustrations.*—As further illustrating the doctrine under discussion, it is held that where the acts of trespass are constantly recurring but the injury resulting from each separate act is trifling, so that the damages recoverable for each act would be very small when compared with the expense necessary to prosecute separate actions at law therefor, relief will be granted owing to the inadequacy of the legal remedy. So where a trespass upon land is repeated and continuous and, if continued, will result in the destruction of the substance of the estate, relief is properly allowed * * *."



Conclusion on Point (5).

If, as plaintiff contends in Point (1), the dumping grounds used by defendant are within the territorial limits of plaintiff, defendant is guilty of a continuous, or repeated, trespass to restrain which this court has jurisdiction, and for the exercise of which jurisdiction a proper case is shown by the evidence.

(6)

Injunction is the only adequate and proper remedy in the premises.

Prescription or Laches.

It may be urged that because this nuisance has continued for many years the right of prescription or laches has arisen. The record shows that for almost as many years as defendant has been dumping its garbage and refuse at sea, complaints against the practice have poured in, and during a greater part of that time plaintiff, by its officers and the officers of its municipalities, have tried by peaceable means, and through the influence of the War Department, to persuade the defendant to discontinue the cause of the nuisance. The only results of these complaints and negotiations have been unfulfilled promises to build incinerators to dispose of the garbage and refuse without dumping at sea and constant increase in the amount dumped at sea and washed ashore. A definite promise to discontinue dumping by the end of 1925, and at other subsequent definite dates, have been disregarded, and still we have a new promise of Dr. Schroeder to discontinue dumping at sea by June 1, 1934 (R. 1789, 1799).

However, as a matter of law, the right, as against the public, to maintain a public nuisance cannot be acquired by prescription or laches, as the following authorities show:

Wood on Nuisances (2, 3rd Ed.):

(pp. 936, 937) "Sec. 727. *No prescription for a public nuisance.*—There can be no prescription for a public nuisance of any kind or description * * *.

Sutherland, J., in delivering the opinion of the court, said:

"There is no such thing as a prescriptive right or any other right to maintain a public nuisance. Admitting that the defendant's dam has been erected and maintained more than twenty years and that during the whole of that period it has rendered the country unhealthy, such length of time can be no defense to a proceeding on the part of the public to abate it, or an action by an individual for the special damage which he may have sustained from it * * *."

21 *Am. & Eng. Encyl of L.* (2nd Ed.):

(p. 733) "At common law no right can be acquired by prescription to commit or continue a public nuisance, and such defense cannot be set up in a proceeding on the part of the public."

In *Northwestern Fertilizer Co. v. Hyde Park* (97 U. S. 659), this court held:

"In such cases, prescription, whatever the length of time, has no application. Every day's continuance is a new offense * * *."

In *Missouri v. Illinois* (200 U. S. 496, 520), this court held:

"Take the question of prescription in a case like the present. The reasons on which prescription for a public nuisance is denied or may be granted to an individual as against the sovereign power to which he is subject have no application to an independent state."

Wood on Nuisances, Sec. 724.

Commonwealth v. Upton, 6 Gray 473.

Mills v. Hale, 8 (9) Wend. 315.

Importance of Case.

It may be urged, also, that the health of many millions of population of defendant city may be involved, and that the importance of defendant should be considered and weighed in the balance against the inconvenience and damage suffered by plaintiff and its inhabitants.

To such contentions we would answer in the language of this court, as follows:

In *Sanitary District v. United States* (266 U. S. 405), Mr. Justice Holmes observed:

“This brief summary of the pleadings is enough to show the gravity and importance of the case. It concerns the expenditure of great sums and the welfare of millions of men. But cost and importance, while they add to the solemnity of our duty, do not increase the difficulty of decision, except as they induce argument upon matters that, with less mighty interests, no one would venture to dispute.”

In *Georgia v. Tennessee Copper Co.* (206 U. S. 230, 238), this court, speaking again through Mr. Justice Holmes, stated:

“This court has not quite the same freedom to balance the harm that will be done by an injunction against that of which the plaintiff complains, that it would have in deciding between two subjects of a single political power.”

21 *Am. & Eng. Ency. of L.* (2nd Ed.), p. 689.

In *United States v. Texas* (162 U. S. 1, 90), Mr. Justice Harlan observed:

“In the argument it was suggested that this court ought not to forget how much was added to the power and wealth of this nation when Texas, with its imperial domain, came into the Union and her people became a part of the political community for whom the Constitution of the United States was ordained and established. This fact cannot, of

course, be forgotten by any American who takes pride in the prestige and greatness of the Republic. But the considerations which it suggests cannot affect the decision of legal questions, and must be addressed to another branch of the government. The supposition is not to be indulged that that department of the government will fail to recognize any duty imposed upon it by the circumstances arising out of this vexed controversy."

Nature of Proof.

It will probably be contended by the defendant that the burden upon the plaintiff of sustaining the allegations of the complaint is much greater than that imposed upon a complainant in an ordinary suit between private parties and that before this court can be moved to exercise its extraordinary power under the Constitution the threatened invasion of rights must be of serious magnitude, and it must be established by clear and convincing evidence.

Such a rule was stated in *Missouri v. Illinois* (200 U. S. 496) and *New York v. New Jersey* (256 U. S. 296, 309) applicable to a case in which the court is asked "to control the conduct of *one state* at the suit of *another*." (Italics ours.) That is not the situation here. To this case we apply the different rule established by this court in *Georgia v. Tennessee Copper Co.* (206 U. S. 230), where it was held:

(p. 237) "Some peculiarities necessarily mark a suit of this kind. If the state has a case at all, it is somewhat more certainly entitled to specific relief than a private party might be."

(p. 238) "This court has not quite the same freedom to balance the harm that will be done by an injunction against that of which the plaintiff complains, that it would have in deciding between two subjects of a single political power."

But whatever degree of proof may be required in such a case, the proof is ample, conclusive and uncontradicted.

The complaint alleges:

“18. Said acts of the defendant are repeated and continued from day to day and, unless restrained, will be repeated and continued in perpetuity, to the manifest and irreparable injury of the health, safety, comfort, property and welfare of the plaintiff and its citizens and to others lawfully within the borders of the State, and the plaintiff is without any adequate remedy at law in the premises” (p. 10).

“In consideration whereof, and for as much as the plaintiff is without adequate remedy in the premises, at and by the strict rules of the common law, and can only obtain relief in this Honorable Court, where matters of this nature are properly cognizable and relievable;” (p. 11).

The answer denies these allegations (par. 2, p. 4).

Defendant here deposits its garbage into the sea, well knowing that a large part of it will float and that in the course of nature certain winds and tides will carry it to plaintiff's shores.

For a single instance plaintiff, or its citizens directly affected, might bring action for damages, but where the recurrence is so frequent and the effect is so widespread as to constitute a public nuisance, the only adequate and effective remedy is in a court of equity by injunction. There is no adequate remedy at law, since an action at law can only obtain damages for what is past. It cannot prevent the recurrence of the grievance. Plaintiff cannot be required to go to the courts in New York State for remedy and it cannot obtain service of process in its own courts. Moreover, a multiplicity of suits would be required in constantly recurring salvos and some of the elements of damage, such as offensive odors, annoyance, unhealthful conditions and deprivation of enjoyment of the shore waters and the beach are not only irreparable, but also incapable of measurement by any adequate monetary standard.

A constantly recurring or a continuous trespass becomes a nuisance, and if the effect is sufficiently widespread to injure the general public alike, it becomes a public nuisance (*Bigelow on Equity*, 300).

But whether the offense partakes of the character of both trespass and nuisance, as we conceive, or of nuisance only, it matters little, since the effect is the same in so far as the remedy by injunction is concerned.

The following authorities and decisions are quoted and cited to support plaintiff's contention that this court has jurisdiction in the premises, that irreparable damage is suffered by plaintiff and its citizens, that there is no adequate remedy at law, and that a writ of injunction to restrain defendant from the continuance of dumping garbage at sea is the only adequate and proper remedy available to plaintiff:

3 *Daniell's Chy. Pl. & Pr.* (3rd Am. Ed.) states:

(p. 1739) "The Court will interfere, by injunction, to suppress the commission or continuance of a nuisance. Nuisances are of two kinds—those which are injurious to the public at large, and those which are injurious to the rights and interests of private persons.

With regard to public nuisances, the jurisdiction seems to be of very ancient date, and to be founded on the irreparable damage to individuals or the great public injury which is likely to ensue."

* * * * *

(p. 1741) "In cases of public nuisance, properly so called, an indictment lies to abate them, and to prosecute the offender; but an information will also lie in Equity to stop the mischief and to restrain the continuance of it. Thus Lord Cottenham held, that there was a clear jurisdiction in a Court of Equity, to restrain the magistrates of a county from doing that which would have been a nuisance to a public road.

In information and proceedings in cases of public nuisance, the Attorney-General may take on himself to sue as representing the public;"

1 *High on Injunctions:*

(Sec. 739, p. 701) "The foundation for the interference of equity in restraint of nuisances rests in the necessity of preventing irreparable mischief and multiplicity of suits. The principles governing courts of equity in the exercise of this jurisdiction are closely allied to those which control their action in restraining trespasses. The distinction between trespass and nuisance consists in the former being a direct infringement of one's rights of property, while in the latter the infringement is the result of an act which is not wrongful in itself, but only in the consequences which may flow from it. In the one case the injury is immediate; in the other it is consequential, and generally results from the commission of an act beyond the limits of the property affected. And the injury must be such as is not susceptible of adequate pecuniary compensation in damages, or one the continuance of which would cause a constantly recurring grievance."

(Sec. 740, p. 703) "And while a trespass affords no foundation for an injunction where it is only contingent and temporary, yet if it continues so long as to become a nuisance, equity may properly enjoin. To warrant the exercise of the jurisdiction in restraint of nuisance, the same irreparable injury must be shown as in the case of trespass, and where this does not appear the person will be left to his remedy at law."

(Sec. 746, p. 710) "A court of equity will not be deterred from the exercise of its jurisdiction in restraint of nuisance because of the difficulty or expense attending the removal by defendants of the nuisance in question."

(p. 729) "Sec. 764. When proceedings are had to enjoin a public nuisance, such as the pollution of a river by a board of municipal officers in violation of an act of parliament under which they are acting, a distinction is drawn, as to the necessity of proving an actual injury, between the case of an information filed by the attorney-general in behalf of the public, and a bill filed by private citizens in

their own behalf. And in the former case it is held to be unnecessary for the attorney-general to establish any actual injury, the statute having prohibited the act complained of; while in the latter case it is held to be necessary for plaintiffs to prove that the act which they seek to enjoin is in fact a nuisance."

(pp. 721, 722) "Sec. 759. One of the earliest recognized forms of public nuisance with which equity has interfered is that of purpresture. A purpresture was formerly held to be a close or enclosure, or in other words an encroachment whereby one person makes several to himself that which ought to be common to the public. The later acceptance of the term, however, is that of an encroachment upon the rights of the sovereign, either by trespassing on his soil, or upon easements, such as highways, bridges, and public rivers. And a still narrower signification has been given to the term by limiting it to an encroachment upon the soil of the seashore, or other tidal waters belonging to the sovereign, between high and low water mark. The jurisdiction of equity in cases of purpresture, as well as of public nuisances generally, rests in the necessity of preventing irreparable mischief and avoiding vexatious litigation. The equitable remedy is more efficacious than the remedy at law, since it has the effect, not only of abating nuisances already existing, but of restraining those which are threatened or in progress. But a public nuisance, such as will justify relief by injunction, cannot arise from an act which is expressly authorized by statute."

(p. 710) "Sec. 746. A court of equity will not be deterred from the exercise of its jurisdiction in restraint of nuisance because of the difficulty or expense attending the removal by defendants of the nuisance in question. It is proper, however, where the difficulties of such removal are very great, on granting the injunction to suspend its operation for a given time to enable defendants to make the necessary arrangements for removing the nuisance
* * *"

2 *Story's Equity Jurisprudence* (2, 14th Ed.):

(p. 596) "Sec. 1248. In regard to public nuisances the jurisdiction of Courts of Equity seems to be of very ancient date, and has been distinctly traced back to the reign of Queen Elizabeth. The jurisdiction is applicable not only to public nuisances, strictly so called, but also to purprestures upon public rights and property."

(p. 597) "Sec. 1250. In cases of public nuisances, properly so called, an indictment lies to abate them and to punish the offenders. But an information also lies in equity to redress the grievance by way of injunction. The instances of the interpretation of the court however are (it is said), rare, and principally confined to informations seeking preventive relief. Thus, informations in equity have been maintained against a public nuisance by stopping a highway. Analogous to that, there have been many cases in the Court of Exchequer of nuisance to harbors, which are a species of highway. If the soil belongs to the Crown, there is the species of remedy for the purpresture above mentioned for that. If the soil does not belong to the Crown, but it is merely a common nuisance to all the public, an information in equity lies."

(p. 598) "Sec. 1251. The ground of this jurisdiction of Courts of Equity in cases of purpresture as well as of public nuisances undoubtedly is their ability to give a more complete and perfect remedy than is attainable at law, in order to prevent irreparable mischief, and also to suppress oppressive and vexatious litigations. In the first place, they can interpose where the Courts of Law cannot, to restrain and prevent such nuisances as are threatened or are in progress, as well as to abate those already existing. In the next place by a perpetual injunction the remedy is made complete through all future time; whereas an information or indictment at the common law can only dispose of the present nuisance, and for future acts new prosecutions must be brought. In the next place the remedial justice in equity may be prompt and immediate before irreparable mischief is done; whereas at law nothing can be done except after a trial, and upon the award of judgment."

(p. 599) "Sec. 1252. * * * Attorney-Gen. v. Forbes, 2 Mylne & Craig, 129, 130. On this occasion Lord Cottenham said: 'With respect to the question of jurisdiction, it was broadly asserted that an application to this court to prevent a nuisance to a public road was never heard of. A little research however would have found many such instances. Many cases might have been produced in which the court has interfered to prevent nuisances to public rivers and to public harbors. And the Court of Exchequer, as well as this court, acting as a Court of Equity, has a well-established jurisdiction, upon a proceeding by way of information, to prevent nuisances to public harbors and public roads, and in short generally to prevent public nuisances * * *.'"

1 *Spelling on Injunctions:*

(p. 304) "Sec. 340. The irreparable damage here meant usually results from repeated wrongs of a continuing character resulting in damages which are not estimable by any accurate standard, and can only be conjectured. Against such wrongs as these, courts of equity rarely refuse to grant relief by injunction. Courts of equity do not ordinarily restrain the commission of a mere trespass; there must be some great vexation from continued trespass, or some irreparable mischief which cannot easily be measured by damages, specially alleged and clearly proven, to authorize such interference."

(pp. 306, 307) "Sec. 342. It is apparent to one giving careful study to the subject, that the line of distinction between the two accepted grounds of relief, namely, irreparable injury and multiplicity of suits, is often not discernible, and that the real ground of equitable jurisdiction in trespass may be most properly referred to the general head of the inadequacy of legal remedies. Where numerous acts are being committed, and their continuance threatened, by one person on the land of another, which acts constitute trespass, and the injury resulting from each act is or would be trifling in amount as compared with the expense of prosecuting actions at law to recover damages therefor, in-

junction will lie to restrain the trespass, not alone because of the irreparable nature of the general course of wrong nor yet for the whole reason that a multiplicity of suits or protracted and vexatious litigation would result, but for both reasons; in other words, because a law court furnishes no adequate means for complete redress, * * *."

(p. 334) "Sec. 376. The superior adaptability of the equitable remedy by injunction to give more complete, convenient, and perfect relief than any attainable at law is universally recognized. Before a legal remedy could be given effect, irreparable mischief might ensue; besides, a resort to law would in many cases result in a multiplicity of suits and interminable litigation without reaching the end most desirable, namely, the suppression of the grievance. The reasons in favor of the superiority of the equitable remedy are well summarized by Mr. Eden, as follows: 'In the first place, they can interpose, where the courts of law cannot, to restrain and prevent such nuisances, which are threatened, or are in progress, as well as to abate those already existing. In the next place, by a perpetual injunction, the remedy is made complete through all future time; whereas, an information or indictment at the common law can only dispose of the present nuisance; and for future acts new prosecutions must be brought. In the next place, the remedial justice in equity may be prompt and immediate, before irreparable mischief is done, whereas at law nothing can be done except after a trial, and upon the award of judgment * * *.'"

(p. 335) "Sec. 377. Injunctions to restrain nuisances is one of the most ancient branches of equity jurisdiction; and in the case of public nuisances may be distinctly traced back to the reign of Queen Elizabeth. In restraining a private nuisance by injunction a court of equity may act from one or more of three motives; the restraint of irreparable mischief, the suppression of oppressive and interminable litigation, or preventing a multiplicity of suits. One or more of these evils must be either present or imminent to warrant a court of equity in granting the relief; for it is not every case which furnishes a right of action against a party which will war-

rant a court of equity in assuming jurisdiction to redress the injury or to remove the annoyance. The injury complained of must be such as from its nature is not susceptible of being adequately compensated by damages at law, or it must be apparent that from its continuance permanent mischief or a constantly recurring grievance must result which cannot be otherwise prevented than by an injunction. Such interference is in every case a furtherance of justice for the protection of substantial rights; and because numerous actions at law for the same cause would furnish no compensation."

(pp. 335, 336) "Sec. 378. As regards the reasons for interfering, just mentioned, the jurisdiction is exercised alike over public and private nuisances. A court of equity has jurisdiction and should grant a perpetual injunction when it is established by trial that the defendant has created a nuisance to the serious injury of the plaintiff, and that the nuisance is permanent in its character so that the injury continues, where complete and ample remuneration cannot be awarded in damages; or where the court can see that to obtain complete and ultimate redress, at law, several suits may become necessary; or where the injury is otherwise irreparable. The jurisdiction over purpresture is based upon similar grounds."

(p. 339) "Sec. 382. An action will not lie by an individual or corporation to restrain, by injunction, the commission of an act on the ground that it is a public nuisance, or the usurpation of a franchise detrimental to all the people of the state, such as the filling up of a highway or navigable river, unless peculiar individual injury be shown. The remedy must be applied for in the name of the people and by the public officers appointed for the purpose. On the other hand, it is a good defense to an action brought by the attorney-general though on the relation of a private party, to show that the public has no interest in the *locus in quo*, and that injury is not to the public at large, but only to a few individuals."

(p. 336) "Sec. 419. Informations in equity have been maintained by public authorities against

stoppage of highways amounting to public nuisances and against nuisances to harbors, as well as in cases of purprestures upon rivers and other public waters. It is held that injunction, in cases of public nuisances or purprestures, are only to be granted in order to prevent irreparable mischief, continual, oppressive, or vexatious litigation * * *."

2 *Wood on Nuisances* (3rd Ed.) :

(pp. 1119, 1124) "Sec. 777. The preventive remedy for nuisances, aside from abatement by act of the party, is by injunction issuing out of a court of equity. Formerly this power was exercised sparingly, and only in extreme cases, at least until after the right and the question of nuisance had been first settled at law. But now the only effectual remedy for the abatement of a nuisance, except where special provision is made therefor by statute, is in a court of equity, and the jurisdiction is predicated upon the broad ground of preventing irreparable injury, interminable litigation, a multiplicity of actions, and the protection of rights."

(p. 1126) "Sec. 778. By irreparable injury is not meant such injury as is beyond the possibility of repair, or beyond possible compensation in damages, nor necessarily great injury, or great damage; but that species of injury, whether great or small, that ought not to be submitted to on the one hand, or inflicted on the other, and which, because it is so large on the one hand, or so small on the other, is of such constant and frequent recurrence that no fair or reasonable redress can be had therefor in a court of law."

(pp. 1128, 1129, 1130) "Sec. 779. When a legal right is violated, by an act that amounts to a nuisance which is of a continuous or permanent nature, the very fact that a jury only gives nominal damages, which are utterly inadequate to protect the right, and place the party injured in *statu quo*, furnishes the best reason why a court of equity should interfere to protect the right, and prevent the wrong, on the ground of irreparable injury.

* * * * *

But, in this country, as well as in England, where the right is clear, and the nuisance established beyond a doubt, an injunction will be issued as a matter of course, whether the injury is large or small."

(p. 1134) "Sec. 780. Continuous and constantly occurring grievance *defined*.—By *continuous* nuisance and *constantly recurring* grievance, or *permanent* injury, is not meant a constant and unceasing nuisance or injury, but a nuisance which occurs so often, and is so necessarily an incident of the use of property complained of, that it can fairly be said to be continuing, although not constant or unceasing. A nuisance that arises from the use of property in a particular way, which occurs only once in two weeks, and lasts only two hours each day when used, is regarded as a continuing nuisance, if the nuisance is the necessary result of such use."

(pp. 1150, 1151) "Sec. 787. The fact that the party has a legal remedy is not material; the question is whether under all the circumstances of the case, his legal remedy is adequate to redress the particular injury complained of. If so, equity will not interfere, except in special cases. But if the legal remedy does not afford that relief to which the party in equity and good conscience is entitled, the smallness of the damage on the one hand, or the magnitude or the interest to be affected on the other, will not prevent the exercise of the preventive power of the court.* * *"

Gould on Waters (3rd Ed.):

(p. 233) "An unlawful obstruction to navigation, being a common nuisance, is remediable by indictment, or by abatement; or a court of equity may take jurisdiction upon an information filed by the attorney general."

* * * * *

In *Georgetown v. Alexandria Canal Co.* (12 Peters 91), there is a discussion by Mr. Justice Barbour, who delivered the opinion of this court, of the remedy by injunction

to enjoin a nuisance, the pertinent part of which is as follows:

(p. 98) "Besides this remedy at law, it is now settled that a court of equity may take jurisdiction in cases of public nuisance by an information filed by the Attorney-General. This jurisdiction seems to have been acted on with great caution and hesitancy. Thus, it is said by the Chancellor (in 18 Vesey, 217) that the instances of the interposition of the court were confined and rare. He referred, as to the principal authority on the subject, to what had been done in the Court of Exchequer, upon the discussion of the right of the Attorney-General by some species of information, to seek on the equitable side of the court, relief as to nuisance and preventive relief.

Chancellor Kent, in 2d Johns. Chan., 382, remarks that the equity jurisdiction, in cases of public nuisance, in the only cases in which it had been exercised, that is, in cases of encroachment on the king's soil, had lain dormant for a century and a half; that is, from Charles I, down to the year 1795.

Yet the jurisdiction has been finally sustained, upon the principle that equity can give more adequate and complete relief than can be obtained at law. Whilst, therefore, it is admitted by all that it is confessedly one of delicacy; and accordingly, the instances of its exercise are rare, yet it may be exercised in those cases in which there is imminent danger of irreparable mischief before the tardiness of the law could reach it."

Missouri v. Illinois, 180 U. S. 208; 45 L. Ed. 497. Action by the State of Missouri against the State of Illinois and the Sanitary District of Chicago to restrain the pollution of the tributaries of the Mississippi River with sewage from the City of Chicago. Statement of facts and opinion by Mr. Justice Shiras. This case deals generally with the question of pollution of streams, but the following extracts are pertinent to our case because of the general propositions of law enunciated:

(p. 219) "The question whether the acts of one state in seeking to promote the health and pros-

perity of its inhabitants by a system of public works, which endangers the health and prosperity of the inhabitants of another and adjacent state, would create a sufficient basis for a controversy, in the sense of the Constitution, would be readily answered in the affirmative if regard were to be had only to the language of that instrument.

(p. 241) "That suits brought by individuals, each for personal injuries threatened or received, would be wholly inadequate and disproportionate remedies, requires no argument."

* * * * *

(p. 243) "Speaking for the court the Chief Justice said:

"The cases are numerous in which it has been held that the attorney general may maintain an information in equity to restrain a corporation exercising the right of eminent domain under a power delegated to it by the legislature, from any abuse or perversion of the powers, which may create a public nuisance or injuriously affect or endanger the public interest.'"

* * * * *

(p. 244) The nature of equitable remedy in the case of public nuisances was well described by Mr. Justice Harlan, speaking for the court in the case of *Mugler v. Kansas*, 123 U. S. 623, 673, 31 L. ed. 205, 214, 8 Sup. Ct. Rep. 273, 303:

"The ground of this jurisdiction, in cases of purpresture, as well as of public nuisances, is the ability of courts of equity to give a more speedy, effectual, and permanent remedy than can be had at law. They can not only prevent nuisances that are threatened, and before irreparable mischief ensues, but arrest or abate those in progress, and by perpetual injunction protect the public against them in the future; whereas courts of law can only reach existing nuisances, leaving future acts to be the subjects of new prosecutions or proceedings. This is a salutary jurisdiction, especially where a nuisance affects the health, morals, or safety of the community.'"

The opinion continues with the discussion of similar holdings in *Coosaw Min. Co. v. South Carolina*, 144 U. S. 550, 36 L. Ed. 537, and *Goldsmid v. Tunbridge Wells Improv. Comrs.*, L. R., 1 Eq. 161.

In *Pennsylvania v. Wheeling &c. Bridge Co. et al.* (13 How. 518), this court entertained an original action brought by the Commonwealth of Pennsylvania against a private corporation and two private citizens of the State of Virginia to restrain the maintenance of a bridge across the Ohio River at Wheeling which constituted a public nuisance by obstructing navigation.

In an opinion delivered by Mr. Justice McLean, this court said:

(p. 562) "And this injury is of a character for which an action at law could afford no adequate redress. It is of daily occurrence and would require numerous, if not daily prosecutions, for the wrong done; and from the nature of that wrong, the compensation could not be measured or ascertained with any degree of precision."

* * * * *

(p. 563) "It is admitted that the federal courts have no jurisdiction of common law offenses, and that there is no abstract pervading principle of the common law of the Union under which we can take jurisdiction. And it is admitted that the case under consideration is subject to the same rules of action as if the suit had been commenced in the Circuit Court for the District of Virginia.

In the second section of the third article of the Constitution it is declared, 'the judicial power shall extend to all cases, in law and equity, arising under this Constitution, the laws of the United States, and treaties made or which shall be made under their authority.'

Chancery jurisdiction is conferred on the courts of the United States with the limitation 'that suits in equity shall not be sustained in either of the courts of the United States, in any case where plain, adequate and complete remedy may be had at law.' The rules of the High Court of Chancery of En-

gland have been adopted by the courts of the United States. And there is no other limitation to the exercise of a chancery jurisdiction by these courts, except the value of the matter in controversy, the residence or character of the parties, or a claim which arises under a law of the United States, and which has been decided against in a state court.

In exercising this jurisdiction, the courts of the Union are not limited by the chancery system adopted by any state, and they exercise their functions in a state where no court of chancery has been established. The usages of the High Court of Chancery in England, whenever the jurisdiction is exercised, govern the proceedings. This may be said to be the common law of chancery, and since the organization of the government it has been observed."

* * * * *

(p. 564) "The common law could be made a part of our federal system only by legislative adoption. When, therefore, a common law right is inserted, we must look to the state in which the controversy originated.' The inquiry, in that case, was, whether a copyright existed by common law in the State of Pennsylvania. But, in the case above cited from 3 Wheaton, the court spoke of the remedy. By the Act of Congress of 1828, proceedings at law, in the courts of the United States, are required to conform to the modes of proceeding in the state courts; but there is no such provision in regard to courts of chancery.

Under this system, where relief can be given by the English chancery, similar relief may be given by the courts of the Union.

An indictment at common law could not be sustained in the federal courts by the United States, against the bridge as a nuisance, as no such procedure has been authorized by Congress. But a proceeding, on the ground of a private and an irreparable injury, may be sustained against it by an individual or a corporation. Such a proceeding is common to the federal courts, and also to the courts of the State. The injury makes the obstruction a private nuisance to the injured party; and the doctrine of nuisance applies to the case where the jur-

isdiction is made out, the same as in a public prosecution. If the obstruction be unlawful, and the injury irreparable, by a suit at common law, the injured party may claim the extraordinary protection of a court of chancery.”

In *Coosaw Mining Co. v. South Carolina* (144 U. S. 550), the Attorney General of South Carolina brought suit on behalf of the state to enjoin the mining company from removing phosphate rock from the bed of the Coosaw River. In the opinion delivered by Mr. Justice Harlan there is an extended discussion of the jurisdiction of this court to exercise injunctive relief in the case of public nuisances. The court says:

(p. 564) “It is necessary, therefore, to inquire whether, according to the principles of equity, as recognized in the courts of the United States, the State can obtain relief by a suit in equity.

The grounds of equity jurisdiction in such cases as the one before us are substantially, those upon which courts of equity interfere in cases of waste, public nuisance, and purpresture.”

Numerous cases are reviewed involving the exercise of the equitable jurisdiction of this court, including the case of *Attorney General v. Jamaica Pond Aqueduct Corp.*, 133 Mass. 361, 363, 364, which is mentioned here only because of the following references thereto in the opinion:

(p. 567) “It was held, upon the authority of numerous cases, American and English, that where the nuisance is a public one, an information by the Attorney-General was the appropriate remedy. After observing that the preventive force of a decree in equity, restraining the illegal acts before any mischief was done, would give a more efficacious and complete remedy than an indictment, or proceedings under a statute for the abatement of the nuisance, the court said: “There is another ground upon which, in our opinion, this information can be maintained, though perhaps it belongs to the same general head of equity jurisdiction of restraining and preventing nuisances. The great

ponds of the Commonwealth belong to the public, and, like the tidewaters of navigable streams, are under the control and care of the Commonwealth. The rights of fishing, boating, bathing, and other like rights which pertain to the public are regarded as valuable rights, entitled to the protection of the government. * * * If a corporation or an individual is found to be doing acts without right, the necessary effect of which is to destroy those rights and privileges, it furnishes a proper case for an information by the Attorney-General to restrain and prevent the mischief.' So, in *Eden on Injunctions*; 'The usual, and perhaps the more correct, mode of proceeding in equity in cases of public nuisance is by information at the suit of the Attorney-General,' p. 267. *Mr. Justice Story* said that an information in equity at the suit of the Attorney-General would lie in cases of purpresture and public nuisance, the jurisdiction of courts of equity being sustained because of 'their ability to give a more complete and perfect remedy than is attainable at law, in order to prevent irreparable mischief, and also to suppress oppressive and vexatious litigations.' *Eq. Jur. Secs. 922, 923, 924; People v. Vanderbilt*, 26 N. Y. 287, 293; *District Attorney v. Lynn & B. R. Co.*, 16 Gray, 242, 245; *Kerr, Inj. 262, 263; 1 Joyce, Inj. 120.*

These principles are applicable to the present case. The remedy at law for the protection of the State in respect to the phosphate rocks and phosphatic deposits in the beds of its navigable waters is not so efficacious or complete as a perpetual injunction against interference with its rights by digging, mining, and removing such rocks and deposits without its consent. The Coosaw Mining Company, unless restrained, will not only appropriate to its use property held in trust for the public, but will prevent the proper administration of that trust, for an indefinite period, by obstructing others, acting under lawful authority, from enjoying rights in respect to that property derived from the State. These conflicting claims cannot be so effectively or conclusively settled by proceedings at law, as by a comprehensive decree covering all the matters in controversy. Proceedings at law or by indictment can only reach past or present wrongs

done by the appellant, and will not adequately protect the public interests in the future. What the public are entitled to have is security for all time against illegal interference with the control by the State of the digging, mining, and removing of phosphate rock and phosphatic deposits in the bed of Coosaw river."

In *Del. & Rar. Canal etc. v. Rar. & Del. Bay R. Co. et al.* (16 N. J. Eq. 321), Chancellor Green held:

(p. 379) "The powers of a court of equity in regard to nuisances, are corrective as well as preventive. It may order them to be abated, as well as restrain them from being erected. *State of Penn. v. Wheeling Bridge Co.*, 13 How. 519; *Van Bergen v. Van Bergen*, 2 Johns. Ch. R. 272; *Hammond v. Fuller*, 1 Paige, 197; *Earl v. De Hart*, 1 Beas. 280; *Washburn on Easements*, 578.

In *Earl v. De Hart*, Chancellor Williamson said: "There is no reason why the court should not exercise a power to abate, as well as prevent the erection of nuisances, in clear cases." The nuisance in that case was ordered to be abated, and the decree of the Chancellor was affirmed by the unanimous opinion of the Court of Appeals."

Conclusion on Point (6).

Citations could be added almost without number, but the foregoing are sufficient, when applied to the facts of this case, to show that injunction is the only adequate remedy in the premises.

General Conclusion.

The prayer of the complaint is as follows :

“May it please the court, the premises considered, to grant unto the plaintiff the United States’ writ of injunction, issuing out of and under the seal of this Honorable Court, to be directed to the said defendant, The City of New York, perpetually restraining and enjoining it, its contractors, officers, agents and employees, and all other persons acting or claiming or assuming to act under its authority, from dumping, or procuring or suffering to be dumped, any garbage or refuse, or other noxious, offensive or injurious matter, into the Ocean or other waters of the United States off the coast of New Jersey, and from otherwise defiling and polluting said waters and beaches, or procuring them to be defiled or polluted as aforesaid;” (pp. 11, 12)

“And that the plaintiff may have such further or other relief in the premises as the nature of the case may require, and as shall be agreeable to equity and good conscience” (p. 12).

Plaintiff respectfully submits that it is entitled to relief by injunction according to the prayer of the complaint.

Respectfully submitted,

WILLIAM A. STEVENS,
Attorney General.

DUANE E. MINARD,
Assistant Attorney General,

Solicitors of Plaintiff.

February 4, 1931.

APPENDIX A.

List of articles mentioned in the testimony as included in garbage dumped at sea and appearing on the New Jersey beaches, with page references to the stenographer's record.

(Note: Letters "N. Y." denote identification as having come from New York City.)

ADVERTISEMENTS:

702 N. Y., 863 N. Y., 1487 N. Y., 1591 N. Y.

ANIMALS:

46, 163, 170, 200, 212, 223, 451, 467, 482, 483, 524, 537,
575, 622, 645, 745, 748, 795, 842, 980, 987, 990, 1012,
1024, 1037, 1059, 1067, 1074, 1102, 1126, 1136, 1145,
1219, 1242, 1283, 1338, 1436, 1447, 1456, 1497, 1506

APPLES:

28, 270, 287, 303, 339, 386, 510, 514, 519, 524, 554, 569,
609, 612, 634, 638, 794, 1211, 1384, 1585

ARTICLES (miscellaneous):

120 N. Y., 297 N. Y., 420, 484 N. Y., 504, 586 N. Y.,
610 N. Y., 628 N. Y., 635 N. Y., 638 N. Y., 645 N. Y.,
656, 665 N. Y., 667 N. Y., 690, 701, 729, 763 N. Y.,
776 N. Y., 729 N. Y., 805, 833 N. Y., 858, 1064 N. Y.,
1070 N. Y., 1104 N. Y., 1115 N. Y., 1124 N. Y.
1128 N. Y., 1149 N. Y., 1162 N. Y., 1221 N. Y., 1245
N. Y., 1344 N. Y., 1457 N. Y., 1458 N. Y., 1497 N. Y.,
1502 N. Y., 1569 N. Y.

ASPARAGUS:

28

AUTO PARTS:

176, 305, 307, 451

BALLS:

28, 138 N. Y., 1439

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BANANAS:

118, 121, 187, 200, 223, 270, 286, 287, 303, 311, 314, 322,
332, 339, 386, 390, 420, 451, 454, 510, 514, 522, 524,
528, 532, 554, 569, 613, 664, 677, 685, 713, 717, 724,
731, 736, 773, 794, 860, 866, 867, 909, 1037, 1109, 1113,
1114, 1120, 1148, 1218, 1227, 1232, 1263, 1384, 1584,
1585

BARRELS:

286, 287, 302, 332, 432, 452 N. Y., 502 N. Y., 528,
796 N. Y., 891, 987, 990, 991, 992, 1003 N. Y., 1005,
1011, 1024, 1113, 1114, 1210, 1211, 1218, 1225 N. Y.,
1584

BASKETS:

518, 883, 1456, 1496

BEANS:

482, 554

BED SPRINGS:

118, 119, 121, 297, 387, 414, 451, 773, 848, 909, 1148,
1244

BEDS:

118, 296, 451, 518, 773

BEDDING:

200, 518, 868

BEEF:

1120, 1498

BEETS:

28, 482, 483, 503, 518, 554, 794, 1585

BILL OF FARE (see menu).**BILLHEADS:**

391 N. Y., 393 N. Y., 495 N. Y., 561 N. Y., 563 N. Y.,
635 N. Y., 636 N. Y., 689 N. Y., 691 N. Y., 721 N. Y.,
862, N. Y., 925 N. Y., 926 N. Y., 1030 N. Y., 1110 N. Y.,
1111 N. Y., 1245 N. Y., 1297 N. Y., 1386 N. Y., 1430
1518 N. Y.

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BOAT:

731

BONES:

597

BOOKS:

500

BOOTS:

451

BOTTLE TOPS:

790 N. Y., 929

BOTTLES:

55, 104, 118, 163, 200, 211, 214, 216, 221, 243, 244, 266,
275, 286, 296, 305, 314, 323, 332, 335, 339, 387, 389, 391,
399, 400 N. Y., 402, 410, 420, 425, 426, 432, 451, 452,
454, 528, 532, 554, 576, 583, 585 N. Y., 589, 597, 610,
612, 613, 614, 622, 635 N. Y., 638 N. Y., 645 N. Y., 655,
667 N. Y., 694, 703, 718 N. Y., 722, 724, 725 N. Y., 748,
766, 773, 782, 787, 794, 835, 840, 842, 844, 845, 858,
870, 874, 880, 883 N. Y., 900, 909, 910, 999, 1012,
1013, 1015, 1020, 1024, 1041, 1060 N. Y., 1063, 1099,
1102, 1105, 1108, 1110 N. Y., 1111 N. Y., 1113, 1120,
1146, 1147, 1158, 1162 N. Y., 1197 N. Y., 1257, 1277,
1286, 1350, 1353, 1384, 1395, 1456, 1464 N. Y., 1487
N. Y., 1497, 1498, 1501, 1502 N. Y., 1512, 1522, 1525,
1568, 1569, 1574, 1584, 1588

BOXBOARD:

1015

BOXES AND CRATES:

28, 66 N. Y., 104 N. Y., 118, 119, 120 N. Y., 123, 124
N. Y., 134 N. Y., 168, 170, 201 N. Y., 221, 224 N. Y.,
243, 244 N. Y., 266, 275, 286, 287, 296 N. Y., 297,
298 N. Y., 302, 304 N. Y., 323, 332, 335, 387, 400 N. Y.,

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484 N. Y., 496 N. Y., 510, 549 N. Y., 554, 597, 627 N. Y.,
628, 638, 640 N. Y., 657 N. Y., 694, 707, 718 N. Y.,
731, 746 N. Y., 773, 796 N. Y., 848, 866, 868, 883 N. Y.,
886, 891 N. Y., 909, 910, 974, 978, 987, 990, 991, 992,
999, 1003 N. Y., 1005, 1007 N. Y., 1011, 1012, 1017
N. Y., 1024, 1060, 1063, 1067, 1071 N. Y., 1074, 1082,
1084, 1089, 1102, 1106 N. Y., 1109, 1113, 1114, 1123,
1124 N. Y., 1136, 1158, 1159 N. Y., 1165, 1208 N. Y.,
1210, 1216, 1218, 1225 N. Y., 1227, 1232, 1242, 1243,
1283, 1297, 1305 N. Y., 1334 N. Y., 1337, 1344 N. Y.,
1350, 1353, 1384, 1395, 1452, 1456, 1458 N. Y., 1464,
1496, 1499 N. Y., 1574, 1588

BOXWOOD:

661

BREAD:

208, 323, 569, 860, 891, 1113, 1148, 1151, 1584

BROOM:

974, 1148

BRUSH:

974, 1584

BURLAP BAG:

434

BUSINESS CARDS AND LETTERHEADS:

66 N. Y., 558 N. Y., 646 N. Y., 647 N. Y., 863 N. Y.,
1030 N. Y., 1111 N. Y., 1430, 1488 N. Y., 1591 N. Y.

BUTTER FIRKINS:

1360

BUTTONS:

1114

CABBAGES:

118, 270, 286, 303, 332, 356, 386, 454, 467, 519, 554, 569,
731, 773, 806, 982, 1113, 1114, 1343, 1384

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CALF :

713

CANDLES :

909

CANS :

118, 163, 200, 211, 214, 216, 221, 243, 266, 275, 296, 305,
314, 315, 323, 332, 335, 339, 389, 402, 410, 415, 420
N. Y., 425, 426, 451, 454, 527, 528, 532, 554, 612, 613
N. Y., 614, 638, 642, 643, 655, 662, 694, 714 N. Y., 722,
724, 748, 766, 773, 835, 858, 870, 871, 900, 909, 1005,
1015, 1016, 1024, 1041, 1060, 1063, 1094, 1099, 1108,
1110, 1111 N. Y., 1113, 1114, 1120, 1136, 1148, 1152,
1222 N. Y., 1232, 1265, 1350, 1353, 1384, 1386, 1513,
1584, 1588

CANTALOUPE :

28, 286, 386, 446

CAP :

1464

CARDBOARD (see pasteboard).

CARDS :

567 N. Y., 570 N. Y., 646 N. Y., 647 N. Y., 702 N. Y.,
863 N. Y., 888 N. Y., 926 N. Y., 1275, 1430, 1484 N. Y.,
1591 N. Y., 1592 N. Y.

CARPET SWEEPERS :

420

CARROTS :

28, 305, 339, 386, 390, 454, 482, 518, 554, 609, 724, 731,
773, 794, 806, 1059, 1343, 1568

CARTONS, PAPER :

637 N. Y., 657 N. Y., 766 N. Y., 924 N. Y., 1034 N. Y.,
1067, 1110 N. Y.

CASES :

452 N. Y., 485, 507

CATNIP :

28

CATS :

28, 57, 102, 118, 123, 192, 223, 270, 296, 311, 323, 339,
387, 390, 404, 421, 425, 457, 467, 479, 506, 507, 510,
512, 522, 524, 528, 537, 546, 554, 645, 664, 763, 773, 794,
806, 842, 886, 909, 980, 1020, 1067, 1082, 1108, 1126,
1148, 1151, 1211, 1221, 1263, 1277, 1343, 1350, 1404,
1498, 1501, 1506, 1568, 1570

CAULIFLOWER :

554

CELERY :

28, 554, 569, 612, 752, 773, 1497, 1585

CHAIRS :

420, 773, 1148, 1584

CHECKS :

391 N. Y., 393 N. Y., 628, 648 N. Y., 649 N. Y., 790 N. Y.,
797 N. Y., 798 N. Y., 860 N. Y., 861 N. Y., 926 N. Y.,
1116 N. Y., 1345 N. Y., 1487 N. Y., 1591 N. Y.

CHESTNUTS :

1002

CHICKENS :

28, 118, 123, 163, 187, 191, 192, 200, 270, 296, 414, 421,
425, 479, 506, 507, 512, 554, 569, 597, 610, 622, 638, 645,
654, 664, 708, 713, 717, 722, 724, 729, 736, 773, 794, 806,
820, 842, 851, 886, 893, 982, 1005, 1024, 1082, 1094, 1108,
1113, 1120, 1148, 1149, 1152, 1161, 1211, 1227, 1229,
1498, 1501, 1531

CHIPS (see sticks).

CITRUS FRUITS :

1584

CLOTH (see rags).

CLOTHING (see wearing apparel).

COAL:

96, 208

COAT HANGER:

888

COCOANUTS:

479, 507, 518, 909

COFFEE POT:

710

CONDRUMS:

28, 58, 752

CONTAINERS:

432, 658 N. Y., 702, 718 N. Y., 721 N. Y., 766 N. Y.,
873 N. Y., 1574 N. Y., 1584 N. Y.

CORD AND ROPE:

28, 752

CORK:

214, 215, 303, 583, 909, 978, 1569

CORN:

500, 508, 522, 682, 909

CORSETS:

144

COTS (see beds).

COTTON SEEDS:

434

COWS:

118

CRANBERRIES:

708, 713

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CUCUMBERS:

554, 638, 700, 708, 731

DELIVERY BOOK:

1338 N. Y.

DOGS:

28, 57, 102, 118, 123, 192, 223, 270, 296, 311, 323, 339,
387, 390, 404, 414, 421, 425, 457, 467, 479, 506, 507, 510,
512, 522, 524, 528, 532, 537, 546, 554, 645, 708, 713, 763,
773, 794, 806, 842, 886, 893, 909, 980, 1005, 1020, 1067,
1082, 1108, 1120, 1126, 1148, 1152, 1161, 1198, 1211,
1221, 1227, 1229, 1263, 1277, 1343, 1350, 1404, 1498,
1501, 1506

DOLLS:

420, 1436, 1439

DRIFTWOOD (see logs).

DUCKS:

506, 1108, 1113, 1532

DUE BILLS:

124 N. Y.

DUSTERS:

1265

EGGS:

102, 421, 1041, 1059, 1120, 1494

EGG PLANT:

554, 703

ELECTRIC BULBS:

28, 102, 296, 339, 391, 432, 554, 794, 867, 880, 1012,
1013, 1060, 1277, 1404, 1436, 1439, 1456, 1497, 1498,
1584

ENDIVE:

1585

ENVELOPE:

104 N. Y., 1042 N. Y., 1110

EXAMINATION BOOKS:

1252 N. Y., 1253 N. Y.

FAT:

402, 404, 752, 909, 1062, 1343

FEATHERS:

275

FLOTSAM AND JETSAM:

356

FLOWERS:

243

FORMS:

584 N. Y., 585

FOWL (see chickens).**FRANKFURTERS:**

554

FRUITS (see vegetables).**FURNITURE:**

102, 420, 909, 1210, 1283

GEESE:

507

GLASS:55, 105, 306, 391, 399, 532, 576, 725, 794, 836, 840, 909,
1015, 1063, 1106, 1158, 1208, 1287, 1456, 1457, 1498**GRAPES:**

243, 296

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280, 286, 287, 296, 303, 311, 314, 322, 332, 339, 386, 390,
410, 414, 420, 425, 451, 454, 467, 479, 482, 483, 497, 500,

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503, 507, 510, 518, 522, 527, 528, 532, 537, 542, 546, 554,
569, 575, 597, 609, 612, 613, 622, 627, 634, 645, 664, 670,
674, 691, 694, 713, 717, 722, 724, 736, 752, 756, 773, 794,
806, 820, 845, 860, 870, 900, 909, 932, 991, 999, 1024,
1027, 1037, 1059, 1082, 1102, 1145, 1146, 1151, 1211,
1218, 1304, 1343, 1350, 1353, 1360, 1384, 1424, 1436,
1464, 1501, 1547, 1561, 1568, 1584

GREENS:

1555, 1585

HAM (see meat).

HAMMER HANDLES:

1265

HATS:

451, 773

HERRING, CASES OF:

507, 508 N. Y.

HOGSHEAD:

452

HOGS:

729

HONEYDEW MELON (see melon).

HORSES:

118, 524

HORSE COLLARS:

144

HOSPITAL REFUSE:

1094, 1100

INFANT'S BODY:

27, 31, 102

INVOICES:

1518 N. Y.

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IRON :

176, 183, 305

JARS (see bottles).

KALE:

554.

KEGS (see barrels).

LABELS:

402, 549 N. Y., 689 N. Y., 691 N. Y.

LACES:

28

LAMB:

28, 123, 1227

LATHS (see sticks).

LAUNDRY TICKET:

562 N. Y., 636 N. Y., 861 N. Y., 922 N. Y., 923 N. Y.,
929 N. Y., 1512 N. Y., 1590 N. Y., 1591 N. Y.

LEADS:

1129

LEATHER:

144

LEMONS:

28, 118, 191, 386, 432, 443, 446, 451, 479, 500, 503, 518,
554, 634, 724, 746, 752, 773, 794, 820, 860, 870, 900,
909, 1059, 1109, 1113, 1120, 1145, 1146, 1151, 1211, 1227,
1242, 1350, 1353, 1471, 1497, 1547, 1584

LETTERS:

66 N. Y., 103 N. Y., 120 N. Y., 210 N. Y., 224, 484, 558
N. Y., 816 N. Y. 1042 N. Y., 1071 N. Y., 1110, 1351
N. Y., 1485 N. Y.

LETTERHEADS (see business cards).

LETTUCE:

28, 118, 303, 314, 454, 554, 731, 736, 752, 1113, 1497,
1585

LITERATURE:

103 N. Y., 501, 502 N. Y.

LIVE STOCK:

729

LOGS AND DRIFTWOOD:

28, 162, 166, 176, 222, 259, 260, 261, 262, 302, 432, 602,
616, 628, 631, 638, 654, 655, 662, 713, 773, 791, 842, 843,
884, 890, 993, 1005, 1009, 1011, 1046, 1154, 1266, 1277,
1304, 1435, 1441, 1447, 1471, 1527, 1576

LUMBER (see sticks).**MAN'S BODY:**

1494

MASON'S LEAD:

909

MATRESSES:

28, 387, 414, 420 N. Y., 451, 454, 518, 682, 773, 867, 909,
1106, 1210, 1283

MEAT:

28, 57, 102, 191, 192, 200, 311, 421, 613, 1012, 1020,
1024, 1136, 1497, 1513, 1548

MELONS:

28, 286, 386, 443, 446, 500, 508, 518, 522, 527, 609, 622,
631, 700, 708, 713, 717, 731, 746, 1041, 1046, 1211,
1343, 1571, 1576

MEMORANDUM:

103 N. Y., 124 N. Y., 583 N. Y., 797 N. Y., 1338 N. Y.,
1339 N. Y., 1340 N. Y.

MENU:

400 N. Y., 414 N. Y., 427 N. Y., 718 N. Y., 842 N. Y.

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MILK BOTTLE CAPS:

66 N. Y., 484 N. Y., 485 N. Y., 486 N. Y., 490, 491 N. Y.,
492 N. Y., 493 N. Y., 497 N. Y., 499 N. Y., 502 N. Y.,
507, 508, 636 N. Y., 641, 642, 645, 646 N. Y., 647 N. Y.,
658 N. Y., 702 N. Y., 703 N. Y., 714 N. Y., 726 N. Y.,
727 N. Y., 782 N. Y., 784 N. Y., 792 N. Y., 802 N. Y.,
815 N. Y., 872 N. Y., 922 N. Y., 923 N. Y., 925 N. Y.,
926 N. Y., 927 N. Y., 928 N. Y., 929 N. Y., 1029, 1030
N. Y., 1031 N. Y., 1034 N. Y., 1208 N. Y., 1339 N. Y.,
1344, 1386 N. Y., 1487, 1590 N. Y.

MILK CANS:

1110 N. Y.

MILK CONTAINERS (paper):

702, 718 N. Y., 720 N. Y., 766 N. Y., 873 N. Y., 923 N. Y.,
924 N. Y., 930 N. Y., 1208 N. Y.

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NAILS:

992, 995, 1013, 1015, 1063, 1064, 1084, 1113, 1123, 1127

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305

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28, 298, 1136, 1351 N. Y., 1384, 1386 N. Y.

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1436, 1439

NOTE:

1512 N. Y.

NUTS:

909

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118, 123, 200, 223, 243, 270, 275, 286, 314, 339, 386, 414,
420, 446, 451, 454, 479, 482, 483, 518, 519, 528, 532, 537,
554, 569, 634, 674, 677, 682, 685, 708, 713, 724, 731, 736,
794, 806, 900, 1088, 1148, 1149, 1304, 1350, 1384, 1585

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ORANGE SKINS:

28, 103, 121, 123, 170, 187, 191, 208, 243, 261, 266, 275,
280, 296, 339, 386, 390, 414, 420, 422, 446, 482, 519, 522,
527, 532, 546, 569, 575, 597, 609, 612, 613, 622, 627, 631,
645, 664, 670, 674, 700, 703, 713, 722, 736, 752, 773, 794,
860, 867, 870, 991, 1024, 1027, 1059, 1082, 1102, 1109,
1120, 1123, 1145, 1146, 1148, 1151, 1218, 1227, 1242,
1263, 1343, 1350, 1353, 1436, 1471, 1476, 1494, 1496,
1584

ORANGES:

28, 118, 187, 191, 200, 223, 270, 286, 287, 303, 311, 314,
322, 425, 432, 454, 467, 479, 483, 497, 500, 503, 507, 510,
514, 518, 522, 524, 528, 537, 554, 597, 694, 717, 773, 851,
900, 909, 1037, 1041, 1099, 1151, 1211, 1216, 1304, 1384,
1424, 1497, 1547, 1561, 1568

ORDER BLANKS AND SLIPS:

420 N. Y., 427 N. Y., 584 N. Y., 797 N. Y., 861 N. Y.,
1071 N. Y., 1503 N. Y., 1570 N. Y.

OYSTER CUPS:

657 N. Y.

PACKAGES:

504, 582, 747 N. Y., 1074, 1075 N. Y., 1110 N. Y.,
1344 N. Y.

PAD:

799 N. Y., 1334 N. Y., 1339 N. Y.

PAILS:

414, 528, 1129, 1531

PAMPHLET:

702 N. Y., 1252 N. Y.

PAPER:

133 N. Y., 208, 210, 224 N. Y., 288, 298, 338 N. Y.,
560 N. Y., 648 N. Y., 689 N. Y., 702 N. Y., 722, 752,
756, 860, 888 N. Y., 1075, 1136 N. Y., 1152, 1162,
1197 N. Y., 1259 N. Y., 1297, 1457 N. Y., 1473, 1499
N. Y., 1511, 1576 N. Y.

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28, 103, 210 N. Y., 224, 298, 558 N. Y., 567 N. Y.,
582 N. Y., 584 N. Y., 586, 756, 798, 859, 1074, 1136,
1152, 1251, 1351, 1354, 1513

PAPER CONTAINERS:

702 N. Y., 873 N. Y.

PARSLEY:

28, 554, 609, 909

PARSNIPS:

554, 609, 1059, 1343

PASS, THEATRE:

1591 N. Y.

PASTEBOARD:

451

PASTEBOARD BOXES:

28, 900, 999, 1048, 1056, 1074, 1574

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144

PEAS:

482, 554

PEPPERS:

554

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570, 1497

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585, 656

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522, 1343, 1501

PILLOWS:

28, 773

PINE CONES:

554

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270, 303, 332, 420, 454, 479, 507, 514, 554, 597, 609,
622, 752, 756, 806, 900, 1102, 1216

PLUMS:

28

POLE:

860 N. Y.

PORK:

554

POSTCARD:

335 N. Y., 562 N. Y., 635 N. Y., 862 N. Y., 863 N. Y.,
1487 N. Y., 1591 N. Y.

POSTERS:

635 N. Y.

POTATOES:

28, 118, 123, 243, 270, 286, 303, 305, 311, 314, 339, 420,
434, 451, 454, 482, 483, 518, 532, 537, 554, 570, 597, 612,
634, 638, 664, 677, 724, 773, 794, 909, 1113, 1148, 1494,
1497

POULTRY (see chickens).

PUMICE STONE:

909

PUMPKINS:

522

RADISHES:

314, 554

RAGS:

144, 163, 210, 298, 752, 773, 1100, 1106, 1384, 1568, 1569,
1571

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1263

RECEIPTS:

562 N. Y., 724 N. Y., 725 N. Y., 783 N. Y., 862 N. Y.,
1345 N. Y., 1465 N. Y.

REGISTER:

1030 N. Y.

REQUISITIONS:

567 N. Y., 637 N. Y.

RESTAURANT TICKETS:

244 N. Y., 718 N. Y., 799, 1116 N. Y.

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144

RUBBERS:

451

SAFETY DEVICES:

170

SALES SLIPS:

452 N. Y., 562 N. Y., 583 N. Y., 721 N. Y., 766 N. Y.,
790 N. Y., 798 N. Y., 1033 N. Y., 1487 N. Y., 1517 N. Y.,
1518 N. Y.

SANITARY NAPKINS:

28

SCORE CARD:

702

SEAL (Xmas):

658

SHAVING BRUSH:

703

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SHAVINGS:

1067

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1239

SHIPPING BILLS:

894 N. Y.

SHOES:

28, 451, 773, 909, 1561, 1568

SHOVEL HANDLE:

801 N. Y.

SIGNS:

28, 911 N. Y., 1129 N. Y.

SKINS:

28, 425, 576, 674, 1447, 1579

SLIPPERS:

28, 1568

SLIPS:

120 N. Y., 427 N. Y., 702 N. Y., 721 N. Y., 739 N. Y.,
783 N. Y., 842, 861 N. Y., 1030 N. Y., 1032 N. Y.,
1487 N. Y., 1517 N. Y., 1518 N. Y.

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SPINACH:

28, 503, 504, 554, 773, 1585

SPONGE:

659

SPRINGS:

420, 682

SQUASH:

570, 645, 703, 722, 724

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563 N. Y., 860 N. Y., 1485 N. Y., 1518 N. Y.

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STEP LADDER :

28

STICKS :

183, 208, 211, 214, 216, 217, 221, 243, 275, 286, 302, 315,
332, 356, 420, 425, 454, 482, 497, 518, 522, 554, 574, 583,
613, 616, 622, 642, 643, 645, 654, 662, 703, 707, 713, 722,
773, 800 N. Y., 821, 835, 866, 883, 891 N. Y., 910, 974,
987, 991, 999, 1002, 1012, 1013 N. Y., 1104 N. Y., 1015,
1016, 1020, 1046, 1074, 1089, 1121, 1127, 1129, 1148,
1154, 1210, 1213 N. Y., 1215, 1225 N. Y., 1242, 1257,
1277, 1303, 1350, 1395, 1496, 1497, 1555, 1559, 1560,
1574

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STONES :

176, 177, 183

STRAW :

170, 356, 909, 1002, 1012

STREET DIRECTORY :

925 N. Y.

STUBS :

103 N. Y., 570 N. Y., 637 N. Y., 924 N. Y., 1345 N. Y.

SUET :

554, 1127, 1343

TAGS :

393 N. Y., 452 N. Y., 746 N. Y., 747 N. Y., 863 N. Y.,
1030 N. Y., 1110 N. Y., 1208 N. Y., 1458 N. Y.

TEA BALLS :

869 N. Y.

TELEGRAM :

1386 N. Y.

APPENDIX A.

THEATRE TICKETS:

66 N. Y., 103, 400 N. Y., 414 N. Y., 427 N. Y., 557 N. Y.,
560 N. Y., 585 N. Y., 636 N. Y., 726 N. Y., 843 N. Y.,
1043 N. Y., 1116, 1149 N. Y., 1528 N. Y.

TICKETS:

557 N. Y., 560 N. Y., 562 N. Y., 636 N. Y., 657 N. Y.,
726 N. Y., 801 N. Y., 861 N. Y., 862 N. Y., 863 N. Y.,
864 N. Y., 929 N. Y.

TILE:

1271

TIMBER (see logs).

TIME SHEET:

721 N. Y.

TIN CANS (see cans).

TIRES:

451

TOMATOES:

191, 410, 717, 746, 909

TOYS:

28, 420, 482, 483, 554, 655, 909, 1584

TREES (Christmas):

482, 483, 501, 508, 518, 524, 528, 569, 722

TRUNKS:

454, 790 N. Y.

TUBS:

909

TURKEY:

506, 991, 1113, 1498

TURNIPS:

28, 118, 187, 286, 305, 386, 454, 483, 518, 554, 569, 597,
634, 773, 909, 1113, 1114, 1145, 1343, 1568

UNDERWEAR (see wearing apparel).

VALISES:

451

VANITY CASES:

28

VEGETABLE AND FRUIT:

28, 57, 102, 170, 200, 212, 221, 223, 243, 266, 303, 311,
314, 332, 335, 339, 356, 402, 420, 425, 432, 451, 456, 467,
503, 506, 512, 524, 527, 528, 546, 575, 576, 612, 613, 631,
634, 638, 645, 664, 670, 677, 682, 707, 708, 729, 745, 763,
794, 842, 857, 893, 978, 980, 982, 987, 990, 991, 1012,
1020, 1067, 1074, 1082, 1088, 1099, 1136, 1161, 1175,
1220, 1257, 1283, 1304, 1337, 1343, 1360, 1424, 1447,
1450, 1494, 1501, 1548, 1555, 1560, 1568, 1570, 1579,
1585

VICTUALS:

103, 200, 794

VOUCHERS:

860

WASTE:

208, 221, 773

WATERMELONS (see melons).

WEARING APPAREL:

28, 144, 298, 451, 752, 756, 1560

WHEELBARROWS:

1244

WIRE:

144, 208, 210

WOOD (see sticks).



APPENDIX B.

Cities	Population		Beach Front	Value of Hotels and Boarding Houses	Assessed Valuation	Cost of Boardwalk	Jetties	Piers	Pools, Pavilions, Pleasure Places	Private Homes	Cost of Cleaning Beaches per Year	Bathing Facilities	Investment in Fish Pounds
	Winter	Summer											
Asbury Park..... (R. 1177-1179) (R. 1519)	1920—15,000 1929—18,000— 20,000	200,000	1 mile	\$30,000,000	\$36,000,000— 37,000,000	\$250,000 for widening \$210,000		\$7,000,000			For 2 wks. \$475.23 131.80		
Allenhurst	1,000	3,000	1,000 feet		6,635,350			275,000			\$1,000	\$ 250,000	
Avon	1,500	5,000	2,900 feet		3,000,000	150,000				\$ 500,000		40,000	
Bayhead	300	6,000— 8,000	6,100 feet	210,809	2,108,094	40,000	\$ 15,000				\$3,000 per yr.		
Belmar	3,800	35,000	1.5 miles	700,000	7,100,000	50,000		525,000	\$ 50,000	6,440,000	1929—\$2,000	110,000	\$18,000— 20,000
Brielle	13,000	18,000											
Bradley Beach..... (R. 604-606)	5,000	30,000— 40,000	4,800 feet	1,105,400	8,062,764	75,000	47,000		398,000	4,133,200	1928—\$800 1928-9—\$1,000 1929—\$877.73	249,500	
Deal			1.25 miles		8,000,000		500,000		250,000		Per yr. \$1,000— 1,500	2,000,000	
Long Branch..... (R. 996)	20,000	30,000— 40,000	4.5 miles		20,847,500						Per season \$200— 300		
Manasquan	2,500	6,000— 7,000	1 mile		4,000,000	25,000					1929—\$500		
Ocean Grove..... (R. 232-240)	3,500— 4,000	25,000— 35,000— 45,000	.75 mile	3,000,000	9,240,295	45,000		60,000	25,000	1,500,000	1926—\$340.08 1927— 291.03 1928— 297.84 1929— 194.90	50,000	
Point Pleasant..... (R. 1284)											Per wk. \$10—\$12		
Sea Girt..... (R. 578-580)	500	3,000— 3,500	300 feet	500,000	2,271,729		42,000	150,000 to be built	100,000	500,000	1929—\$242.14	50,000	
Seaside Heights..... (R. 1443-1444)	1,000	5,000— 6,000	4,500 feet	75,000	1,500,000					300,000	\$500		
Seaside Park..... (R. 877-879)	500	5,000	1.6 miles		2,600,000	500,000	305,000				\$600		
Shipbottom Boro, Arlington. (R. 1156)	300	1,500— 3,000			1,100,000						\$300		
Spring Lake..... Imp. Assn. (R. 768-773)	1,500— 2,000	15,000— 20,000		2,000,000	7,000,000	25,000		465,000			Per storm \$300 (1929) \$700		

APPENDIX C.

Map.

APPENDIX D.**Supplemental Abstract of Testimony.**

(December 5, 1930.)

- R. 2095- DAVID C. BOWEN, Director of the State Department of Health of New Jersey, produced three
2096 resolutions, dated September 14, 1926, regarding Long Branch Sewer Company.

Offered as Defendant's Exhibit 9-a, b and c.

- R. 2099- OTIS R. SEAMAN, City Engineer of Long Branch,
2102 produced a report which is a document of the City of Long Branch, not of State of New Jersey. Report obtained from city records of City of Long Branch. Mr. Clyde Potts had only copy of report and witness telephoned Mr. Potts and obtained it.

Offered as Defendant's Exhibit 10.

Supplemental List of Exhibits.

<i>Defendant's Exhibit No.</i>	<i>Description</i>	<i>Stenographer's Vol. Page</i>	
9	Certified copy of three resolutions, dated September 14, 1926, regarding the Long Branch Sewer Company's sewer in Long Branch.....	14	2096
10	Photostat copy of Report for the City of Long Branch, N. J., valuation of plant, Long Branch Sewer Company, Watson - Pugh - Lendall, August 5, 1928.....	14	2102

APPENDIX D.

<i>Defendant's Exhibit No.</i>	<i>Description</i>	<i>Stenographer's</i>	
		<i>Vol.</i>	<i>Page</i>
11	Bill in Equity, Department of Health of State of New Jersey v. Asbury Park, filed November 10, 1930, with resolution and notice thereunto annexed	14	2103
12	Table showing by months quantities of garbage dumped at sea by defendant for the years 1925 to 1929, inclusive.	14	2104
13	Letter dated June 12, 1930, from Chief of Engineers of War Department to John J. Boylan	14	2109
14	Undated Map entitled "Sewerage System of the Long Branch Sewer Company"	14	2111
<i>Plaintiff's</i>			
<i>Exhibit No.</i>			
348	Report of Commission on Street Cleaning and Waste Disposal, City of New York, 1907.	14	2115

