The National Waterways Commission in its Final Report, Appendix I, has the following to say regarding the decline of water traffic in the United States (62d Cong., 2 Sess., Senate Documents, Vol. 15, No. 469, pages 68-73):

"It has been the aim of the commission to find the explanation of the marked tendencies which have become manifest in the diminished use of most of the inland waterways of the country-------.

"It is the opinion of the commission that the most important factor in the decrease of water-borne traffic alongside of and contemporaneously with the great increase in railway traffic is due to the relations between these two great agencies of transportation.

"The many advantages which a railway has in competition with a water route may be grouped into two general classes.

"1. Those inherent or fundamental advantages which are based upon permanent conditions.

"The first and most important of these is the wider area of distribution available to railroads. A railroad line can be constructed in any direction to any part of the country except the portions which are admittedly inaccessible, while the line of a river is fixed by nature in a single direction. Railroads are more readily adaptable to the newly-arising and ever-shifting demands of producing areas and of markets. In providing for the receipt and delivery of freight at factories or warehouses, branch lines or switches can be constructed. Railroads can reach all cities and towns alike, whether located upon the water or not, while obviously boats or barges cannot be used except for the receipt and delivery of freight or passengers from or to localities on waterways. The rapid growth of inland cities not located upon waterways, many of which have attained very considerable size, emphasizes the possibility of development where the dependence for transportation facilities must be upon railroads alone. Notable illustrations of such prominent centers are Birmingham, Ala.: Atlanta, Ga.; Columbus, Ohio; Indianapolis, Ind.: Denver, Colo.; and a great number of cities and towns which are not provided with facilities for water-borne traffic.

"A second advantage of the railways, which can be counted as belonging to this class, lies in the increasing importance of terminals and the necessity for facilities for the prompt and economical loading and unloading of freight. The cost of hauling freight, as compared with the handling or delivery at terminal points, has experienced a great change in the last forty years. The cost of hauling has very materially decreased, while the cost of handling and the expenses connected with terminal facilities, though diminished in many ways, have not decreased accordingly.

"A third advantage in this class is intimately associated with the preceding, and arises from the readier transfer of traffic from one railway to another, as compared with transfer from water to land or land to water. This includes not only physical transfer of traffic, but the through haul of cars without break of bulk and a thorough organization for through billing over various roads, with facilities for easy settlements of joint accounts of the cooperating

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railways. In this connection may be mentinned a physical disadvantage of rivers,due to the very considerable oscillation in their levels. This fact makes it more difficult to provide convenient and adequate loading machinery and renders the receipt and shipment of freight proportionately more expensive. The variation in the Ohio River at Cincinnati is over 60 feet: that of the Mississippi at Grafton,Ill.,below the mouth of the Illinois River, is 29.6 feet: at St.Louis,43.92 feet; below Cairo and the mouth of the Ohio River,45.6 feet; between Memphis and Helena,Ark., 54.75 feet: at Vicksburg,Miss.,58.98 feet; and at New Orleans,La., 21.02 feet.

"Another consideration is that railways,as a rule,make a higher speed per hour and the distance to be traversed between terminals is usually shorter by rail. Furthermore,the railway is more reliable in its schedules. It should,however,be stated that on certain water routes in this country,especially in seasons of traffic congestion,freight is quite as promptly delivered,and in many instances more promptly,than on railways.

"2. Those advantages pertaining to railways which may be deemed artificial or temporary. These are due to conditions not necessarily permanent in their nature.

"The first and most important of these is the right of the railway to charge lower rates between points where there are line is in competition with water routes.

"Section 4 of the act to regulate interstate commerce contains the following provision: 'That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property,under substantially the same similar circumstances and conditions,for a shorter than for a longer distance over the same line,in the same direction,the shorter being included in the longer distance.'

"The words 'under substantially similar circumstances and conditions,' found in this section have been interpreted to mean that the existence of actual water competition constituted a circumstance sufficiently dissimilar to relieve the carrier from the operation of the law. Under this interpretation the cutting of rates,where water competition exists,has been carried to an almost unlimited extent. -------

"A second of these artificial or temporary advantages of the railroads comes from the power to acquire steamboat lines or enter into agreements with them for the purpose of stifling water-borne traffic,either by operating the steam-boat lines or by discontinuing their use upon competitive routes. In both methods, namely,in the acquisition and operation of steamboat lines in such a manner as not to compete with railways,and in removing them entirely from the field of competition,the railway companies of the country have been very active.

"A third advantage arises from the refusal to pro rate on through routes where naturally freight would be carried part of the way by rail and part by water. In many cases the route which apparently would be the natural one,would be by water for three-fourths or more of the distance,yet the charge for the remaining

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railway haul is so considerable as to render carriage for the longer haul by water unprofitable.

"A fourth advantage of the railways, in this class, is the far greater attention given to provisions for warehouses, terminals, and the equipment for handling freight. On many of the waterways very little if any progress has been made during the last fifty years in furnishing modern facilities for the storage or handling of freight. In each of a considerable number of cities located upon rivers and canals in Germany the members of the commission during their recent inspection saw a larger investment for terminals and for the storage of freight and handling of boats than exists on the whole of the Mississippi River above New Orleans.----------

"In dwelling upon the disadvantages of waterways we do not omit to mention the handicap which has existed on numerous rivers because of the delay of the Government in prosecuting projected improvements. This delay operates at a disadvantage, because those who contemplate the building of boats and the establishment of steam boat or barge lines are unable to proceed with confidence. On the other hand it should be said that the danger of ruinous railway competition is a far more serious obstacle to the development of waterway traffic. Under this competition many channels which afford ample depth and the opportunity for the economical shipment of freight have remained largely in disuse."-------

Further reasons for this decline are given in the report of the Windom Select Committee on Transportation Routes to the Seaboard, in two parts, printed 1874, 43 Cong., 1 Sess., Report 307, which, on pages 58 and 59, part I, reads as follows:

"The last twenty years have constituted a period of railway improvement, in which the inventive genius and business talent of the country have been devoted to the newer and more rapid means of transport, while the artificial waterways have been comparatively neglected. But by far the most efficient cause of the relative increase of railway-tonnage is to be found in the administrative organizations of the railway companies, and in their combinations against the water-line-the two railways competing with the canal [i.e. the Erie Canal] having their traffic arrangements with lines of steamers on the lakes, carrying from all the principal western ports. There are now but few, if any, lake steamers that do not constitute a part of some through-line by water and rail to New York. The Erie Canal has no such connections. Consequently when Western products are once on board steamers at Chicago, Milwaukee, and other ports of the upper lakes, they are substantially under the control of the railways leading from Buffalo, Erie and Dunkirk to New York, and it is not difficult to understand how they are prevented from being carried on the canal, although the charges by canal are less than by rail. The object of the organization of mixed lines, consisting of lake steamers and railroads, is to direct the traffic over the railways after it reaches the eastern lake termini.

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"But there is still another reason for such increase.
"The area of the greatest cereal-production has moved rapidly westward until its center is now far west of the lakes. Within a few years 'fast freight lines' have been organized, which extend into the interior of the Western States far beyond Chicago and other lake ports. They form through-lines and offer through-rates to the Eastern cities, and to the consumers in the Atlantic States. These freight lines have their agents in nearly all the local markets of the West who solicit traffic for them, and as the local rates to lake-ports are much greater per mile than the through-rates by such lines to the East, a large traffic is thus diverted from the lake and canal line. The Erie Canal has no such agencies. It receives only such traffic as seeks it in consequence of lower rates. It is not difficult so to adjust rates to the nearest lake-ports from points west of these ports as to prevent the traffic from being diverted to the water-line. There are also other circumstances which have caused large shipments to be made by rail during the season of navigation, at rates higher than those which prevail on the canal, viz: 1st. The fact that railway transportation is preferred for grain in bad condition, since it sustains less injury when shipped in that way than by canal. 2d. The fact that grain is at times required to be delivered in New York in order to meet contracts for ocean-shipment, sooner than it can be transported by canal."

To summarize these, and a few other reasons for the decline of water traffic, we get the following list of reasons: 1) The inadequate development of water lines; 2) Unfair rate-cutting on the part of railroads: 3) Control of terminal sites, equipment, canals, and boat lines: 4) Refusal of railroads to co-operate with boat lines in carrying through freight: 5) The lack of organization among water lines as compared with the wonderful organization of railroads: 6) The development of great trunk-lines and of primary grain markets in the Far West: 7) The necessity of speedy delivery in many cases, and the fears of ruining completely grain which has been shipped in a bad condition, if shipped by water; 8) The great cost of trans-shipping, of insuring goods shipped by water, and of uncertainty as to the availability of boats at needed times as well as the closing of water routes during periods when the water is frozen. The following are some further illustrations of other reasons:

Testimony before the Cullom Senate Selcet Committee on Interstate Commerce, Part II of the Report (1886) Page 367, brought out the fact that the New York Central refused to co-operate with water traffic on the Erie by thretening to sever connections with any roads that accepted traffic coming to them from the Erie Canal. "The New York Central Railroad threatened to sever the railroad connection if any grain was brought in that way. THey forbade New England having any advantage from the Erie Canal."

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Decline of Water Traffic:

Again, testimony before the Windom Committee, Report, Part II, Page 1297, stated that: "The railroads west of the Mississippi River, running to the river and crossing the river, - unless they could be compelled to do so by law, - would not discharge their cargoes on the west bank of the river, but would carry them through to the lake ports." Naturally the longer haul would mean more money for the railroads.

Purchase of Canals etc.: The Mahoning Railway Company purchased the Ohio and Pennsylvania Canal of Ohio and then raised the tolls so high as to make boating unprofitable. (Census 1880, Vol. IV, P. 30) Further, Cullom Report, II:507, "All the canals of any consequence in the United States, except the Erie Canal, are now owned and controlled by railroads."

Exhaustion of supply of commodities formerly shipped extensively by water routes: From Fairlie, New York Canals, in Quart. Jour. of Econ., 1900 Pages 219-220: "The New York Forests have long since been denuded; and in recent years the Michigan supply has fallen off, and with it the Lake lumber business." Again, "Iron ore was once an important traffic in New York canals, but the relatively small output of the Lake Champlain mines since the development of the vast deposits of ore along Lake Superior has resulted in a great falling off in such traffic on the canals of New York."
(According to the Report of the Nat'l Waterways Commission in 1909, Page 70. this traffic, although diminished, was still considerable, however.)

Inadequacy of water lines: From Moulton, Waterways vs Railways, Hart, Schaffner and Marx, Prize Economic Essay, Page 78:

"It cannot be denied that one of the reasons for the failure of water traffic to increase in the United States of late has been the inadequate development of water lines. Many of the old canals are of insufficient depth to be of any importance in modern transportation. Other canals have been neglected and allowed to fill up with silt, while the wharves have rotted away away for want of repairs. Again, some of our canals are poorly located, 'beginning nowhere and ending nowhere,' as has been very well said. These cannot play an important part as carriers of traffic. It is an essential that water lines should connect with the important routes of traffic.

"Many of our rivers are ill adapted to navigation on account of the existence of snags, sandbars, shifting channels, and alternating high and low water. The non-uniformity of depth, and the absence of connecting links between important water routes, have likewise been serious handicaps to the development of water traffic." [On the other hand the Hudson River has none of these handicaps, yet its traffic has decreased to an insignificant amount, as compared with the railroad traffic, and the Erie Canal as well as the channell on the Mississippi River below Cairo etc. all have a greater depth than most of the inland waterways of Europe which have an extensive traffic. This is therefore only a partial reason for the decline.]

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Decline of Water Traffic:

Speed of delivery, insurance, damage: "Unless the grain is perfectly dry, it is liable to heat when carried for long distances in so large a mass as is necessary when it is loaded into the holds of ships or barges. The same consideration prevents the extensive shipping of grain by boat in France, even though the distances there are much shorter than in the United States.

"In the case of flour, these considerations are still more important. Expeditious delivery of flour is a very frequent demand of shippers, and barrels of flour are often broken open if rough weather is encountered on the Lakes. It is worthy of attention---that when a cargo is delivered to a railway company, the company assumes the responsibility and guarantees a safe and reasonably speedy delivery. IT issues the shipper a bill of lading, which is a merchantable or bankable paper, and almost absolutely protects him against loss of any kind. On the contrary, if he ships by water he receives a mere receipt for his goods, and must go to the expense and trouble of having his cargo insured. This point of itself is very often sufficient to lead the shipper to choose the rail route without further consideration." (Moulton, 89)

Control of terminal facilities: From the Report of the U.S. Commissioner of Corporations, Part III: In Philadelphia "the attitude of the railroads as to their frontage holdings has been highly exclusive and adverse to general water traffic. Railroads, as a rule, refuse any use of their piers for freight not going over their particular lines and oppose independent lighterage. Thus lighters cannot come to a railroad pier to get freight for independent water or rail lines." (Report, Page 10) The city of Milwaukee "owns no frontage of commercial importance. The 7 railroads own a large portion and much also is held by industrials, especially coal companies." (Ibid, 23) In Buffalo "about half of the active river frontage is owned by railroads, with some small holdings by water lines. Of the five miles on the two sides of the City Ship Canal, four miles are owned by railroads. On the Lake front the total frontage protected by breakwaters is about four miles, of which railroads own three, subject to some dispute as to title. The city owns about three-fourths of a mile, but with the exception of two blocks, practically none of its frontage can be reached without crossing railroad property." Ibid, 25)

Purchases of Canals:

Through Railway Lines: National Waterways Commission, Document 11:48---"The building of railroads west of the Mississippir River brought that vast territory almost completely into subjection to rail transportation. By 1879, seven-eighths of the surplus products of the trans-Mississippi States north of Arkansas crossed the Mississippi River on railways at St. Louis, or between that city and St. Paul, and were transported east to local or foreign markets. Only 608,555 tons were carried south by river in 1878, as compared with 4,583,844 tons moved east by rail by way of St. Louis and points north, from the territory west of the Mississippi."

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Trans-shipments: As far as the Ohio River is concerned "with the exception of coal,and to a slight extent lumber,commerce is now confined to short-distance movements between local points. In spite of the fact that along the Ohio River between Pittsburgh and Cairo there are forty railway crossings,or terminals,this traffic reaches but a few miles from the river bank. Traffic requiring transfer and a rail haul for any considerable distance no longer makes use of the river,but is handled the entire distance by rail." (Nat'l Waterways Com. Doc.11:48)

The reason why there is a flourishing coal traffic business on the Ohio River is explained by the National Waterways Commission,Doc.11,page 69 as follows: "Coal can be loaded direct from the mines into the barges and can then be transported without any handling to its destination,which is the river steam-boat, the ocean-going steamship,the sugar plantation on the bay,or the railway coal-yards on the river bank. In other words,the Mississippi system can at present handle traffic successfully which begins and ends within its banks,but tr affic requiring transfer to the railways at any point on its course will have a tendency to resort to the railways for the entire distance." Again,Ibid,39: "The diversion of commerce from the river to rail at St.Louis was aided by the fact that in river traffic transfers were necessary at this point. Because of the shallowness of the upper river,vessels of much less draft operate above the city than below. Because of this break in shipment,the railways found their opportunity to step in and take the business."

Industrial Commission,Vol.19: 434 ff.:

"Competition of artificial waterways or canals has played a very important part in the regulation of rail rates,especially in the early period of our history. It is indisputable that the Erie Canal,for example,operated to reduce rates upon the great trunk lines for many years. This condition was clearly evidenced by the testimony in 1874 before the select Congressional Committee on Transportation Routes to the Seaboard. Since this time a mighty change has taken place in the relations between the two modes of carriage.------Improvements vast in their scope and character have ensued in respect of transportation by rail. The canal boat,on the other hand,remains very much as it was in the heyday of such carriage fifty years ago. The declining importance of canals as regulators of freight rates is evidenced clearly in two ways. In the first place,the unprofitableness of the business, upon the Erie Canl in particular,is shown by the decline in the number of boats. Only four new boats were constructed in 1899, sixteen in 1897,and 12 in 1896. Secondly,the declining importance, importance of water competition is shown in the reduction of the proportion of traffic carried,even of the lower grade. In 1898 the N.Y.Central and Erie Railroads carried 46,000,000 tons of freight,as against 2,300,000 on the Erie Canal. Boats did not exist to carry

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any larger proportion than this,and this small fraction going bywater was in reality diverted from the roads because they did not care for it. The bulk of the canal traffic consists of lumber,ice,stone,lime,and coal. Less than ten per cent in 1899, and in 1900 less than eight per cent of the flour and grain received at New York came by this route. The decline has been forcibly illustrated by the reports of the New York State Committee on Canals of 1899,and of the New York Commerce Commission of 1900. Canal competition,in short,has ceased to be effective. The statement of Mr.Carnegie before the Pittsburgh Chamber of Commerce in 1898 is significant in this connection:

" ' Such has been the progress of railway development that if we had a canal to-day from Lake Erie through the Ohio Valley, free of toll,we could not afford to put boats on it. It is cheaper to-day to transfer the ore to fifty-ton cars and bring it to our works at Pittsburgh over our railway,than it would be to bring it by canal.'

"The lowest estimate of the cost of transporting grain from Buffalo to New York is ~~1x8~~x 1.75 mills per ton-mile. This, it will be noted,is largely in excess of the figures cited for the cost of railroad operation under the most favorable circumstances on standard routes,as given in an earlier part of this report. And,finally,we have the specific testimony of the chairman of the railroad grain committee at Buffalo before the Interstate Commerce Commission in 1900. Here it was clearly shown that the canal was ineffective under present conditions,such as size and speed of boats,either in carrying traffic or in making rates, and that canal rates were now made in accordance with those made by the railroad companies. Competition has entirely outdistanced any possible scale of charges upon such canals as exist at the present time. ----------

"River Competition."

"River competition should be considered in two classes,according to its importance. Traffic upon the Ohio and Mississippi obviously stands in a different class as respects competition with railroads,from that carried on the l ittle rivers throughout the South,for example. In respect to the first,the same phenomenon of decline in the number of boats and investment of capital may be observed upon the Mississippi as has been instanced upon the Erie Canal. This has been positively stated by witnesses before the Industrial Commission. It is significant of this change that the aggregate tonnage forwarded from St.Louis in 1880 by water was 1,037,000 tons,while in 1900 it was only 245,000 tons. Some slight improvement has been witnessed since 1890,but no approximation to the former magnitude is apparent. This decline of the Mississippi River traffic is primarily due to the fact that it has been paralleled upon both sides by easy-grade railroads operating with huge trainloads at a minimum of cost. To be sure,for many kinds of freight river steamers can underbid their competitors,particularly at local points; but,on the other hand,insurance charges,risk of damages from water,or in loading,together with other disabilities,have greatly hampered the boats in competition. The increasing uncertainty of the river itself,due to artificial drainage and the cutting of

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our forests,is also a factor,inasmuch as capital investment must oftentimes remain inactive for several months at a time. A peculiar feature of this competition also is,as alleged by the river men,that the railroads can afford to take traffic at unduly low rates at competitive points and recoup themselves by high charges at local inland stations. This line of action is not open to the steamers,it is alleged,because none of their local points is noncompetitive as in the case of the railroads. Some other steamer is always free to touch at a local point. The consequence is that the long and short haul principle must,in the nature of the case,be more generally observed by the river boats,yielding a distinct advantage to the carriers by rail where they engage in competition.

"The only exception to the decline of importance of the great rivers as rail regulators is found in the case of the Ohio and Mississippi in respect of transportation of ore,lumber,and coal. It is unquestionable that when coal can be carried from Pittsburgh to New Orleans,2,000 miles,at $1 a ton-that is to say,less than half a mill a ton mile-the railroads are prevented from engaging in competition,and the magnitude of this traffic down-river in low-grade freight is undoubtedly increasing at the present time. Where it exists it must be reckoned as a factor in the determination of the rates which the railroads may charge.

"Entirely distinct from the water competition on the Mississippi and Ohio is competition upon the smaller rivers,which, for example,penetrate the Southern States through and through. It is important to bear this in mind because the persistent violation of the long and short haul clause by the railroads in the Southern States has been justified on the ground of the existence of competition of this kind. Extended examination by an agent of the Industrial Commission,as well as consideration of the various reports and decisions of the Interstate Commerce Commission,tend to show that this water competition on the small rivers is practically of little effect. It does,of course,fix the minimum rate, but the steamers are so small and their service is so irregular, and the incidental risk of damage,cost for insurance,and other charges are so great,that the railroads practically control the business. Moreover,in many places it appears as if the steamboat lines were either owned by the railroads or by those operating in league with them,or else that a division of the business has been effected by which the little river steamers were accorded a certain proportion of the low-grade freight. These facts have been established in detail in the so-called Dawson Case before the Interstate Commerce Commission concerning the Chattahoochee River; on the Ocmulgee,at Macon,in the Griffin Case,as also in the Hawkinsville Case;at Montgomery in the Troy cases: and on the St.John's River at Palatka,Fla.,in the Hampton case. Many experiments have been tried to institute effective water competition with the roads at Nashville and Chattanooga,and yet we have the statement of a competent witness before the Senate Interstate Commerce Committee of 1897 that there is no more water competition there than in the Rocky Mountains. The conclusion is that the railroads with their improved facilities are enabled to put rates in force so low as to practically drive the water lines out of business. It is true,

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perhaps, that the latter are potentially of impotance-that is to say, their services fix the minimum rate which the roads may charge; but, on the other hand, their facilities are altogether inadequate to the transportation of any considerable volume of business, and they are constantly under threat of extinction by rate wars imposed by the railroads.

"Lake and Ocean Competition."

"The last two classes of water competition, namely, upon the Great Lakes and the ocean, seem to be more important than in the case either of rivers or canals. The reason for this is to be found in the fact that deep water enables an increase in the size of the boats and a corresponding decrease in the cost of service. It cannot be denied that the existence of a thousand vessels carrying ore from Lake Superior ports, or of the speedy and commodious steamers ply ing between Savannah and New Orleans and New York, fixes freight rates which the railroads are compelled to regard as final. On the other hand, some grades of freight will not go by water routes under any circumstances; and in the second place, and more important still, many of these lines, both upon the lakes and upon the coast, have been bought up and are now controlled either by single railroad lines or by a number of systems operating jointly. The ownership of boats on the lakes by all of the large railroad companies is a matter of public record. That such lines as the Old Dominion Steamship Company along the seacoast are also controlled through ownership of stock by a number of the trunk lines, has also been established by testimony before the Industrial Commission. Of course, even in such instances, tramp steamers may always come in to distrub the level of rates, but, on the other hand, year in and year out the effectiveness of such competition is probably less than it was a number of years ago."

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Decline of Water Traffic:

Tonnage carried by New York Canals, by the New York Central, and by the Erie Railroad from 1878 to 1892, showing the decline in canal traffic, from: New York State Constitutional Convention, 1894, Document 23, Canals of the State, pages 285-288 and 236:

Year	Canals	N.Y.Central	Erie R.R.
1878	5,171,320	7,695,413	6.150.568
1879	5,362,372	9,015,753	8.212.641
1880	6,457,566	10,533,038	8.715.892
1881	5,179,192	11,591,379	11.086.283
1882	5,467,423	11,330,393	11.895.238
1883	5,664,056	10,892,440	13.610.623
1884	5,009,488	10,212,418	16.219.598
1885	4,731,784	10,733,499	10.253.489
1886	5,293,982	12,636,435	18.668.235
1887	5,553,805	14,531,726	13.949.260
1888	4,942,948	15,162,812	15.174.009
1889	5,370,369	15,011,541	15.084.132
1890	5,246,102	16,108,441	16.269.656
1891	4,563,472	16,621,567	17.339.140
1892	4,281,995	20,721,752	18.334.716

Perhaps better yet is the following table showing the number of tons carried by N.Y.canals and railroads combined, and the percentage of the total carried by the canals alone, from: U.S.Treasury Dep't, Bureaun of Statistics, Canal Statistics, taken from Summary of Commerce and Finance for October, 1898, Page 1014:

Year	Tons carried by canals and railroads	% carried by canals
1878	19,017,301	27.19
1879	22,590,766	23.73
1880	25,706,586	25.12
1881	27,857,394	18.59
1882	28,693,054	19.05
1883	30,167,119	18.77
1884	26,293,844	19.05
1885	27,543,948	17.18
1886	31,168,744	16.98
1887	34,029,791	16.32
1888	26,244,610	18.83
1889	35,486,042	15.14
1890	37,624,199	13.94
1891	38,524,179	13.43
1892	43,618,569	9.82
1893	42,953,233	10.09
1894	37,916,412	10.24
1895	36,170,339	9.67
1896	43,756,051	8.49

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Decline of water traffic:

New boats, on New York State Canals from 1878 to 1892, from N.Y. State Const. Conv., 1894, Document 23, Page 359-360:

Year	New Boats	Year	New Boats
1878	300	1886	53
1879	382	1887	157
1880	439	1888	85
1881	368	1889	58
1882	93	1890	77
1883	76	1891	52
1884	60	1892	35
1885	34		

See here also page 9, six lines from bottom.

The number of tons of property moved on all New York State canals dropped from 6,457,656 in 1880 to 3,617,804 in 1897. (Canal Statistics, 1011)

Tons of freight carried to tide-water (Hudson R.) on N.Y. Canals (the Erie and Champlain canals) from: Canal Statistics, 1008 and Document 23 (supra) pages 296-297:

Year	Tons	Year	Tons
1878	3,637,101	1888	2,584,661
1879	3,286,176	1889	2,623,836
1880	4,067,402	1890	3,024,765
1881	3,065,839	1891	2,286,855
1882	3,068,152	1892	2,336,519
1883	2,892,176	1893	2,565,845
1884	2,900,788	1894	2,256,895
1885	2,715,219	1895	1,603,745
1886	3,215,177	1896	2,073,378
1887	3,158,923	1897	1,878,218

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B I B L I O G R A P H Y .

DECLINE OF CANAL AND RIVER TRAFFIC.

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