

Harlem River a Vital Link in Coordination of Local Waterways

Improvements for the Stream Are One of Chief Essentials in Full Development of New York's Harbor Facilities—Harlem's Traffic, Despite Present Obstructions, Equals That of Many Seaports—Newtown Creek Another Important Tributary

THE port of Greater New York is now in a fair way to become coordinated in its several natural advantages, thanks to the dynamic efforts of the Commissioner of Docks, Murray Hulbert. Likewise the port of New York, in its still larger sense, is going to be before long what its physical features have destined it to be, because the authorities of neighboring New Jersey are alive to the fact that our mutual heritage of a wealth of waterways can give the fullest measure of common benefit only through cooperation, collaboration, in all that concerns the most momentous of our national harbors.

Simply because we have water on all sides of us here the man in the street has generally grown to think that the North and the East rivers would satisfy every demand of commerce and provide all essential lines of communication afloat. Simply because erosive glaciers, strong tidal

local traffic; but even so the movement of freight on the Harlem River for the calendar year of 1917 was worth four times that of the foreign trade of the capital port of Massachusetts.

Greater New York? Specific figures cannot be given because too many speculative elements are involved, but it is safe to say that the commodities that would travel through the Harlem River under pettered conditions would be many times greater in amount than at present. Within the past week it has been disclosed that 100 manufacturers desire to locate on that stream when shipping conditions warrant them in so doing; and these known enterprises are in all likelihood only a small part of the industries that would be attracted to the Bronx if the Harlem River had a deep, wide and reasonably straight channel from end to end.

Putnam Bridge and the Hudson River. It is also essential that the New York Central Railroad bridge, at Spuyten Duyvil, which now is so low that it is hardly possible for row-boat to pass under, should be remodelled. The Deputy Chief Engineer of the Department of Docks has declared the railroad bridge to be a positive barrier to navigation. A structure that will facilitate the passage of large craft is needed in its stead.

Twice Baltimore's Commerce.

During the same year the record for Baltimore was as follows:

Foreign-Cargoes	Short Tons	Value
Imports	1,822,532	\$2,953,173
Exports	2,749,479	\$7,633,900
Canadian exports	171,179	\$1,992,021
Coastwise and domestic	1,167,421	\$4,007,900
Totals	14,968,585	\$61,618,904

Bronx Nation's Sixth City.

Even as it is, that water route has drawn to its shores and near by an immense population and manifold activities, as the movement of freight on its course clearly indicates. If the Bronx were a separate municipality, its present population would entitle it to rank sixth among our big cities; and its future as an integral part of Greater New York is inevitably going to be linked closely with the development of the Harlem River, which can be effected at a comparatively modest outlay.

Apart from certain dredging which has been under way, very little has yet been done to bring the waterway up to date and nothing has been carried through looking to the removal of three serious obstacles that stand squarely in the way of the passage of really sizable vessels travelling from the Hudson River to the East River and vice versa. Five years ago, when Gen. William M. Black—now Chief of Engineers—was in charge of rivers and harbors work in this district, he reported:

"At High Bridge, the channel is obstructed by the bridge piers, the horizontal clearance between which is reduced to about 44 feet at mean low water. Also the cross sectional area of the channel is greatly reduced by the foundations of four of the piers, which lie entirely within channel



NEWTOWN CREEK LOOKING SOUTHWEST FROM VERNON AVE. BRIDGE.

currents and the passing of time have scored deep passages for shipping along parts of both shores of Manhattan the layman has come to believe that Nature's processes have done quite enough for the local needs of water borne traffic. As a matter of fact, Nature, while dealing somewhat lavishly in this respect in some directions, has handicapped us, yes, tantalized us, in others, where she has failed to complete the channels which, had she been so kind as to make them a part of a potentially marvellous system of navigable highways.



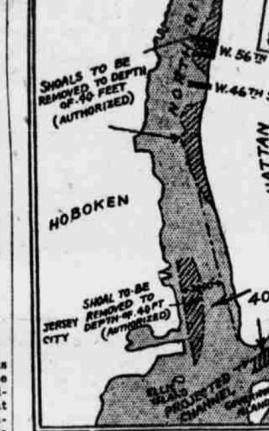
HARLEM RIVER LOOKING NORTHWEST FROM 3RD AVE. BRIDGE.

New York Is Muscle Bound.

The burden is upon the dwellers in all five of our boroughs to leave no stone unturned to bring about the early coordination of our several shipping lanes, thus opening easy avenues to and from all of our industries and to amplify the areas within which our multiple businesses may expand and which otherwise would be cramped and drawn without adding to the cost of living. In a productive sense Greater New York has become akin to a muscle bound giant.

River and bay during the calendar year of 1917 amounted to 23,721,773 short tons valued at \$1,945,965,938—a superiority for that vast industrial region of only \$157,434,714. As a matter of fact the Harlem River actually exceeded the traffic confined to Philadelphia harbor by \$68,381,956.

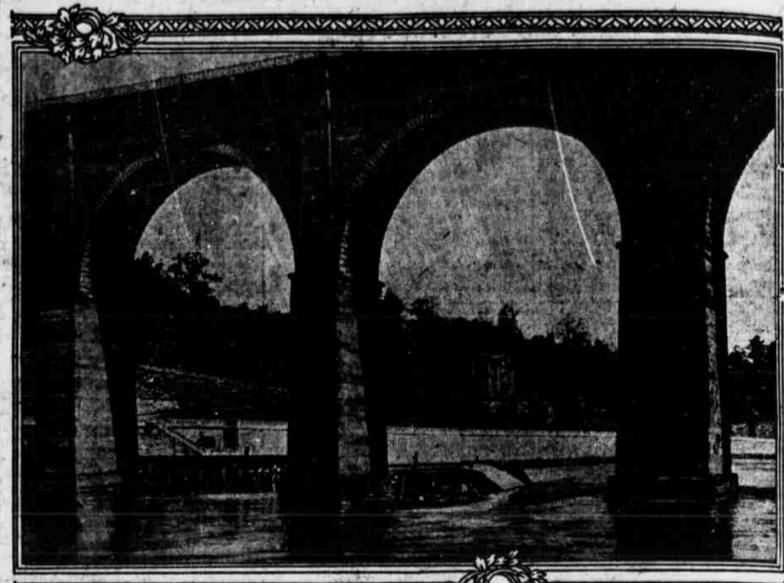
limits, with their longest dimensions at an angle with the direction of the current. These conditions cause eddies and high current velocities at certain stages of the tide, thereby rendering navigation through the eridge channel extremely hazardous for all but the smaller craft."



THE NEED OF DEEPENING AND STRAIGHTENING OUT THE CHANNEL OF THE HARLEM RIVER IS WELL KNOWN TO ALL WHO RECOGNIZE IT AS THE VITAL LINK BETWEEN THE HUDSON RIVER AND THE EAST RIVER IN THE DEVELOPMENT OF BARGE CANAL TRAFFIC. THIS LINE OF MOVEMENT WILL ULTIMATELY LEAVE THE NORTH RIVER CLEAR FOR THE GREAT TRANS-ATLANTIC LINES AND THE LIGHTER SERVICE OF CONNECTION WITH THEM. IMPROVEMENTS URGED, AUTHORIZED, OR UNDERWAY.

By the Johnson Iron Works, near the Hudson River outlet. Though the channel at that part of the Harlem River is in a fair navigable condition as to width and depth the turn abreast of the foundry is so sharp as to make the passage difficult and, under certain conditions, dangerous.

Another subsidiary waterway tributary to this port of ours is Newtown Creek, which is a tidal arm of the East River and forms the boundary between the boroughs of Brooklyn and Queens. The mouth of the creek is nearly opposite Thirty-fourth street, Manhattan, and four miles northeast of the Battery. Its length is about four miles and its width varies from 125 feet to 200 feet. The creek drains an area of approximately seven square miles.



THE HARLEM RIVER AT HIGH BRIDGE SHOWING THE CENTRAL CHANNEL PARTLY BLOCKED BY A SUNKEN BARGE. SOME OF THE PIERS OF THIS BRIDGE MUST BE REMOVED TO PROVIDE AN AMPLE PASSAGEWAY FOR THE INCREASED TRAFFIC.

Cutting the Point Authorized.

The rivers and harbors acts of March 3, 1909, and March 4, 1918, authorize the straightening of the channel at the Johnson Iron Works, and the act of March 4, 1915, provides for the cession to the State of New York of the land occupied by the present channel after a new channel has been cut. It is now up to the city of New York to take the necessary steps to acquire the land in question so that the army engineers can proceed to make the authorized excavation.

Finally, the Bronx Kills must be dredged sufficiently to insure a depth of fifteen feet of water at mean low tide.

With these various improvements completed, it will be possible for vessels of considerable size to use the Harlem River as a short cut when bound from the East River north on the Hudson, and vice versa. That is to say, traffic via the State Barge Canal thus can reach or leave terminal points on the East River and avoid that section of the North River which is inevitably bound to become more and more frequented by great ocean-going ships in various sorts, where barge traffic would imperil the free movement of these big craft and invite disaster to the canal boats. In short, the Harlem River is logically destined to become a ship canal which will facilitate the passage of steamships, drawing not more than fifteen feet of water, from the Hudson north or seaward by way of Long Island Sound, or the reverse.

The East River entrance to the Harlem River is eight and a half miles north of the Battery, while the Hudson River entrance to that stream is thirteen and a half miles north of the

Battery. To-day river boats and canal barges loaded with freight at points contiguous to the Hudson River—not to mention craft coming from further up State—must pass down the North River, around the Battery and up the East River, a distance of twenty-odd miles. The run from end to end of the Harlem River and Spuyten Duyvil Creek is a matter of not more than eight miles. As a question of economy of effort and a saving in time, fuel and expense, the complete modernizing of the Harlem River is a pressing one.

freight, valued at \$1,564,150; in the Rock Island district, 188,420 tons, valued at \$16,736,724; in the St. Louis district, 238,248 tons, valued at \$11,401,644, and St. Louis to New Orleans, 3,426,869 tons, value not given. The total tonnage was 4,582,318 tons. If we allow an average value of \$40 a ton for the St. Louis-New Orleans freight we shall have a total of \$170,171,778. According to Commissioner Hulbert: "During the same period the total tonnage carried on Newtown Creek was 5,215,320 tons of the value of \$294,701,789." Thus, within two inconspicuous waterways here in our very midst we now move annually an amazing amount of freight worth considerably more than the combined tonnage of Philadelphia and the Delaware River points right down to the Atlantic outlet.

At its last session Congress appropriated \$205,000 for the improvement of Newtown Creek. This sum is designed to provide a channel 18 feet deep at mean low water and 435 feet wide from the mouth to the head of navigation, a distance of about 2.5 miles. Under ordinary conditions the average range of tides is about 4 feet, the spring tides having a rise and fall of 4.8 feet, while storm tides sometimes reach a difference of 10 feet between high and low water.

Used to Be Wider.

Back in 1857 the creek varied in width from 140 feet to 1,200 feet, but these contours have been modified since by the building of piers and the dredging of slips as occasion required. In carrying out the program now proposed as it now stands it will be necessary to readjust property rights between the city and private owners, and it is important that this be effected with dispatch so that the dredging can follow the determined lines and certain structural work can be pushed to completion. The dredging where already increased have made the flanking landings accessible to bigger vessels carrying larger cargoes than heretofore, and this has resulted in measurably reducing the previous schedules of freight rates.

At the present time the State authorities are endeavoring to establish a Barge Canal terminal, and this potentially adds much to the economic value of this waterway. While it is true that barges, some schooners and kindred smaller craft are the principal users of Newtown Creek, still they move, as it were, an enormous amount of freight in the course of a single year. With the completion of the dredging it will be possible for sizable steamers to go right up to the docks instead of loading and unloading outside by means of lighters.

Figures Prove Newtown's Case.

A short while back Commissioner Hulbert compiled for the Merchants Association of New York comparative data covering the tonnage on Newtown Creek for 1917 and the similar traffic on the Mississippi within the important districts of St. Paul, Rock Island, St. Louis and New Orleans. According to his figures, to quote from "Greater New York":

"In the St. Paul district there were carried during 1917 277,281 tons of

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More Sorrow Than Joy in Stage Stars' Favorite Roles

Parts Which Players Like Best to Interpret Often Prove Least Suitable to Their Talents—Some of Their Interesting Experiences

ALMOST every player has a favorite role. That is only natural. But it is curious to note that the part the actor likes to interpret is not necessarily the performance the public applauds.

Nat Goodwin gained fame and fortune as a comedian. In 1875 he presented a vaudeville sketch at Tony Pastor's. In 1877 he joined E. E. Rice's company and appeared in "Evangelina." After that came a series of successes in farce comedies, including "A Gold Mine," "The Nominee," "A Gilded Fool" and "In Mizoura." But his friends and associates often heard him express a desire to play the part of David Garrick. In 1895 he realized this ambition, enacting the role at Miner's Fifth Avenue Theatre. The venture was severely condemned, so Goodwin decided that discretion was the better part of valor and reappeared in "An American Citizen."

part, and as Charles Frohman had provided an elaborate production and had secured a splendid support, including William Faversham and James K. Hackett, people went to see the play because of their interest in the play-ers. But Miss Adams's Peter Fawcett long be remembered, whereas her Juliet has long been forgotten. Miss Adams has filled successful engagements in Barrie's "Quality Street," "What Every Woman Knows" and "A Kiss for Cinderella," but she admits still having a tender spot in her heart for Shakespeare's unhappy heroine.

Irving's Disappointment.

Henry Irving established his reputation in farce comedies, and it was only after patient waiting that he was permitted to play serious roles for which he was by nature better fitted. His great success came with melodramatic pieces, such as "The Bells," and year after year his prestige increased in these characterizations. He developed eccentricities of attitude and inflection. These mannerisms were, however, overlooked in "Charles I." and "Richelieu." But Irving was especially anxious to appear as Hamlet, and in 1874 he realized this ambition and played the part at the Lyceum Theatre, London.

Oscar Wilde as "funny, without being vulgar."

So Tree returned to eccentric make-up as *Evening* in "Tribby," as *Bottom* in "A Midsummer Night's Dream," as *Rip* in "Rip Van Winkle," as *Sakuri* in "The Darling of the Gods," as *Collin* in "The Tempest," and as *Robin* in "Oliver Twist," almost outdoing himself as *Nero* and *Mephistopheles*. In England and in the United States, Tree appeared in various revivals, but "Hamlet" was never resurrected. Nevertheless, the role remained a favorite with the noted actor-manager, and in private remarks and public speeches he often quoted the Melancholy Dane.

Ada Rehan was born in Limerick, Ireland, was educated in Brooklyn, N. Y., and made her stage debut in Newark, N. J. In 1875 she joined John Drew's stock company at the Arch Street Theatre, Philadelphia, where she played a great variety of parts. In 1879 she joined Augustin Daly's stock company, in New York, remaining with that organization until Mr. Daly's death in 1899, during which period she played more than two hundred parts, in comedies, tragedies, farces and melodramas, her Shakespearean interpretations including *Rosalind* in "As You Like It," *Katherine* in "The Taming of the Shrew," *Cordelia* in "King Lear," *Viola* in "Twelfth Night," *Miranda* in "The Tempest" and *Portia* in "The Merchant of Venice."

beauty and her melodious singing soon attracted attention and she played prominent parts in "Patience" and "The Sorcerer." In 1889 she went to the Casino and secured the leading roles in such comic operas as "Nadgy," "The Brigands," "The Grand Duchess," "Poor Jonathan," "La Cigale," "The Mountebanks," "Gloire-Gloire," "The Princess Nicotine," "Le Percheur," "Le Taiguan," "The Cuckoo," "The Duke and the Duke," "An American Beauty," "The Wedding Day," "La Belle Helene" and "Ermeline."

A Great Industrial Centre.

The principal items handled in the course of a year are: Coal and other fuel, petroleum and its products, crushed stone, gravel, sand, cement, copper ore and copper, bricks, lumber and various building materials. The Newtown Creek region is among the greatest of the nation's industrial centres, and manufacturing concerns are gathering there rapidly from season to season. As the figures show, the value of the tonnage floated upon the stream during 1917 exceeded by nearly \$90,000,000 the exports of the port of Boston during that twelvemonth. It has been commonly supposed that the principal industry interested in the development of Newtown Creek was that of oil refining. This is by no means the case, because one large copper company located there receives and ships over that waterway annually in the neighborhood of \$200,000,000 worth of that metal in one form or another.

The Harlem's Busy Commerce.

Despite the fact that traffic through the Harlem River is still the heaviest, especially by way of the East River entrance, is of a volume that would make many of our seaports proud if their individual commerce reached similar proportions. The following figures are from the last annual report of the chief of engineers of the United States army and these commercial statistics relating to freight traffic on the Harlem River reveal an economic importance of robust magnitude.

Imports-Cargoes	Short Tons	Value
Imports	1,822,532	\$2,953,173
Exports	2,749,479	\$7,633,900
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Nevertheless while he was appearing in "Nathan Hale" and "The Cowboy and the Lady" he dreamed another dream, so he studied the lines of *Shylock*, finally playing the part in 1901 at the Knickerbocker Theatre. Again the critics criticised, and the purport of their paragraphs was that a shoe-maker should stick to his last and a comedian should stick to his comedy. So he went back to revivals of his earlier pieces and finally appeared in the role of *Shylock*. During the run of this farce Goodwin was heard to remark that *Shylock* was his favorite role and he hoped to play the part once more.

Mr. Hanson's invention was made public at the recent meeting of the Second Pan-American Aeronautical Convention in Atlantic City, when Mr. Hanson entertained the convention with "canned music," which they heard through receivers after affixing the metal clips to the metal parts of their seats. The music box was in another part of the building. The young engineer explained that he perfected the device for the benefit of wounded soldiers in the hospitals. Hereafter, except in the convalescent wards, it has not been possible for the soldiers always to have phonographs or music boxes playing, because sometimes the noise disturbs the seriously ill. And then again, even in the wards where it was possible, not all of the men would care to listen to the particular piece being played.

Miss Rehan's associates in this celebrated organization often heard her say, especially the latter years, and the results were excellent. The phonograph was installed in a part of the hospital building where it could not possibly be heard by any one, and then each bed in a particular ward was fitted with the apparatus. Then the names of the various selections were announced, and played, and any soldier who cared to listen to any special piece simply made his connection with the metal clip and the metal part of his bed, and the music was heard in his ear and listened. If he didn't care to hear the music, he didn't make the connection. The thing was such a success at Walter Reed that it is likely the War Department will install the apparatus in other hospitals. It would work just the same, of course, with stories and newspaper articles, or anything else of that sort, spoken into a small hand transmitter attached to the switch-board of the apparatus.

Lillian Russell's Triumph.

Lillian Russell made her stage debut in 1877. After being in the chorus of E. E. Rice's production of "H. M. S. Pinafore," she appeared at Tony Pastor's Music Hall. Her remarkable

the modernizing of the Harlem River, the deepening of Bronx Kill and the completion of the 40-foot channel through Hell Gate are going to rationalize the usefulness of our local waterways. Shipping will no longer be limited to the roundabout passages of the Hudson and the Bronx and will have a direct route to reach the sea—either by Long Island Sound or down through the East River and out via Ambrose Channel to the Atlantic Ocean.

This amplifying of our lines of water approach will admit a tremendous expansion of our waterfront and make conveniently available to many thousands of factories and other plants wide areas and shores which are now undesirable because of their comparative inaccessibility. Similarly, the waterway will become a source of profit or a handsome revenue, and because of the logical coordination of all contiguous navigable routes,

Accustomed as we have grown of late to talk in terms of millions and hundreds of millions, perhaps the foregoing totals may not alone suffice to bring out the real claim to recognition which belongs rightfully to the Harlem River. Therefore some comparisons of the traffic of certain of our great seaports will serve to put this local stream in its true light. According to data compiled from statistics and records of the year 1917, the value of the exports of that port amounted to \$205,967,901 and the imports were \$229,402,074—giving a total of \$435,369,975. To be exact, these figures do not include domestic, coastwise and

"Toward the end of his days, after various productions had failed to attract, Irving remarked rather bitterly: "The public did not want my Hamlet, so I gave them 'Don Quixote' and 'Robespierre,' 'Peter the Great' and 'Dante!' But the public does not want these, either! I don't know what the public wants! I don't believe it knows itself! I would like to revive 'Hamlet!' But he never did so."

Tree's Experience as "Hamlet."

Berthom Tree followed in Henry Irving's footsteps. He was in his early experience associated with farce comedies, appearing in "Jollyboy's Work," "A Cruise to China," "H. D.," and "Where's the Cat?" He made a great hit in "The Private Secretary,"

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