



THE
ERIE CANAL
CENTENNIAL CELEBRATION

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ERIE CANAL
CENTENNIAL
CELEBRATION





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"THE MARRIAGE OF THE WATERS"

A mural decoration in the DeWitt Clinton High School New York, showing a scene connected with the ceremony of opening

STATE OF NEW YORK

THE
ERIE CANAL
CENTENNIAL CELEBRATION

1926

*New York (State) Erie canal
centennial commission*

THE FINAL REPORT OF THE ERIE CANAL CENTENNIAL
COMMISSION SUBMITTED TO THE GOVERNOR AND THE
LEGISLATURE JANUARY, NINETEEN TWENTY-EIGHT



ALBANY
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THE ERIE CANAL CENTENNIAL COMMISSION

Chapter 233, Laws of 1924

Chapter 432, Laws of 1925

Chapter 778, Laws of 1926

Chapter 570, Laws of 1927

Chairman, GEORGE CLINTON, Buffalo

First Vice-Chairman, WILLIAM J. ROCHE, Troy

Second Vice-Chairman, HENRY MOSKOWITZ, New York

WILLIAM J. HICKEY, Buffalo

THOMAS C. BROWN, Schenectady

PERLEY A. PITCHER, Watertown

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JOHN J. HOWARD, Brooklyn

General Secretary, ALFRED M. O'NEILL

Assistant Secretary, FRANCIS DORAN DULIN



Alfred Smith

Governor of the State of New York

REPORT

STATE OF NEW YORK:
ERIE CANAL CENTENNIAL COMMISSION,
ALBANY

To the Honorable

The Governor of the State of New York,

The President of the Senate, and

The Speaker of the Assembly:

SIRS:

THE undersigned Commission appointed pursuant to law to prepare plans for and conduct a celebration of the centennial of the completion and opening to commerce of the original Erie Canal, respectfully submits its report as required by the statute.

The Commission was constituted under the provisions of chapter 233 of the Laws of 1924. Section 2 of that act defined its functions as follows:

§ 2. Such commission shall arrange preliminary details, devise ways and means and adopt plans for the proper celebration in the year nineteen hundred and twenty-five of the centennial of the opening of the old Erie Canal. Such commission shall so plan and arrange such celebration that it will be not only a memorial of a great historical event, but the occasion for forcefully bringing to the minds of the business world the benefits to be accrued from a wider and larger use of the canal as a means of transportation. The commission shall make a report of its proceedings to the legislature and to the governor not later than the first day of March, nineteen hundred and twenty-five.

An appropriation of \$10,000 was provided. Much time was devoted by the Commission to the preparation in detail of plans for the celebration and report was duly made to the Governor and the Legislature in February, 1925.

In 1925 the original act was amended (chapter 432) by postponing the celebration until 1926, and the unexpended balance of the appropriation was continued in the General Appropriations Act.

In 1926, by chapter 778, the Commission was continued for the following purposes: To hold and conduct during the year 1926 a celebration of the canal centennial, to consist of such exer-

cises, ceremonies and other events as might be proper in the judgment of the Commission to commemorate a great historic event and to call to the attention of the business world the transportation facilities afforded by the Barge Canal system, such celebration to be held at the cities of New York and Buffalo. The Commission was given an appropriation of \$25,000 with which to prepare for and conduct the celebration.

PROCEEDINGS OF THE COMMISSION

Upon the passage of the act above mentioned, the Commission at once took up the work of carrying out the intention of the statute. To accomplish this purpose, it communicated with the authorities of the two cities and secured their assistance, the city of Buffalo providing an appropriation of \$10,000 to aid and extend the celebration in that community. The project was presented to all commercial, civic and historical organizations. In both cities we met with ready response and active cooperation.

CANAL OPENING AN HISTORIC EVENT

At public meetings in New York and Buffalo and through the medium of the public press, the Commission emphasized the great benefits which had inured not only to the State of New York but to the Nation and world from the opening of the Erie Canal, and there were presented in concise but impressive form the outstanding historic facts of construction and advantages. As to the construction and opening of the canal we believe we succeeded in bringing particularly to public attention the following:

The Erie Canal is one of our oldest State institutions. Its opening in October, 1825, marked the beginning of a distinct era in the development of this State as well as of the whole Middle Atlantic and New England regions. It was an historic event of such far-reaching importance, forming as it did the foundation on which the prosperity and growth of our State has been built that it was most fitting its centennial should be commemorated with proper ceremonies.

The record made by the Erie Canal is well known. It is not the purpose of the Commission to make more than a passing reference to its accomplishments. We desire now merely to recall to the minds of the people the achievements of the men of a hundred years ago in establishing a water route from the west.

Aid from the Nation was denied, but the young State of New York courageously entered upon the project of providing a high-

way for commerce from the Great Lakes to the Sea — a task which in those days was a tremendous one, even for a great Nation. Engineering science was in its infancy and tools were primitive; but a way was blazed through the forest and the swamp; across rivers and valleys and over the plains. Our far seeing forefathers, broad of vision and stout of heart, enthusiastically entered upon the project and carried it through to a successful completion in the face of every obstacle. They began it in 1817 and finished it in 1825.

The Erie Canal brought the State of New York to the attention of the civilized world. It was declared in Europe to have been the greatest accomplishment of the new American Nation. It was said: "New York has built the longest canal in the world in the least time, with the least experience for the least money and to the greatest public benefit."

The benefits to the State and Nation were foreseen, and while those accruing to the world at large were perhaps not fully realized, they were recognized, and experience has proved that they were inestimable.

EARLY COMMERCIAL CONDITIONS

In Colonial times, during the Revolution and for a long time thereafter our great commercial city of New York was among the more backward of the colonial ports. There came, however, an improvement. The facilities of the harbor and of the great and navigable Hudson river began to bring trade. In the last half decade of the eighteenth century and the first few years of the nineteenth it assumed a more conspicuous place. Nevertheless, its export trade wavered, fell and did not recover its former proportions until some twenty years afterwards, or about 1825. During this interval, as the accumulated evidence of population and commercial statistics attests, there seems to have been something of a critical period experienced, as if the prize of supremacy were being held in abeyance. There was apparently a moderate retardation of growth and a cessation of development.

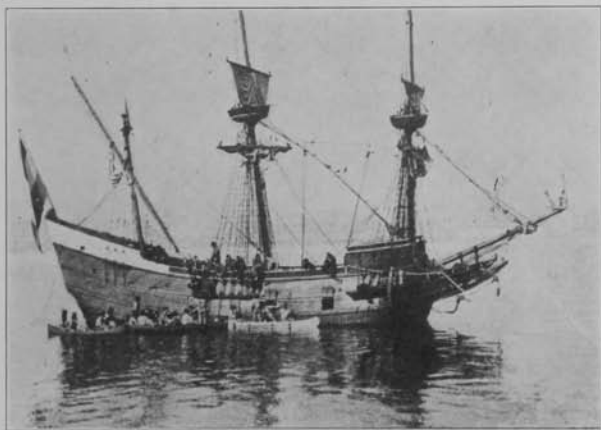
Corresponding with this period of stagnation, there was taking place a fundamental change in the character of our commerce. Figures giving the proportion of American carriage in foreign trade for exports show in 1826 practically ninety per cent., or more than in a long time previously, but more also than from that year to the present day. The carrying trade of the world, which had been almost a monopoly and the source of so much profit to American seamen, especially during the European wars, was rapidly passing from our grasp. It was then that many

thrifty ports which it had nourished, such as those along the New England coast, Newburyport, Salem and Portsmouth, became largely decadent. It was a period of changes and of new developments; for, as the foreign trade diminished, the coastwise trade began to increase, and, ~~more auspicious~~ than all else, at this juncture the internal trade of the Nation had its birth, came rapidly to the forefront and grew to be a most important element in the wealth, comfort and community of interests of the several States. Thus the particular advantages, which once had made cities and seaports, shrank into relative insignificance. Conditions were reversed. It was as though commerce had abandoned her old haunts and sought new ones and especially a site for a great metropolis, the requisites for that site being an ample harbor and a direct connection with the interior. Thus the introduction of new ruling elements into the commercial problem, and especially the rise of the internal trade in conjunction with the opportune building of the Erie Canal, made New York City the commercial capital of the Nation.

So great is the prominence of the change which we have thus depicted, that historians distinguish the year 1820 as the beginning of a new and glorious epoch in the annals of the City of New York. And they set down, as the great opening event, the building of the Erie Canal and its early operation, accompanied by the increase of commerce, the influx of aliens and, not the least of them all, the spread of democracy, first manifested in the metropolis through the demand for the convention of 1822 and the sweeping extension of the suffrage.

If further corroboration of the commercial changes which we have outlined were necessary, the evidence is not lacking, even from sources least disposed to exaggerate the glory of New York and the beneficence of her institutions. There was one famous rival port, that of Philadelphia, situated somewhat similarly in the middle States, liberally endowed by Nature and possessing prospects no less brilliant than those of our metropolis — probably far more promising in the eyes of our forefathers, the colonists — and that city was the one which had a population at the beginning of canal times exceeding that of our own seaboard city. Yet today New York has a population three times that of Philadelphia and a combined export and import trade far greater.

The value of shipments brought to tide-water on the New York canal was, by 1846, greater than the whole export trade of the State and more than one-half the combined trade of all the principal commercial States of the Union. This fact points first to the commencement and growth of the canal trade in the twenty years



THE HALF MOON

First boat sailing the Hudson river (1609)

of canal transportation and then to the upbuilding of New York's export trade during the same twenty years. It rose from a position of rivalry to one of complete supremacy.

It may be well to remark that there are some phases of the influence of the canal upon which we have not touched, or to which we have done but meagre justice. We have not delved into the specific instances of the rise of sudden and enduring prosperity through the effects of canal-building. We have not given a word to the political battles waged upon the issue of Internal Improvements, both in State and Nation,¹ and to the impetus afforded that issue everywhere by the success of the Erie Canal. We have scarcely hinted at the fact which statesmen and economists have continually averred during the last fifty years, that had the canal accomplished no direct benefits, its potential possibilities as a public carrier, managed in the interests of the public, have so conserved rates of shipment across the country as to render the waterway indispensable to the Nation. We have not studied the marked influence it has exerted on the cost of transportation over all the country extending from the interior of the Gulf States to the Saint Lawrence river, and from the great plains of the eastern foothills of the Rocky Mountains to the Atlantic Ocean. We have failed to consider numerous other influences resulting directly or indirectly from the Erie Canal and to fittingly develop those we have considered.

The canal is as vitally essential to the welfare of our people as it was acknowledged to be a hundred years ago. The strength of the popular sentiment in its favor through many vicissitudes is an established fact which cannot be ignored. This has been conclusively proven by the tremendous majorities registered in favor of canal development and improvement. In spite of periods of maladministration, through temporary reverses of fortune and amid partisan war-cries, the heart of this great commonwealth has never swayed so far that a reminder of the magnificent services of our historic waterway would not suffice to touch a chord of loyalty. Criticise and argue as we may, the abiding devotion of an intelligent and sovereign people amid the vexations of nearly a century is a splendid tribute. It is indeed the surest commendation, the safest human testimonial to the success, utility and importance of the object of their devotion, and an argument whose eloquence we certainly can not escape.

INFLUENCE OF CANAL ON STATE AND NATION

But the great waterway has well earned the praise and support of the people. This fact too is apparent — so apparent that he who runs may read. The world knows that the Erie Canal has been a tremendous agency in ranging our State in the forefront of the forces of civilization; that it stimulated the development of the frontier and built up a great industrial zone from east to west and drew unnumbered cargoes to our port and made that port the commercial metropolis of the New World. Like a magnet it attracted to its own shores the mightiest of the transcontinental railroads.

It extended our custom far and wide. It gave us the lead in the contest for the supremacy. It broadened us in the school of commercial intercourse. In fact, it made possible that imperial democracy — that Empire State — unique in the annals of the world.

But the Erie Canal exerted no mean effect upon the Nation. Its influence spread beyond and strove to efface our local boundaries and to make of the loose confederation of States and territories one united people. The opening of the canal marks the beginning and was largely the immediate cause of the epoch of emigration from the East and immigration into the West. It was also a signal for the sudden and portentous increase of alien immigration. Its value to the States bordering on the Great Lakes in promoting their development is not computable. It prevented trade from following down the St. Lawrence to an outlet in foreign territory. The canal became, indeed, the principal "Gateway to the Interior" — the great artery of inland travel — knitting together the thrifty East and the newly-developing West.

All this, which we see realized as we look around us, is a glorious eulogy on the genius and courage and beneficence of our forefathers, who discerned, in advance of their age, the canal on the one hand, and on the other, prosperous cities, "the desert blossoming as the rose," the invigoration of industry, the spread of knowledge, and the dissemination of happiness and plenty. The canal has indeed builded cities and peopled plains. But while the cities and the plains may pass away, the fruits of our education in the broad and humane school of commercial intercourse and the golden ties of kinship and union that it has knit about us will endure. When other memories fail, these forces will still keep alive countless reverberations of the influence of Our Grand Canal.



EARLIEST KNOWN VIEW OF NEW YORK HARBOR (1610)

THE ORIGINAL ERIE CANAL

The development of transportation in this country differed in its course but little from that of other lands. First, there was the highway through the wilderness, then the waterway and lastly the railroads. History shows that in the New World the use of highways and the water courses for travel was almost simultaneous.

As has been shown, New York State offered natural facilities for communication between the East and West in that the lowest gap in the Appalachian Chain between the Gulf of Mexico and the St. Lawrence existed here and the early pioneers found their way westward through it by means of the natural water courses. The early boats were of the batteau type and loaded with the household goods of the homeseekers were slowly poled along the shallow rivers and creeks, through the lakes, and laboriously carried over the divides.

The first attempt at waterway improvement seemed to have been in 1791 at Little Falls where a group of enterprising men including Philip Schuyler, Goldsbro'w Banyer and Elkanah Watson, organized under the name of the Western Inland Lake Navigation Company, constructed an artificial channel. It had the necessary locks for transferring the small boats of that period around the rapids of the Mohawk river, thus avoiding a carry of considerable length. The canal they built was nearly a mile long, cut for half its length through the solid rock. It had five locks with an aggregate lift of over forty-four feet. The building of those tiny locks did much toward setting the State of New York on its way toward the improvement of the entire route. It was the forerunner of the State's canal building. The venture was a successful one from an engineering point of view, but a financial failure, as boatmen generally preferred portaging to paying the tolls for lockage.

And it may be said in passing that one of those locks still remains. It lies there at Little Falls, half hidden between a railroad and a factory, neglected and in ruins with not a marker or a single word upon it to inform the passerby of the service it once rendered — of what it meant to the early pioneers and of the splendid part it played in our commercial history. It was in fact the first lock ever built in America.

In the closing days of the eighteenth century, agitation for inland waterway improvement was general along the Atlantic seaboard. Baltimore had dreams of future greatness and plans were being discussed for diversion of commerce to the Chesapeake.

In Pennsylvania a movement was well underway to construct a canal which would link Lake Erie with the Ohio river system and thence to the city of Philadelphia. But while Maryland and Pennsylvania discussed their projects, the men of New York acted, and the Erie Canal became an actual reality.

But the task was not easy of accomplishment. Opposition to the canal building scheme was vigorous and many men of that day predicted that the young State would be plunged into bankruptcy. The forward looking ideas prevailed and the building of the first canal was given official authority by the enactment by the Legislature on April 15, 1817, of chapter 262, whose preamble reads as follows:

"WHEREAS, navigable communication between lakes Erie and Champlain, and the Atlantic Ocean, by means of canals connected with the Hudson River, will promote agriculture, manufactures and commerce, mitigate the calamities of war, and enhance the blessings of peace, consolidate the union, and advance the prosperity and elevate the character of the United States: And WHEREAS it is the incumbent duty of the people of this State to avail themselves of the means which the Almighty has placed in their hands for the production of such signal, extensive and lasting benefits to the human race: *Now, therefore*, in full confidence that the Congress of the United States, and the States equally interested with this State in the commencement, prosecution and completion of those important works, will contribute their full proportion of the expense; and in order that adequate funds may be provided, and properly arranged and managed for the prosecution and completion of all the navigable communications contemplated by this act:—

"1. Be it enacted by the People of the State of New York, represented in Senate and Assembly, * * *

Looking back over the record of the years leading to the adoption of the State's inland waterway improvement policy, it is not possible to give to any single individual credit either for the conception of the idea or its actual accomplishment. Rather it was the result of the efforts of broadminded men of those days among whom may be mentioned prominently: Gouverneur Morris, Adgate, Williams, Watson, Livingstone, Barker, Christopher Colles (An Irish Engineer), George Clinton, first Governor of New York, General Philip Schuyler, Governor Dewitt Clinton, Peter B. Porter, William D. Ford, Cadwalader Colden, John Smith, Jesse Hawley, Joshua Forman, Thomas Eddy, Jonas Platt, Benjamin Wright, Cadwalader Colden, Jr., Stephen Van Rensselaer, George Tibbits, Martin Van Buren, Judge Yates, Colonel Young, Van Vechten, and others who took an active part in bringing to public attention the practicability and value of con-

necting the Great Lakes with the Atlantic Ocean by means of a canal, or in promoting the legislation leading to canal construction and the construction itself. All of these men are entitled to the highest credit for the tremendous work which placed our State in the first place among the Commonwealths of the country, and did so much to promote the comfort, prosperity and happiness, not alone of its own people, but of those of the adjoining States.

These illustrious men recognized the fact that New York's predominating asset was its waterways. What were New York's advantages before the canal was built? Its sea-coast was not extensive. It had no mines of coal or iron or other metal. There was no oil stored beneath its surface; but nature had provided us with inland waterways, extending east and west, and north and south, and with men who had the wisdom, the ability and ambition to make the most of them.

In 1817 the construction of the Erie Canal was undertaken. DeWitt Clinton was Governor of the State and to him belonged the distinction and honor, merited not so much by his official position as by his consistent policy of canal construction advocacy, to dedicate the building of the canal. [That his vision was broad and actually prophetic is shown by the words he used. In his address delivered in July, 1817, when the first spadeful of earth was turned, he predicted:

"As a bond of union between the Atlantic and Western States, this canal may prevent the dismemberment of the American Empire. As an organ of communication between the Hudson, the Mississippi, the St. Lawrence, the Great Lakes of the north and west and their tributary rivers, it will create the greatest inland trade ever witnessed. The most fertile and extensive regions of America will avail themselves of its facilities for a market. All their surplus productions, whether of the soil, the forest, the mines, or the water, their fabrics of art and their supplies of foreign commodities, will concentrate in the city of New York, for transportation abroad or consumption at home. Agriculture, manufactures, commerce, trade, navigation, and the arts will receive a correspondent encouragement. The city will, in the course of time, become the granary of the world, the emporium of commerce, the seat of manufactures, the focus of great moneyed operations, and the concentrating point of vast, disposable, and accumulating capitals, which will stimulate, enliven, extend and reward the exertions of human labor and ingenuity, in all their processes and exhibitions. And before the revolution of a century, the whole island of Manhattan, covered with inhabitants and replenished with a dense population, will constitute one vast city."

The original canal was completed in 1825 and was officially opened to navigation on October twenty-sixth of that year, only

eight years' time having been required, and what is more, the cost of construction was fully met within ten years afterwards.

The canal at once became a national institution. Westward immigration was made possible and the young Nation, not alone the State, became the beneficiary. The canal opened to settlement and later to commerce the western States. As to Ohio alone, statistics show that in 1830, only five years after the canal was opened, her population had doubled from what it had been in 1820. An early historian of the Mississippi valley writes:

"In consequence of the great change produced by the opening of the New York State canal and the canal connecting Lake Erie with Ontario, the northern portion of Indiana, along Lake Michigan, which a few years since was regarded as a kind of terminating point in the desert, has begun to be viewed as a maritime shore and the most important front of the State."

It is pointed out by the same historian that owing to the "cheapness of transportation by canal * * * more than half the whole number of immigrants and nine tenths of those from Europe and the northern States, now arrive in the west by water"; and further, "that perhaps more than half the northern immigrants arrive at present by way of the New York Canal and Lake Erie."

Another State that owes its increase of population to the Erie Canal is Michigan. The growth of the city of Detroit between 1800 and 1840, following the completion of New York's canal was greater than at any other time in its history. Statistics show that in 1830, 15,000 immigrants arrived. The historian of the city describes their coming in vessels which were crowded to the utmost capacity, and the larger part of these home seekers were from New York and New England.

SUMMARY OF BENEFITS

The benefits of the canal to the State and Nation may be summarized as follows:

It demonstrated the ability of a self-governed people to execute a great public work.

It provided the only practicable means of communication between the west and northwest and the seaboard.

It diverted commerce then flowing south through the Ohio and Mississippi rivers to the Gulf of Mexico, and turned it in an easterly direction to the northern Atlantic seaboard.

It stimulated commerce on the Great Lakes by providing a direct outlet to the sea.



GOVERNOR DEWITT CLINTON

It gave an impetus to immigration and made possible rapid settlement of the Great Northwest territory.

It speedily populated this State, its opening having been followed immediately by a tremendous growth of cities and villages along its route.

It opened up farming regions to the north and south of its line.

In addition to eliminating the hardship of stage-coach travel, it reduced the cost of transportation and travel by more than eighty per cent.

It reduced the time of travel between New York and Buffalo from six weeks to ten days.

It repaid in tolls the full cost of its building and enlargements and enriched the State treasury by a surplus. The amount collected as tolls up to 1881 when they were abolished exceeded the total sum expended upon it previous to that year by more than \$42,000,000.

It carried through this State a steady flow of commerce, enriching all communities along the way.

It focused attention here and attracted capital and genius to the State.

It made New York City the greatest seaport of the New World and the metropolis of the Nation.

It made this Commonwealth the Empire State of the Union.

The original Erie Canal in fact foreshadowed the great increase in population and wealth of this and the middle western States. It was the pioneer waterway, built not only to secure for New York its legitimate share of the Nation's commerce but was for the advantage of the entire country.

The world has moved a long way since the first canal was opened, but the wonderful advancement seen in the engineering and construction field, the discoveries made in scientific research and our modern inventions, can in no way dim the glories of the "Grand Canal" as it was formerly called, nor can the canal's beneficent influence on the State and Nation be overrated.

DIMENSIONS OF ORIGINAL CANAL

The first canal had a minimum depth of four feet and a width of forty feet. The channel permitted the passage of boats of from thirty to seventy tons capacity. A towing-path was built for the entire length and the craft were towed slowly by animal power.

LATER IMPROVEMENTS

Improvements and enlargements with some changes in line were made from time to time to keep pace with the traffic upon it, and in 1862 there was a depth of seven feet and barges of 240 tons capacity were in general use. In 1895 a further deepening to nine feet was authorized but only partly completed.

THE BARGE CANAL SYSTEM

In 1904 the so-called "Barge Canal Improvement" was begun and in 1918 the present Erie Canal was officially declared open for its entire length. Unlike the old waterway which consisted of artificial channels, the canal route now follows natural water courses, making use of the rivers, creeks and lakes which stretch in an almost unbroken chain across the State, and which had been the path of the earliest pioneer and home seeker.

The Erie Canal (or the main line), the Champlain Canal, the Oswego Canal and the Cayuga and Seneca Canal constitute the Barge Canal system, the route of each being shown on map. The Erie Canal has a length of 340 miles, reaching across the State from Troy, on the Hudson River, to Tonawanda and Buffalo, on the Niagara River. The Champlain is 63 miles long and runs north near the easterly boundary of the State, from Troy to Whitehall at the southern end of Lake Champlain. The Oswego, from a point near Syracuse, connects the Erie Canal with Lake Ontario and has a length of 24 miles. The Cayuga and Seneca Canal is 27 miles long and leaves the Erie west of Syracuse, runs southward, connecting with Cayuga and Seneca Lakes. With the Hudson River and connecting lakes, a total of 800 miles of commercial channels is provided.

There is a uniform depth of 12 feet, with a channel width ranging from 75 to 200 feet. There are 57 locks, all constructed of concrete and operated by electric power generated from the canal itself.

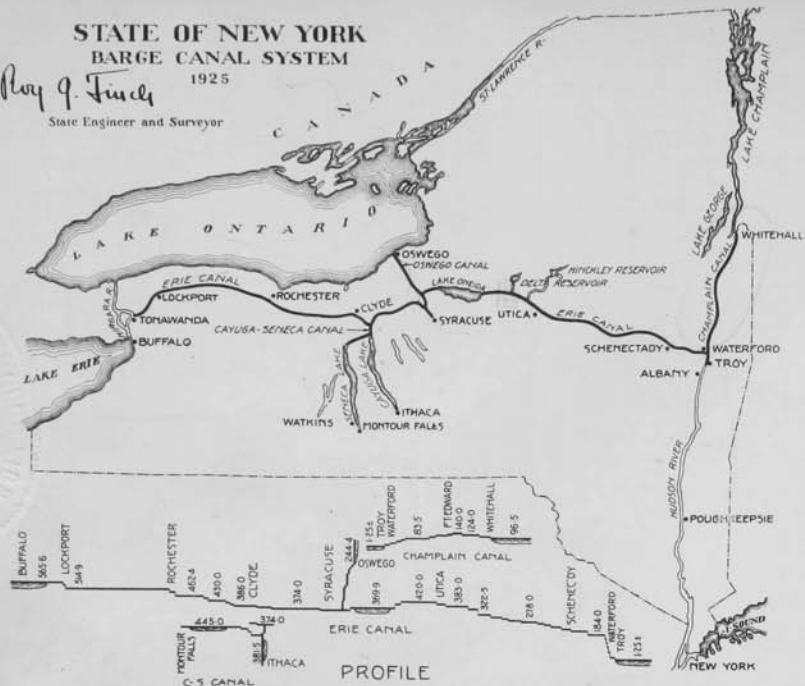
The lock at Little Falls, having a lift of $40\frac{1}{2}$ feet, elevates traffic higher than any single lock on the Panama Canal; and the siphon lock at Oswego is the first of its kind to be built in the United States and the largest of its type in the world. At Waterford is located a most interesting series of high-lift locks, where barges are raised from the level of the Hudson River to the Mohawk River pool, a height of 169 feet, within a distance of little more than a mile. Highway and railroad bridges to the number of 306 span the canal, with a minimum clearance of $15\frac{1}{2}$ feet.

STATE OF NEW YORK BARGE CANAL SYSTEM

1925

Ray Q. Finch

State Engineer and Surveyor



State-owned grain elevators are in operation at Brooklyn and Oswego, and canal terminals for the handling and storage of freight are available at every important point.

Many types of freight-carrying vessels now navigate the Canal. They include both wooden and steel craft, ranging in capacity from the 650 tons, which may be carried in the barge 150 feet by 20 feet, with 12-foot sides, to the modern steel motor ships, 256 feet long, 36 feet wide, with 14-foot sides, and carrying 2000 tons.

The traffic on the canal system in 1925 amounted to 2,344,013 tons, and consisted of almost every variety of freight and merchandise, and, if the cargoes handled at the State-owned terminals is to be added, the total was 3,206,862 tons.

Well-organized canal carrying companies are in the field, excellently equipped for the transportation of freight to any point touched by the canal system and Great Lakes.

New York State today is a powerful, prosperous nation within a nation, and as has been shown, the Erie Canal has been the greatest factor in its upbuilding. The canal which gave to the nation its greatest metropolis and to the world its greatest city, is still the conservator of our commerce and the foundation of our manufacturing and agricultural industries. Without it the business of New York would be at the mercy of routes feeding the ports of other States. If our imperial station among the States and in the world is to be retained, our canal system must be maintained in a condition of the utmost efficiency and everything possible done to encourage commerce upon it.

PRELIMINARY PLANS FOR CELEBRATION

The work of the Commission was initiated by the dissemination of literature dealing with the matters referred to above and conferences were had with many citizens. At the request of the Commission commercial and historical organizations in the cities of New York and Buffalo appointed committees to represent them and these committees united formed an advisory committee to the State body.

Public meetings were held in both cities at which suggestions were invited and received and as a result in February, 1925, the Commission made its preliminary report to the Legislature recommending a celebration of an elaborate and State-wide nature and at the same time presenting an estimate of the funds required. The full text of the Commission's report may be found in Legislative Document No. 82 and need not be repeated here. It suggested in

short an extensive program of events, duplicating as nearly as may be the ceremonies of a century ago when the original canal was opened to traffic, and outlined a program in which every community along the line of the waterway from New York to Buffalo might take part.

At this time changes were seen in the Commission's personnel. Senator Theodore Douglas Robinson of Mohawk had become assistant secretary of the Navy at Washington and Senators Robert C. Lacey and John P. Ryan had not returned to the Senate. On the Assembly side, William J. Hickey of Buffalo had entered the Senate. The term of Gilbert L. Lewis was completed and Alfred J. Kennedy had resigned to assume other official duties.

Following the 1925 session the Commission retaining George Clinton of Buffalo as chairman, and William J. Roche and Dr. Henry Moskowitz as vice-chairmen was reorganized as follows:

From the Senate: William J. Hickey of Buffalo, Thomas C. Brown of Schenectady and Perley A. Pitcher of Watertown; and from the Assembly: Victor C. Lewis of Fulton, Wallace R. Austin of Spencerport and John J. Howard of Brooklyn.

During the remainder of 1925 the Commission continued its work of making known to the people of the State the celebration project and what it meant. It was emphasized at all times that the objects to be accomplished were two-fold:

1. To familiarize the people with the commercial history of their State; its early struggles with transportation problems; the manner in which a water route was constructed across the State from the Great Lakes to the Hudson River; and the benefits gained by turning the flow of commerce from the West and Northwest through this State; and

2. To inform the people of the facilities offered by the existing Barge Canal system and to bring to the minds of the business world the benefits to accrue from a wider and larger use of the canal as a means of transportation.

While these two principles as laid down by the statute governed the activities of the Commission, a further thought was had in mind — the accentuation of the ambitions and deeds of the New York men of a century ago to the end that a spirit of pride and patriotism might be strengthened among our citizens. This indeed is the underlying principle of all celebrations. Dwelling on the past possesses in itself but a sentimental value, but the glorification of the accomplishments of our forefathers cannot fail to provide inspiration for our own future. In the inculcation of such thoughts as these the Commission was assisted by the com-

ERIE CANAL CENTENNIAL COMMISSION

OFFICIALS



GEORGE CLINTON

Grandson of Dewitt Clinton and
Chairman of State Commission in
Charge of Canal Centennial
Celebration



WILLIAM J. ROCHE
First Vice Chairman



HENRY MOSKOWITZ
Second Vice Chairman

mercial and historical organizations of the State, as well as the public press, which from the beginning had taken a keen interest in the celebration project. Meetings were had and addresses and articles on the subject of the canal, its past, present and future, were delivered and circulated. The Commission confidently believes that this period of preliminary planning actually became a campaign of advertising of the State's canal system and as such cannot fail to be productive of much good to it.

THE CELEBRATION AUTHORIZED

The second report of the Commission was submitted to the Governor and Legislature in February, 1926. It reiterated the recommendations of a year previous and urged the appropriation of moneys which would make possible a celebration of a State-wide nature along the lines suggested in its 1925 report.

Following such report, chapter 778, was enacted, reading as follows:

"Section 1. The Erie canal centennial commission, as heretofore constituted under the provisions of chapter two hundred thirty-three of the laws of nineteen hundred twenty-four as amended by chapter four hundred thirty-two of the laws of nineteen hundred twenty-five, is hereby continued for the objects and purposes of this act.

"§ 2. Said commission is hereby authorized to hold and conduct under its direction and supervision, during the year nineteen hundred twenty-six, a celebration of the one hundredth anniversary of the opening to commerce of the original Erie canal, such celebration to consist of such exercises, ceremonies and other events, as in the judgment of said commission, may be proper to commemorate a great historic event and to call to the attention of the business world the transportation facilities afforded by the barge canal system. Such celebration shall be held at the cities of New York and Buffalo. The members of said commission shall receive no compensation for their services under the provisions of this act, but shall be paid necessary expenses incurred in the performance of their duties. The commission may employ such assistants as may be necessary to carry into effect the provisions of this act.

"§ 3. To carry into effect the purposes of this act, the sum of twenty-five thousand dollars (\$25,000), or so much thereof as may be necessary, is hereby appropriated out of any moneys in the state treasury not otherwise appropriated. Said moneys shall be paid out by the state treasurer on the warrant of the comptroller on the certificate of the chairman of said commission.

"§ 4. This act shall take effect immediately."

Immediately upon the passage of this statute, the Commission proceeded with plans for celebrations at New York and Buffalo,

and municipal authorities, commercial and historical organizations and leading citizens of both places were called into counsel.

In the City of New York, the Chamber of Commerce of the State of New York and the New York Board of Trade and Transportation freely placed the facilities of their offices and rooms at the disposal of the Commission, and in both cities a series of meetings was had of small groups of representative men and the nature and scope of the proposed celebration were discussed. At the first of these conferences, an informal committee of New York citizens was formed and William McCarroll was chosen chairman. The spirit of enthusiasm shown in the previous year was manifested and the Commission received the most decided expressions of interest and pledges of support.

The next step taken was the presentation of the matter to the Chief Executive of the city with a request for official recognition and aid. This was done by the Commission and Chairman McCarroll of the Citizens' Committee. Then followed action by the New York municipal authorities.

THE NEW YORK CITY CELEBRATION

In August 1926, Hon. James J. Walker, Mayor of New York City, appointed the following to act as an advisory committee to the State body:

CITIZENS' ADVISORY COMMITTEE OF CITY OF NEW YORK

James J. Walker, Mayor, Honorary Chairman
Albert Goldman, Executive Chairman
J. Driscoll Tucker, Secretary
Eugene F. Moran, General Chairman, Water Pageant

ARMY:

Major General C. P. Summerall, U. S. A.
Major Emer Jeager, F. A., 2d Corps Area, U. S. A.
Captain F. L. Lawton, U. S. A.

NAVY:

Rear Admiral C. P. Plunkett, U. S. N.
Captain K. M. Bennett, U. S. N.
Captain John M. Enochs, U. S. N.
Lieutenant C. R. Skinner, U. S. N.

COAST GUARD:

Captain D. F. A. de Otte, U. S. C. G.
Captain George C. Carmine, U. S. C. G.

NAVAL MILITIA:

Rear Admiral L. M. Josephthal, N. M. N. Y.
Commander Leo W. Hesselman
Commander Frank R. Lackey
Commander Theodore Nelson
Lieut. Commander Malcom MacKenzie
Lieut. Commander Francis R. Gundlock
Lieut. Commander Arthur M. Sekelbera

NEW YORK STATE NAUTICAL SCHOOL:

Charles Williamson

CANAL TRANSPORTATION LINES:

Henry A. Sutphin
Edward S. Walsh
John H. Muller, Jr.

ERIE CANAL CENTENNIAL COMMISSION

MEMBERS AND EXECUTIVE STAFF



WILLIAM J. HICKEY
Senator



THOMAS C. BROWN
Senator



PERLEY A. PITCHER
Senator



VICTOR C. LEWIS
Assemblyman



WALLACE R. AUSTIN
Assemblyman



JOHN J. HOWARD
Assemblyman



ALFRED M. O'NEILL
General Secretary



FRANCES DULIN
Assistant Secretary



PASSENGER BOATS:

Alfred Van Santvoord Olcott
Chauncey G. Whiton
Frederick Bishop
Herbert R. Odell
John Englis
Daniel McAllister
Robert Collyer
W. A. Gelhaus

HARBOR LIGHTERS:

Reginald Narelle
Ernest Stavey
Henry M. Lee
Russell L. Boyer
H. R. Stephen

HUDSON RIVER TUGS:

Frederick Coykendall

COASTWISE TUGS:

Joseph H. Moran
Edmond J. Moran

RAILROAD FLOATING EQUIPMENT:

Walter B. Pollock
Nathaniel L. Cullin

HARBOR TUGS:

Fred B. Dalzell
Frederick A. Russell

WRECKING VESSELS:

Joseph J. Glatzmayer

OIL COMPANIES:

Alfred Renshaw
Richard Jones
Arnold Mathis
James Kennedy

YACHT SQUADRON:

Commodore William H. Todd
Commodore George Nichols
Commodore George E. Molleson
Captain George Lewis

MOTOR BOATS:

C. F. Chapman
Fred Still
Ira Hand
J. F. McGrath
Martin S. Mulvihill

GENERAL COMMITTEE

John G. Agar
Louis A. Ames
Dr. J. Lewis Amster
Howard Ayres
Frank Bailey
George F. Baker, Jr
Harry Balfe
Julius H. Barnes
Edward F. Barrett
Hon. James M. Barrett
Henry Harper Benedict
Charles L. Bernheimer
Cornelius N. Bliss
Samuel J. Bloomingdale
Edward C. Blum
Henry Bowen
John McE. Bowman
Arthur Brown
Col. Franklin Q. Brown
C. Lynn Bundy
Prof. William H. Burr
Joseph M. Callahan
Harry B. Chambers
Edward J. Chapman
William Hamlin Childs
William E. Cleary
Julius Henry Cohen
Samuel S. Conover
Delos W. Cooke
George B. Cortelyou
Michael Cosgrove

R. Fulton Cutting
J. Vipond Davies
J. Sherlock Davis
William C. Demarest
John A. Dillard
William Donnelly
John J. Dorman
William H. Douglas
John J. Duffy
John D. Dunlop
John J. Dunnigan
Harry Durning
Guy DuVal
Frederick H. Ecker
Leo J. Ehrhart
Douglas L. Elliman
William H. English
Grosvenor Farwell
George Fennell
Dr. F. L. Flynn
Michael Friedsam
Frank A. Gallagher
Frank S. Gardner
John J. Gillen
M. H. Gleason
William R. Grace
Charles T. Gwynne
John M. Haffen
Gen. James G. Harbord
Henry O. Havemeyer
Elon H. Hooker

Jesse L. Hopkins
Thomas A. Howell
Edward C. Hoyt
Murray Hulbert
Charles F. Hubbs
Stanley P. Jadwin
Nathan S. Jonas
Ralph Jonas
Dewitt Clinton Jones
John Kadel
Charles F. Kerrigan
Gus J. Kindervater
Lee Kohns
George Kumpf
Charles W. Leavitt
James P. Linahan
Lucius N. Littauer
George W. Loft
William L. Lone
Edward N. Loomis
William McCarroll
Joseph V. McKee
George V. McLaughlin
V. Everit Macy
George W. Markey
Edward B. Maynard
S. Christy Mead
Herman A. Metz
Nathan L. Miller
George E. Molleson
Robert L. Moran
William Fellows Morgan
Edward R. Morse
Jordan L. Mott
Maurice Muller
Edward G. Murray
Lewis Nixon
James O'Flaherty
John Stratton O'Leary
George W. Olvany
Eugenius H. Outerbridge
William E. Peck
William H. Pouch
Cornelius A. Pugsley
John J. Pulleyn
George D. Pratt
Herbert L. Pratt
Thomas H. Roulston
George J. Ryan
William J. Schieffelin
Philip J. Schneider
W. A. Schumacher
August F. Schwarzler
John V. Sewell
J. Burston Small
Arthur S. Somers
Elmer A. Sperry
Edward L. Stanton
Moe P. Stein
James C. Stewart
Arthur D. Stone
Jesse I. Straus
Percy S. Straus
Henry R. Sutphen
Charles Triller
Marcus H. Tracy

Edward S. Walsh
Rodman Wanamaker
Grover A. Whalen
Charles S. Whitman
Benjamin L. Winchell
William H. Woodin
Fred Wurzbach
C. B. Zabriskie
George A. Zabriskie

Advertising Club

Charles C. Green

*American Scenic and Historic
Preservation Society*

Reginald Pelham Bolton
Dr. Edward H. Hall
Dr. George F. Kunz

Broadway Association

F. V. Baldwin
Henry H. Bizallion
Lee J. Eastman
John E. Gratke

Bronx Board of Trade

Alexander Haring
Charles E. Reid
Olin J. Stephens

Brooklyn Chamber of Commerce

Homer L. Bartlett
Albert B. Hager
Grant E. Scott
Walter G. Peterkin

Canal Operators Association

S. W. Bullock
John H. Muller, Jr.

Central Mercantile Association

Clarkson Cowl
Joseph Kean
C. Stanley Mitchell

*Chamber of Commerce of State
of New York*

David C. Ball
Herbert L. Dillon
John W. Lieb
Frank Presbrey
Charles H. Simmons
Francis H. Sisson
R. A. C. Smith

*42nd St. Property Owners' and
Merchants' Association*

Edward W. Forrest

Harlem Board of Commerce

Irving Holmes

Maritime Association

John P. Magill



JAMES J. WALKER
Mayor of City of New York and
Honorary Chairman of Citizens'
Advisory Committee



ALBERT GOLDMAN
Executive Chairman of Citizens'
Advisory Committee



EUGENE F. MORAN
General Chairman, Water Pageant

Merchants Association

Rear Admiral Alfred Brooks Fry
Olin H. Landreth
R. A. C. Smith
Arthur Williams

*New York Board of Trade and
Transportation*

W. J. L. Banham
Frederick Coykendall
Frank C. Munson

N. Y. Boat Owners Association

Ernest Stavey
Eugene F. Moran
Edward G. Murray

N. Y. Historical Society

W. Gedney Beatty
Reginald Pelham Bolton
A. J. Wall

N. Y. Produce Exchange

Edward R. Carhart
W. E. Hedger
R. N. Morgan
W. C. Rossman
B. H. Wunder

Port of New York Authority

Elihu C. Church
John F. Galvin
Schuyler N. Rice
Otto B. Shulhof
Herbert K. Twitchell

Queensboro Chamber of Commerce

W. J. Russell
L. C. L. Smith

Staten Island Chamber of Commerce

Louis W. Kaufman

34th St. Board of Trade and Transportation

W. B. Gibbs

34th St. Midtown Association

Vivian Green
William F. H. Koelsch
Arthur L. Lee

Traffic Club of New York

W. N. Agnew
S. MacClurkan
E. G. Warfield

Mayor Walker's cooperation with this Commission did not end with the appointment of his committee nor in enlisting the aid of citizens generally, but he placed at the disposal of the celebration planners the facilities of the city departments, notably those of the Department of Plant and Structures, the Fire and Police Departments and the Municipal Bands.

The actual celebration was inaugurated in the City of New York on the evening of Wednesday, October 6, 1926, when a mammoth display of fireworks was held on the North River. Ribbons of flame shooting skyward to break in streamers of various colored fire; aerial bombs, stirring music and marine pagentry gave notice to the world that the building of the original Erie Canal was being celebrated.

Municipal craft and private yachts in great numbers, all brightly lighted and decorated, formed a line off Eightieth street soon after sunset. A twenty-one gun serial salute opened the program. It was followed by gold and silver plumes, bursting high in the air; showers of red, white and blue fire; streamers of blue and purple, whirling points of brilliant white and cascades of fire of all colors. The pyrotechnics were staged from barges floating in the river and which moved slowly northward; augmenting the wonderous effect of the brilliant colored explosives was the presence of some half dozen municipal fire boats. These

craft surrounding the barges and propelling streams of water high into the air, transferred the entire area into fairyland.

Along Riverside Drive thousands of citizens had gathered to witness the display and augmented by numerous automobiles the thoroughfare was packed solidly from Eightieth street to One Hundred and Tenth street. Noteworthy in the fiery pageant were two pieces, one depicting "The Marriage of the Waters" and modeled after the famous picture of DeWitt Clinton pouring the waters of Lake Erie into the New York Bay at Sandy Hook, and the other showing DeWitt Clinton, Governor of the State when the first canal was opened, clasping hands with Governor Alfred E. Smith, who made the celebration possible. The display ended at 9:30 o'clock.

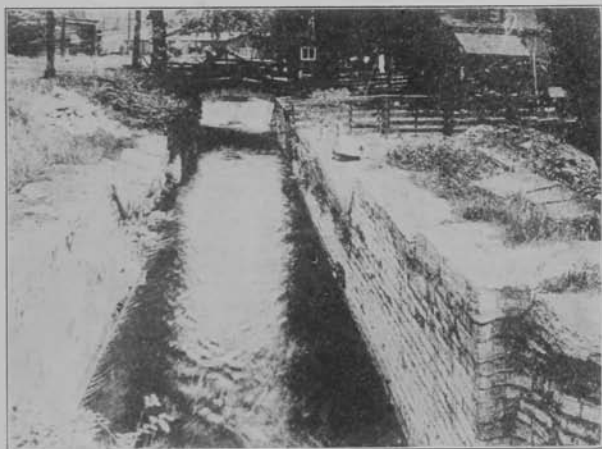
The second phase of the New York City celebration began at noon of Thursday, October 7, 1926, and consisted of a great marine pageant, planned and carried through by Eugene F. Moran, Chairman of the Marine Pageant Committee and his aides.

A line of vessels nearly three miles long floated down the Hudson River from Spuyten Duyvil and through New York Bay to Staten Island. Every type of vessel was represented. There were boats of the Navy and the Coast Guard; and passenger, pleasure and commercial craft. Aeroplanes flying high in the air covered the route while speed boats dashed up and down the river for the entertainment of the vast crowds which had gathered to witness the spectacle.

The municipal boat "Macom" was the flagship, placed at the service of the Commission by Mayor Walker and in charge of Albert Goldman, Chairman of the Mayor's Advisory Committee, who had labored zealously for the success of the celebration, and his efficient aide, J. Driscoll Tucker. The "Macom" carried also the members of the State Commission and its executive staff, including the Chairman, George Clinton, Joseph V. McKee, President of the Board of Aldermen, and other city officials and many guests of the Commission.

As part of the celebration ceremonies, Chairman Clinton repeated the role played by his illustrious ancestor a century ago. Through the courtesy of the New York Historical Society, the original cask used by Governor DeWitt Clinton at the canal opening ceremonies was aboard the "Macom" and Chairman Clinton poured water taken from Lake Erie again into New York Bay.

The whole constituted a spectacle worthy of the occasion. So many craft joined the pageant too late for official record that unfortunately it is impossible to list all of them. Consequently only a partial list may be set down as follows:



FIRST WATERWAY IMPROVEMENT IN NEW YORK

Lock at Little Falls built by private capital in 1791

ORGANIZATION OF MARINE PARADE

City Flagship, Macon
Chairman, Mayor's Committee, Albert Goldman
Fleet Flagship, Thomas E. Moran
Fleet Commodore, Eugene F. Moran
Chief of Staff, Charles A. Mason

First Division, Passenger Steamers

Commodore Alfred Van Santvoord Olcott
Chief of Staff, Chauncey G. Whiton

Position No.	Name	Owner's Name
1.....	Alexander Hamilton.....	Hudson River Day Line
2.....	City of Keansburg.....	Keansburg Steamboat Co.

Second Division, Yachts and Motorboats

Commodore Wm. H. Todd
Chief of Staff, Capt. George Lewis
Motor Boat Aide, C. F. Chapman

Position No.	Name	Owner's Name
1.....	Salemo.....	W. H. Todd
2.....	Florida.....	Byron Collier
3.....	Ripple.....	Thos. L. Chadbourne
4.....	Moby Dick.....	F. S. Fish
5.....	Irwin.....	Jules Heilner
6.....	Sequoia, 2d.....	Richard M. Cadwalader

Third Division, Freight Steamers

Commodore John Englis
Chief of Staff, Herbert R. Odell

Position No.	Name	Owner's Name
1.....	Reserve.....	Catskill Evening Line
2.....		Munson Inland Water Lines

Fourth Division, Salvage Steamers

Commodore Joseph J. Glatzmayer
Chief of Staff, Lewis L. Smith

Position No.	Name	Owner's Name
1.....	Resolute.....	Marritt-Chapman & Scott

Fifth Division, Railroad Tugs

Commodore Walter B. Pollock
Chief of Staff, Capt. Arthur J. Hillary

Position No.	Name	Owner's Name
1.....	N. Y. C. 18.....	New York Central R. R.
2.....	Transfer 18.....	N. Y., N. H. & H. R. R.
3.....	Newark.....	Central R. R. of N. J.
4.....	George M. Shriver.....	B. & O. R. R.
5.....	Newark.....	D. L. & W. R. R.
6.....	Wyomissing.....	Phil. & Reading R. R.
7.....	Athens.....	Lehigh Valley R. R.
8.....	Syosset.....	Long Island R. R.
9.....	Lancaster.....	Penn. R. R.

Sixth Division, Harbor Tugs
Commodore Frederick A. Russell
Chief of Staff, Fred B. Dalzell

Position No.	Name	Owner's Name
1.....	Russell 3.....	Newton Creek Towing Co.
2.....	Dalzellea.....	Dalzell Towing Company
3.....	Dalzellite.....	Dalzell Towing Company
4.....	O'Brien.....	O'Brien Bros. Towing Co.
5.....	Dauntless 6.....	Dauntless Towing Line
6.....	D. F. McAllister.....	McAllister Towing Co.
7.....	Federal No. 1.....	McAllister Towing Co.
8.....	O. L. Hallenbeck.....	Cahill Towing Line
9.....	Revere.....	Olsen Towing Co.
10.....	Baker Bros.....	Baker Bros. Towing Co.
11.....	Francis J. Reichert.....	Reichert Towing Line
12.....	George J. Moser.....	Taylor Towing Line
13.....	Bronx 1.....	Bronx Towing Line
14.....	Leonard J. Busby.....	Wright & Cobb Ltge. Co.
15.....	Victor T. Kelly.....	Flweer Lighterage Co.
16.....	Edward J. Berwind.....	Berwind-White Coal Co.
17.....	Dixie.....	New York Marine Co.

Seventh Division, Hudson River Tugs
Commodore Frederick Coykendall
Chief of Staff, Capt. Robert Oliver

Position No.	Name	Owner's Name
1.....	Cornell Steamboat Co.
2.....	Cornell Steamboat Co.
3.....	Cornell Steamboat Co.
4.....	Cornell Steamboat Co.

Eighth Division, Steam Lighters
Commodore Reginald Narelle
Chief of Staff, Ernest Stavey

Position No.	Name	Owner's Name
1.....	Kangaroo.....	Atlantic Ltge. Co.
2.....	Malicor.....	Marine Ltge. Co.

Ninth Division, Floating Equipment Oil Companies
Commodore Alfred A. Renshaw
Chief of Staff, Harry Beardsley

Position No.	Name	Owner's Name
1.....	Standard Oil 18.....	Standard Oil Co., N. Y.
2.....	Standard Oil 19.....	Standard Oil Co., N. Y.
3.....	S. H. Edwards.....	Tidewater Oil Co.
4.....	Texas Oil 125.....	Texas Oil Co.
5.....	Mexpet.....	Mexican Petroleum Co.
6.....	.....	Vacuum Oil Co.
7.....	.....	Gulf Refining Co.

Tenth Division, Grain Elevators
Commodore Charles E. Burgess
Chief of Staff, William S. Limond

Position No.	Name	Owner's Name
1.....	Ceres.....	International Elevating Co.

Eleventh Division, Canal Transportation Lines.

Commodore Henry A. Sutphen
Chief of Staff, Edward S. Walsh

Position No.	Name	Owner's Name
1.....	Brewerton.....	Brooklyn & Buffalo Nav. Co.
2.....	.....	Brooklyn & Buffalo Nav. Co.
3.....	.....	.....
4.....	.....	.....

In honor of the occasion a half holiday was declared by the Board of Education in all public schools on the west side of the city, thus enabling thousands of children to take part as spectators in the celebration. On the days previous in all of the schools the story of New York's canal had been told by the teachers, and these lessons followed by the actual witnessing of the great parade commemorating the canal's centennial could not have failed to impress the youth with the achievements of their forefathers in waterway development.

This report would be lacking if it did not at this time make special reference to the splendid services rendered by Eugene F. Moran in connection with the afternoon's events. As chairman of the committee having the water spectacles in charge, he gave much of his time and labor in designing and perfecting all details of the pageant and the success had in the elaborate program of the day is due in the largest measure to his executive ability and loyal interest.

The third and concluding event in New York City was the holding of commemorative exercises and a great public meeting and banquet on the evening of Thursday, October 7, 1926. Citizens from every walk of life were present. The National, State and City governments were represented officially; each commercial, fraternal and historical body had representatives and a great body of citizens attended. At special tables were grouped descendants of the men who had taken a prominent part in the original canal's building.

Addresses were delivered, dealing with the canal's history, the part it has played in the commercial development of this and other states, as well as the Nation at large, and the present and future possibilities of the existing Barge Canal system were emphasized in a most convincing manner. Throughout the evening, the Police Band and Glee Club of the City of New York, headed by Lieutenant Patrick Fitzgibbons, rendered stirring and appropriate music and songs. The dais was constructed in such manner as to represent the historic "Seneca Chief" which carried the notables of

a century ago at the canal opening ceremonies, and on its platform were seated the following:

Rt. Rev. William T. Manning.
Hon. Alfred E. Smith, Governor of the State of New York.
George Clinton, Chairman of the Commission, presiding.
Hon. James J. Walker, Mayor of the City of New York,
Toastmaster.
Theodore Douglas Robinson, Assistant Secretary of the
Navy.
Rear Admiral C. P. Plunkett, U. S. N.
Major General C. Summerall, U. S. A.
Major General William N. Haskell, N. Y. N. G.
Admiral Louis M. Josephthal, N. Y. N. M.
Frederick S. Greene, Superintendent of Public Works.
Roy G. Finch, State Engineer and Surveyor.
Albert Goldman, Executive Chairman, Citizens Advisory
Committee.
William J. Roche, First Vice-Chairman of the Commission.
Dr. Henry Moskowitz, Second Vice-Chairman of the Com-
mission.
Dr. John H. Finley, former President of the University and
Commissioner of Education of New York State.
Elon H. Hooker.
Julius Henry Cohen, Counsel to the New York Port Au-
thority.

Mayor Walker, executive of the City of New York, was toast-
master. The invocation was pronounced by Rt. Rev. William T.
Manning, Protestant Episcopal Bishop of the Diocese of New
York. Chairman Clinton of the State Commission opened the
meeting and then spoke as follows:

GEORGE CLINTON:

"It is my very agreeable duty, as Chairman of the State Com-
mission, created by the Legislature and Governor, to open these
exercises in celebration of the hundredth anniversary of the open-
ing of the original Erie Canal.

"That event took place as you know October 7, 1825. The
passage of events in the last two or three years has prevented our
adhering to the actual Centennial year, but now in 1926 we are
celebrating the real opening of the Erie Canal to commerce.

"It is not for me to deliver an address, but simply to tell you
gentlemen what we are trying to do, and what you are a part of
in that effort.

"The statute directed us to prepare a plan for the celebration,
and subsequently an appropriation was made. We were directed
to carry out the plan and were specifically instructed that the pur-
poses of the celebration were to celebrate the opening of the Erie
Canal as an historic event and to forcefully aid in promoting com-
merce upon it.

"Now, gentlemen, I hope I have done my duty in informing you what we are here for, and if there has been any failure on the part of the Commission to perform the duties expected of them, I hope, Governor, and you gentlemen will overlook the omission.

"Having performed my duty, our respected Mayor, who needs no introduction, will take over the management of the ceremonies."

Mayor James J. Walker as Mayor of the City of New York and as toastmaster, assumed the chair. He spoke as follows:

"*Mr. Clinton, Ladies and Gentlemen:* I am not unmindful that a great distinction has been visited upon me to be toastmaster at this distinguished foregathering, and I hasten in the time permitted me to make public the grateful acknowledgment we must accord to the Citizens Committee of New York City, who have cooperated with the State Commission in these exercises.

"I might, at another occasion when time was not so scarce and there were not so many distinguished and influential citizens of this State at this Board who will address you in detail upon the history and the advantages and the purposes of the canal—I might have liked, had time permitted, to have made some observations as the Chief Magistrate of the City of New York on the attitude of New York toward the canal, and the advantages of the canal to the City of New York.

"My duty at the moment is one that I shall adhere to, and perhaps set a precedent for toastmasters in the future! (Laughter.) I lose no time in carrying out the platform of economy upon which I have taken my place. (Laughter.)

"Ladies and Gentlemen, it is my distinguished pleasure to present the first speaker of the evening, His Excellency, the Governor of our State!"

The audience arose and applauded.

GOVERNOR ALFRED E. SMITH:

"*Ladies and Gentlemen, Guests and the Committee:* It is not my purpose to recite the history of the Erie Canal. The Official Historian, Dr. Finley, is present. He will probably take us from the day when the first shovel of earth was turned up around Rome, to the day when a Canal boat anchored in the harbor and then went around to Brooklyn so as to distribute the patronage equally between the two great counties! (Laughter.) Then it proceeded around to Sandy Hook so the fresh water of Lake Erie might meet the salt water of the Atlantic Ocean.

"However, I think it would not be amiss for me to give my testimony to some of the salient points that will undoubtedly be raised in connection with the canal, and that is, the benefit the canal was, and is to the State of New York, as a factor in promoting its commerce.

"It goes without saying that the great Port of New York attained its position as a port of entry on the seaboard of the Atlantic Ocean because of the construction of the Erie Canal.

And by looking over the State, we find that all the great sections of population are along the line of the canal. There are 10,500,000 people who reside in New York, and 7,500,000 of that number reside along the canal from New York to the City of Buffalo, giving to all the rest of the State a population of only 3,000,000, and that 7,500,000 live in five cities, although we have in the State 35 cities and a number of large villages whose population is sufficient to warrant them in applying to the Legislature for charters as cities. There was a time when there was a reason why they didn't do it. They were evading the excise tax. But why they don't do it now, nobody knows.

"In 1925 I sent a message to the Legislature in which I laid before both houses in Albany the story of the canal for the purpose of bringing to the attention of the people of the State of New York, as I believe it should be brought, the fact that the canal is not being used to the degree that we had hoped it would be used after the enormous amount of money that we put into its construction.

"In our political system, the time will never come when we will be able entirely to escape the feather-brained individual that has something to say about everything that a public man does. Some fellow rushed into print quick and said, 'Hey! Al. Smith wants to scrap the canal! Al. Smith wants to turn over the commerce to the New York Central Railroad!' I suppose it was the same fellow who thought the Al. Smith who was the Governor was the same Al. Smith who is President of the New York Central Railroad.

"Well, of course, it doesn't need very much of a stretch of the imagination to see how absurd that is, because nobody can scrap this canal except the people of New York. This canal is provided for in the Constitution. It is protected. It is safe, as safe in its tenure of office as the Governor! (Laughter.)

"However, the Committee was not amiss, because after all, we are running a great business corporation. The operation of the canal is a business, just as much as the operation of the Central railroad or any other means of transportation, and it has to be advertised. People have to know of its possibilities.

"It isn't sufficient to maintain in Albany a Bureau of Information and wait for somebody to come in and ask about it. You must go out and talk about the canal, invite them in, provide an opportunity for them to come and consult with the proper authorities as to the advantages of the canal for shipping.

"During the war operation on the canal was at a low ebb so that in 1919 only 1,238,000 tons of freight passed through the canal during the operating season. In 1925, however, the tonnage increased to 2,344,000 tons, and in 1926, although the operating season was delayed by an ice block at Buffalo three weeks beyond the time when the canal itself was physically prepared for operation, the tonnage will exceed anything that has occurred upon the canal since it was enlarged in accordance with the Constitutional Referendum of 1901! (Applause.)

"It therefore remains for the State to handle this great waterway from a strictly business standpoint. It must be advertised;



ERIE CANAL AND BARGE OF 1825 (30 TONS)



CANAL PASSENGER TRAFFIC IN 1830

its advantages must be told in the language of business to men that require transportation in the State across from Buffalo and points on the canal to tidewater. So far as the State is able to do that, it is doing it, but unless the efforts of the State are supplemented by some private endeavor, by private effort on the part of Chambers of Commerce and Boards of Trade and businessmen's organizations, the canal will never attain what its greatest friends expect it to accomplish. So there is a large field left for private endeavor in the State to convince our shippers that the canal is the proper way to handle their freight.

"There is something else the State must do, and that is, maintain the canal the way a business institution is maintained. I wish this dinner was in April or February when there was no campaign talk. I am a little bit modest; I don't like to talk about this. But inasmuch as it is a fact, this is the only place to disclose it. Everybody in this room that knows anything about the canal knows that for a number of years it was politically run in that it afforded some very comfortable berths for superintendents and assistant superintendents that knew as much about its operation as I do myself—and that is nothing.

"When we speak about our great big transportation organizations and we look at the president, we say, 'Well, he is the president of the railroad. He used to be a yardmaster, and he was promoted to track foreman, and then he became traffic manager, and finally he got into the main office, and now he is president.'

"What do you think would happen to the New York Central Railroad if all the division superintendents were changed every two years? Still, that is the way we attempted to operate the canal. Every time there was a change in the political government of the State, a whole new system of superintendents and operation came in. Obviously, that must lead, not to management, but mismanagement, so that in 1923, by a consolidation of the Department of Highways with the Department of Public Works, the canal was finally brought under the direct supervision of five district engineers who hold their office year in and year out and are covered by the protective provisions of the Civil Service Law.

"Nobody ever thought of the Department of Highways when there was a change in administration—they never thought of talking about the engineer in the third division. Nobody knew him. He was there for years, and he was continued there while he was able to perform his duty. As a result, today, instead of all the political assistants and deputies, the canal is under the management of the same five highway engineers in whose district that particular portion of the canal happens to lie.

"We were criticized for that when we started it, but I think we have established beyond any possible question of doubt that a continuity of efficient and intelligent administration is entirely necessary for the successful operation of the canal as a great transportation enterprise. (Applause.)

"I have long cherished the hope that more and better use could be made of the terminals. In 1911 we submitted to the people of the State a proposal to issue bonds for \$19,800,000.00 for

terminals for the canal. These terminals are not being used. Nobody can say that they could not be put to use, but the fact remains nevertheless that they are not being used. I entertained for a long while a hope that the Council of Farms and Markets, charged with devising ways and means of transporting farm products, might be able to sit down with the canal operating authorities and find out if there wasn't some way that some part of these terminals could be used for public markets, so that the produce of the farm might find a ready place for sale in the great centers of population along the line of the canal. But under our unique and peculiar organization of this so-called Council of Farms and Markets, outside of a great volume of law and a wonderful grant of power, we don't seem to be able to get any real action.

"I recommended that that Council be abolished, and that that Department be put among the other administrative departments of the government under the Governor so that there could be some driving force behind these men. But the Legislature seems to think that it is a great contribution to the cause of agriculture to allow them to select some man from each judicial district every so often and elect him a councilor, and then never see him again or hear anything from him!

"However, all progress is slow. It takes about nine or ten years to do anything, and I only started that in 1919, so I have three years yet to work on it! (Laughter.)

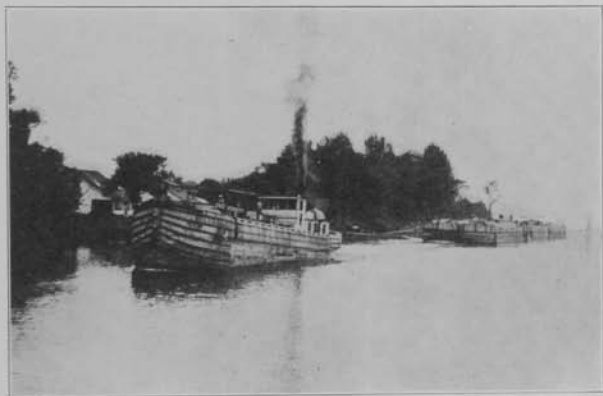
"Now, I feel that I have made about as large a contribution as I am able to make to the festivities of the evening, and I know of nothing else that remains except for me to express, as the Governor, my very sincere thanks to the Chairman of the Canal Commission and to his able assistants for the work they have done, and for the interest they have taken in the celebration. And I might incidentally take this public occasion to also thank Mr. Clinton in this presence for his unfailing interest at all times in everything that has to do with the good of this canal system. (Applause.) He seems to have what amounts to a personal interest in it, and if we could only interest enough of our business men and our leaders of thought in the business world throughout the State to devote some part of their time, not nearly as much as he does, but some part of their time to the promotion of the welfare of the canal, it would really and actually be the great inland waterway that we predicted for it. I believe it will be that in time, but that day could be hastened.

"I am very grateful to the Committee; I congratulate them on the splendor of this affair tonight, and I extend a hearty greeting to all of their guests."

The audience arose and applauded.

MAYOR WALKER: The next speaker will deal with the history of the canal. I know you will be delighted with the announcement, Dr. John H. Finley.

The audience arose and applauded.



CANAL BARGE OF 1890 (300 TONS)



DR. JOHN H. FINLEY:

Mr. Chairman, Mr. Governor, Members of the Commission and Ladies and Gentlemen: When I was a student in history at the University, I did most of my work in a room, on the walls of which there was a motto, 'History is past politics, and politics is present history.' You will notice how quickly Governor Smith left the field of past politics and has allowed me to use that field for myself. But I am here, ladies and gentlemen, not as the official historian, but as the death's head at the feast, to remind you that present policies, in the course of time, become past politics. It will become history.

"After Governor DeWitt Clinton, then in his third term—and you will remember that he entered upon his fourth term, he spent the rest of his life as Governor of the State—after the celebration a hundred years ago, he made what is said to be 'a short and very pertinent address,' and had poured the keg of water (I thought that ceremony was to occur before I was to speak) into the bay, an address which is characterized 'as a long and interesting discourse,' the one which I am to imitate, was made by one whose name has now been universally forgotten. I have looked it up myself, however; but his titles were as long as was the Governor's speech—one Samuel Mitchell, M. and LL.D. (*i. e.* Doctor of Medicine and Laws), late Representative and Senator in Congress and President of the State and County Medical Societies of New York, Professor of Botany and *Materia Medica* in the University, Surgeon General of the Militia, President of the Lyceum for Natural History, etc., etc., etc. Before beginning his formal speech, however, he performed a ceremony which is described as an 'effusion of waters from various bottles,' derived from several European and other rivers, as symbolizing the mingling of our commerce with these foreign countries. In this speech (the only one preserved except that of the Governor), beginning: 'The present is a day memorable in this eventful age,' he pronounced an epithalamium (that is, a nuptial poem), over the wedding of the Lord of the Seas to the Lady of the Lakes, saying that it was no wonder that the Ruler of the Deep should have become enamored of our 'incomparable Belle, now become the lawful and virtuous partner,' who has 'full jointure and dower in three-fourths of the surface of the tertaqueous globe,' which if any pirate, freebooter (there were no bootleggers at that time), or disturber of any kind dare to invade, the wrong will be avenged by ten million freemen, who have rendered the quaking bog arable and the solid upland navigable.'

"He then expressed appreciation of the symbolic donations of the river gods of the Elbe, the Thames, the Seine and the Tagus in language so flowery and florid, that if used by a twentieth century orator he would not have been taken seriously. He requested the impersonation of the Elbe to say to the Bohemian, Saxon, Prussian and Danish Kings, the cities of Dresden, Hamburg, Altona, and Bremen, that the kindest feelings existed toward them and prophesied that for a long time (he did not specify 1914), there would be no interruption of their friendly rela-

tions. He thanked the Thames 'whose water is famous for its potable qualities as well as for brewing and dyeing,' adding that while we had as a people been separated by destiny from its people, we ought always to cultivate the best relations toward the Mother Country. The Seine he characterized in language which cannot be paraphrased, as 'the river that affords drink to the metropolitans of a most polished and important nation,' whose genius resides beside 'the calcereous basin of Paris and the formation of quartz buhr, whence our manufacturers of flour procure the material for their preferable millstones.'

"The receipt of the water from the Tagus gave him opportunity to express the expectation that 'the valiant Spaniards may soon experience a happy deliverance from their comotion.' (This was 100 years ago.) Then, acknowledging the offerings of the Oronoco, the Amazon, and the Plata, he saluted their symbolic presidents seated high on the snow-capped and cloud-covered Cordilleras, hailed their emancipation from European dependence, and looked forward to the time when these 'almost illimitable countries shall be inhabited by a self-governed and virtuous people.' And finally, explaining that the mystery had taken place by a combination of mechanical impulse, chemical action and diffusive propagation with electrical rapidity and magnetical subtlety, he pronounced 'the circumfluent ocean republicanized,' (the antecedent of the democratization of the landworld), and looked forward to the day when the frame of man would be gradually so modified by it, that at length even the sable and savage tribes dwelling in the tracts bordering the Senegal, the Cambia and the Congo, shall lay aside their ferocity and enjoy as we ourselves do, Liberty under the guidance of the Law (a phrase which has been given such eloquent utterance in the present generation by the President of Columbia University).

"Having said this, he added, 'It does not occur to me that much more remains to be said.' (Laughter.) It would, in fact, seem that nothing whatever remained to be said, except to inquire of the historian whether this 'enthusiastic citizen' as he was called, had not said too much, and to what extent there has been a fulfillment of the prophecy of the hopes of that day expressed not only in words, but in such a pageant, both by land and sea, as New York had never witnessed — a display 'so grand, so beautiful, so sublime' that the chronicler thought it possible that the like would never be witnessed again. Of course, in those days they didn't dream that any one would ever swim the Channel! (Laughter.)

"Turning from this brilliant pageant and this effusive oratory to sober history, one finds, however, almost as stirring tributes to the Erie Canal and the brood of canals which it raised and other sister 'civilizers' of that day, the turnpikes. As McMaster, the historian, says, the Erie Canal moving freight at four cents per ton per mile revolutionized business. The merchant found the whole West as well as the East his market. And New York City, which now could reach around the mountains, was the gainer. By 1830 the population had increased by nearly two-

thirds, while Philadelphia, her nearest rival, had added only one-fourth over 1830.

"One suggestion of the 'vast benefit' is found in a Columbus, Ohio, newspaper of that period. 'It takes twenty days and costs five dollars a hundred pounds to transport goods from Philadelphia to this city, but the same articles may be brought in twenty days from New York by the Hudson and the canal at a cost of two dollars and a half a hundred. Supposing our merchants do import on an average five tons twice a year; this means a saving to each of five hundred and sixty dollars.'

" 'It meant, indeed, far more,' adds the historian. It meant lower prices, more buyers, a wide-spread market, increased comfort for the settlers in the new states, and what was of equal importance, an impetus to internal improvements which should soon open up regions into which even the frontiersman would not go.'

"There is a more general summary in a single paragraph of the history of the Canal System of the State by that great citizen whom some of us still mourn as a friend, A. Barton Hepburn, who wrote a history of the Canal; writing in 1909, he said: 'It is incontestable that the Erie Canal has proved enormously beneficial in the past. In length it is second only to the Great Canal of China (which was 600 years in the building) among the artificial waterways of the world. For a quarter of a century, it was the greatest transportation line in the country, and this was during the country's first industrial and commercial growth, the most important in this respect, since the country had not yet attained financial strength.'

"For New York State it was 'the chief if not indispensable factor' in building up a chain of towns and cities along its route (reaching to Buffalo which had, when DeWitt Clinton made his preliminary survey in 1810, thirty or forty houses, a court house built by the Holland Land Company, several stores, a tavern and a post office), a combination of towns and cities which placed the state in the lead both in population and wealth among the States and helped to give New York City as much at one time as 56 per cent of the total export trade of the whole country.

"But it is not this economic service that is of first importance. It was the political and social tying of the West and Northwest to the Atlantic and into an indissoluble union. Washington was among the first to divine the importance to the young nation of keeping the people of the western waters — 'the valley of a hundred thousand streams' — commercially and politically linked with the East. The fear that these pioneers might find their interests distinct from the East, following these hundred thousand streams, that together touched every community from the Alleghanies to the Rockies, to a port at the mouth of the majestic Mississippi, toward which every creek ran from the watershed near the Great Lakes. The canal not only attached the whole basin of the Great Lakes to the Atlantic seaboard, and also cut through that neighboring watershed and by slender though powerful threads which were later supported by the rails and wires of steel. Coming myself from a town in the Middle West settled by a colony

of God-fearing men and women who lived near Utica on the banks of this canal and started Westward on or along its slender stream, I, a fresh-water Mid-Westerner who never saw the ocean until I was twenty-five years old, have personal reason for gratitude to the Erie Canal. Except for it I should perhaps have been a citizen of another country than yours — The United States of the Western Waters, with a capital in St. Louis, or New Orleans.

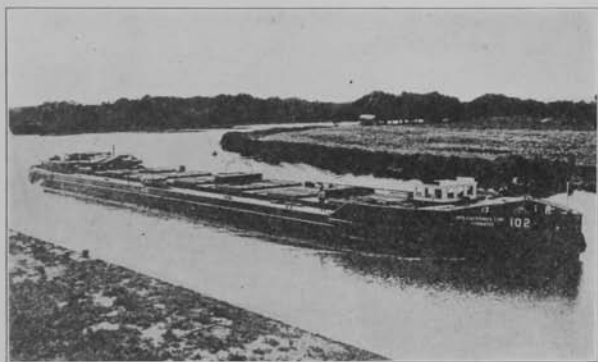
"I cannot begin, gentlemen, to speak of the history of the canal. That would take hours. I can but say in a summarizing sentence or two that the Erie Canal by 1837 more than repaid the original outlay by the state after providing for operating expenses; and that it repaid the State and the Nation many times over in its contribution to the East and West unity of America, to the imperialization of this State and the primacy of New York among the cities of the world.

But I should, before I sit down, say a word about the Father of the Canal, DeWitt Clinton. Back in 1784, catching the vision of Governor George Clinton, the first Governor, his uncle, whose secretary he had been, he made this prophetic utterance: 'Great improvements must take place which far surpass the momentum of power that a single nation can produce, but will with facility proceed from their united strength. The hand of art will change the face of the universe. Mountains, deserts, and oceans will feel its mighty force. It will not then be debated whether hills shall be prostrated, but whether the Alps and the Andes shall be levelled; nor whether sterile fields shall be fertilized, but whether the deserts of Africa shall feel the power of cultivation; nor whether rivers shall be joined; but whether the Caspian shall meet the Mediterranean and the waves of the Pacific lave the Atlantic.'

"He was no provincial in his thought. He 'graved the memorial of his being upon this bit of earth which is dearest to us, but he was interested in the Universe and concerned for all mankind.

"The Alps and the Andes have been levelled since his day. At any rate, I have myself, as have many of you, crossed the Alps as if they were levelled. I have within a few months seen the farms and gardens reaching out into the African desert. I have myself ridden from the Mediterranean by ship and train past Mt. Ararat to the borders of the Caspian; and as the result of American engineering, the waves of the Pacific do lave the Atlantic at Panama. DeWitt Clinton's world prophecies have since his death come true, if not just in the way that he himself anticipated; but in his life he saw his dearest dream come into realization.

"At the entrance to the Suez Canal there stands a great monument to de Lesseps. It would be the fittest memorial to DeWitt Clinton, if where the water of the Lakes was poured into the sea, or where the deeper Hudson will some day carry ocean ships to meet the waters of the Lakes at Albany, there should rise a mighty and an enduring monument to DeWitt Clinton. In a fragment of an old Greek poem, written 600 years B. C., reference is made to a ditcher of unremembered name who became a king. Here is a man who was almost as a king, and who became a ditcher, a



STEEL BARGE OF 1926 (650 TONS)



man whose name should never be forgotten by this city and by the world, for by the ditch he digged be not only changed the face of the earth, but in doing so affected the whole course of civilization and gave New York the opportunity to become the capital of a recreated world. (Applause.)

MAYOR WALKER: You will direct your attention to this end of the hall. A tableau entitled, "The Marriage of the Waters" will now be enacted for you.

There was then depicted with living forms a representation of Charles Y. Turner's "Marriage of the Waters" as it is shown as a mural decoration in the DeWitt Clinton High School. The ceremonies at the canal opening were carefully duplicated and as the character representing Governor DeWitt Clinton poured the lake water from the historic cask and voiced Clinton's inspired prophecy the silence and intentness of the audience attested the profound impression made upon them.

The exercises then continued.

MAYOR WALKER: It is my pleasure now to announce that Elon H. Hooker will discuss the canal and inland commerce, and their possibilities. Mr. Hooker. (Applause.)

MR. ELON H. HOOKER:

Mayor Walker, Governor, Distinguished Guests, Ladies and Gentlemen: I feel at the latter end of the program as if all the good things about the canal had been said. It is a good deal like my unfortunate location on the lower end of Wall street. It is very difficult to make a living down there, because the crowds have to pass the people on the street higher up.

"About the time that the Erie Canal was at its low ebb, our popular Governor was playing baseball on the streets on the East Side of New York, and our genial Mayor was concocting, I presume, boyish deviltries in Greenwich Village. I hope he was that kind of a boy. We boys in Western New York were swimming in the wide waters of the canal near Rochester. But I don't think any of us were really pioneers in this matter of water navigation.

"A general of the army has said that the real pioneer was Noah. You see, Noah knew he had to have some kind of a barge. He didn't exactly know where he was going, and he didn't exactly know why; but it was a sure thing that it was going to be wet, so he kept hammering away, although everybody found fault with him, as they always do with anybody who proposes water transportation. Mount Ararat, I suppose, was the first successful Seaport.

"As one who had a part in operating the Erie Canal under Colonel Roosevelt, I have some conception of the problems which our Governor has so ably discharged in the larger way with the

Barge Canal. The history of the Erie Canal has been dealt with most interestingly, and I want to touch, and perhaps elaborate a little on some of the things that Dr. Finley has referred to.

"There were four old Indian trails over the Appalachian Mountains, reaching out into the west. One passed through southern Pennsylvania and the Alleghenies. Another went out into the Monongahela. Another went up through the Hudson and Mohawk Valley and down again into the Monongahela, and the fourth went up through the Hudson and Mohawk Valley out to Oswego and out toward Niagara. It was this latter line as a canal route which appealed first to the greatest engineer-constructor that this country has produced. The project for developing the Potomac river into a waterway which would embrace the James and the other watersways in that section was the seed from which grew the Constitutional Convention of 1787.

"This man knew that industrial progress in all modern civilization was dependent on routes to the interior. He knew that New York State was largely supplied with rivers, and that there is no high tide of civilization or industrial development except where there are such water routes into the interior.

"While still in command of the American Army with headquarters at Newburgh, Washington, before disbanding his troops, personally made the trip up through the Champlain territory, down through the Mohawk, and his books still exist in which he made careful notes of the terrain and recommended that a route to the west was available through that section. He did this at his own expense, as was his custom. Even at that time Washington's mind was busy with methods and ways of bringing the west and the east together.

"After returning to Mount Vernon from the war, he directed his attention to binding these eastern and western territories by commerce, commercial intercourse, through the Valley of the Potomac. This route he had himself explored and mapped. The confederation of the Colonies was on its last legs. The war was ended; peace had come; but each Colony was building up its own fences without regard to what might happen to the whole. The southwestern settlers were declaring that they would throw themselves on the protection of Great Britain, and the unity of the American Commonwealth was actually toppling.

"In this crisis Washington's canal project came to the front, and eventually kept this country united as a whole for the benefit of the world in the future years. A meeting in the library at Mount Vernon was followed by the convening of a Waterways Congress in Philadelphia. A diary of the time records Washington's despondency at the wrangling of the selfish interests that were there shown. Finally, the Connecticut delegates succeeded in introducing the famous Compromise. They were Roger Sherman and Oliver Ellsworth. This saved the situation and brought about the beginning of the United States as a nation. The southern Colonies had large area and very little population. The northern Colonies had many people and very little area. Each wanted to control, the southerners thinking they had Wash-



STEEL MOTOR SHIP OF 1926 (2000 TONS)

ington and Madison, and the Tylers, and the other leaders of thought in those days in the south, and they felt that they were really the brains of the new organization and ought to control it. The New Englanders were not at all willing to stand second, so the lines were very closely drawn, and eventually they were about to give up the formation of this Republic entirely. The suggestion then of Roger Sherman that they compromise on the basis of the Constitution with an upper house representing area and a lower house representing population, solved the problem, and they came together. This, of course, is reflected today in our Senate and House of Representatives at Washington.

"I have touched on this early waterway development to show how vitally in those days, as even in ours, the unfolding of the nation depends upon its transportation problem.

"The Erie Canal was finished in 1825 by the adolescent State of New York alone without any help from the United States. Engineering was in its infancy. It was the longest canal in the world at that time, built in the shortest time, with less money, and demonstrated the zeal of governing people to build public works. It was paid for in full within ten years after its completion. It turned the tide of commerce from the Mississippi to the Atlantic seaboard and gave impetus to immigration, and reduced transport and travel cost about eighty per cent. It changed the time of travel from New York to Buffalo from six weeks to ten days.

"At the time Governor Clinton opened the Erie Canal, Philadelphia and Boston were the most important cities in this country. Sixteen years after the canal was opened, there were five times as many industrial workers in New York as there were before. The canal made New York a metropolis of the new world, and made this State the Empire State.

"This waterway has developed through various stages from a four foot depth in 1825 to a seven foot depth in 1862, and to the present great barge canal started in 1904 and completed in 1918 to a twelve foot depth. Today we have a channel there which could carry to the seaboard the entire United States production of wheat and four times as much as is actually exported. The capacity eastward and westward in one season is equivalent to a string of freight cars 9,000 miles long, or one-third of the distance around the earth. It has the world's greatest series of high lift locks, twice the height of Panama, and the canal is ten times as long as Panama, and has many more structures than Panama.

"Reference has been made to the significant fact that eighty-two per cent of the people of the State are gathered in a narrow strip within ten miles of this great waterway; and nearly ninety per cent of the wealth of the State is assembled in this same narrow area.

"The old Erie Canal had justified the vision of its fathers by repaying the entire construction and operating costs and a supplementing surplus of \$42,000,000 when in 1881 New York State generously decided to abolish the tolls and dedicate the canal to the Nation.

"The New York Barge Canal has cost \$170,000,000 and is open to the Nation now without toll. Its total length is about 801 miles. Today it will float barges carrying 2,084 tons. In 1925 it is estimated that there was saved to the people of New York about \$52,000,000 directly and indirectly in freight charges. The net annual expense of operation of the canal until the maturity of the bonds is about \$10,000,000. The direct saving to shippers by 1938 or 1939 will be just about \$10,000,000. So that eleven or twelve years from now the canal may be said to be paying its way. After 1960 the cost will only be about \$3,000,000 a year, and the saving to the State will be something like \$13,000,000 or \$14,000,000, and up to \$20,000,000 a year.

"For twenty years up to recently, transportation on the canal had no part in the business men's plans. The same type of barge was in use that was in use fifty years ago, and canalmen had practically disappeared. Now canal improvements have reached the grade of railroad improvement. The canal is free from side tracks and from freight yards. Lumber is brought from Oregon and delivered near Lake Champlain. Canal boats carry as many automobiles as a dozen freight cars, and 123 large automobiles have been transported on one barge. That is equivalent to about forty freight cars, and is about forty per cent saving in freight. Moreover, the automobiles are ready to drive off the boat and drive on under their own power, which is a great saving. Phosphate rock passes from Florida to Ontario, Canada, in one fleet, a saving of forty per cent in freight; 2,000 ton steel motor ships move from the Lake ports to New York on a waterway adequately lighted for night travel — available twenty-four hours a day, and for eight months of the year.

"This waterway is largely a canalized and lake waterway, so that transportation on it is similar to transportation on large rivers.

"While these changes have been going on, the United States has become the industrial center of the world. James Watt invented something 170 years ago which started the revolution, and now we are passing through another and perhaps more striking revolution. We are now turning out eleven automobiles per worker where two per worker were turned out in 1913. Happily also, a type of immigration has been shut off which was striking at the very well springs of our social and political and industrial life. Mechanical production has superseded hand labor, and high wages are paid as a direct stimulant to increased output. Where wages are highest and machinery is most used, output is greatest and selling prices lowest.

"The center of gravity of our industrial life has gradually moved westward from the Atlantic across the State of New York, and leaves Ohio teeming with industry. It is just like a carpet unrolling from the Atlantic seaboard across over the west. Detroit has become the center of the enormous automobile industry, Pittsburgh is the coal and steel center, and St. Louis is the metallurgical center — as these industrial centers have moved industrial activity further and further to the south and west. The textile and bleach-

ing industry has been coming down the Atlantic seaboard. Birmingham, Alabama, is vying with Pittsburgh in steel.

"The time was not long ago when the student of international affairs and the industrial leader dealt with the tariff and foreign trade, and he did well to stand on the Atlantic coast with his face toward Europe and ponder there the solution of his problem. Now the far-seeing captain of industry and the statesman who has his country's welfare twenty-five or fifty years from now at heart, will in my judgment take his stand in the Mississippi valley with his face toward the Gulf of Mexico and South America. His eyes will be turned through the Panama Canal toward the Orient. Here lies America's future, and it is from this standpoint, with back almost turned toward Europe, that there will be decided aright the questions of the Monroe Doctrine, the League of Nations, the World Court, our foreign trade, the tariff, and the collection of debt.

"David Lloyd George stood on a wharf at St. Louis and remarked as he saw a few scattered ships on the broad bosom of the Mississippi, that we were the most wasteful Nation on earth, and that in Europe the stream would be loaded with all kinds of traffic to the south. Certainly, our place in the sun lies to the south and the west.

"Since the war 30,000,000 people bordering the Mediterranean have practically turned their business over to us. There are twenty countries in Mexico and South America, of which sixteen will find it to their best advantage to do business closely with the United States, and with four it is a matter of fifty-fifty with Europe.

"Occasionally we send an elder statesman to the south. We have sent Mr. Hughes there. We have sent Robert Bacon there. We are sending a stream of statesmen to Europe, and devote most of the time of our daily press and in our public discussions to the discussion of our European relations. This, to my mind, is quite the reverse of what should be the case. Europe represents our past; the south and the west our future. Commercial thought, energy, and diplomatic capacity should be devoted to unlocking the markets of our future and building closer relations rather than giving advice unwanted in a field over-supplied with home talent.

"The natural flow of commerce is downstream, not over mountain ranges to the Atlantic coast or through long tortuous and artificial channels to a foggy and ice-bound Gulf of St. Lawrence. Important western leaders, Herbert Hoover, Julius Barnes, Henry Allen, have been urging the St. Lawrence Canal project upon this country. It has seemed to many of us to be economically unsound, commercially unwise, and politically inadvisable. Such a huge expenditure of money could only be justified if it were an important commercial necessity. Seventy per cent of such a waterway would lie in Canada, and thirty per cent on our border. Is it conceivable that the United States should undertake a huge investment in a foreign country where our interest in transportation or in power is only fifteen per cent? Certainly, our experience at Niagara Falls in the last war would

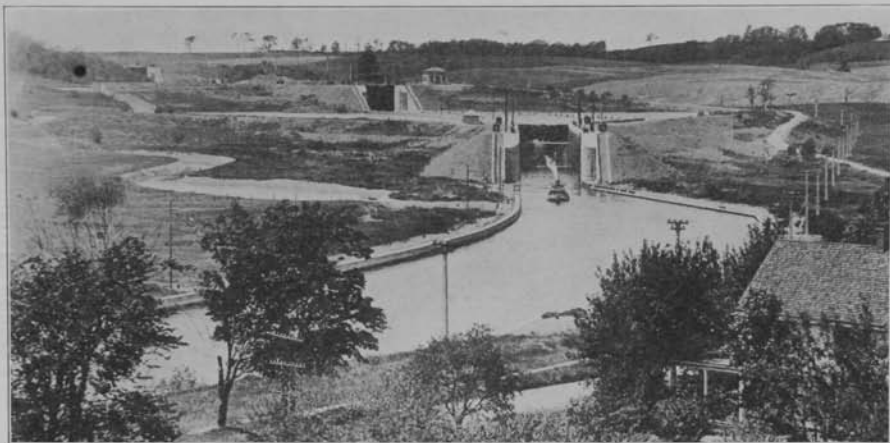
show that in the matter of power the United States would have a very small chance in any great exigency. The distance from Duluth to Liverpool through St. Lawrence is 4,700 miles, half inland transportation, unfavorable to ocean vessels, and the route is but 400 miles shorter than by way of canal and the Port of New York. Now, should the barge canal ever prove inadequate, a ship channel can easily be substituted through our own country, and with our own funds. As a matter of fact, the largest export of wheat today goes out through the Gulf of Mexico. Our exports of wheat are likely to disappear in twenty-five years, and the demand for the St. Lawrence route will become less and less.

"It seems to me that those calling for this route built with our American money will be among the first to turn from the canal upon its completion and make their shipments to the south on the broad current of the Mississippi, where one barge will carry the freight of one ocean going steamship in the direction where most of it is likely to be sold.

"Now, we have perhaps a ninety per cent responsibility under the Monroe Doctrine in the affairs of the American Continent, mainly to the south of us, and certainly, a preponderating influence in the other third of the world lying to the west and in the Orient. Why, under these circumstances we should feel so keen a responsibility about the other third of the world which divides its responsibility naturally between five and six so-called Christian nations, is beyond me to perceive. In this respect we see logic as did the famous college half-back with a knowledge of chemistry. He was a member of the All-American team, and if they could keep him in college another year, the pennant was won. By dint of much coaching and liberal construction in examination answers, his marks allowed him to stay in college if he could only get 50 in chemistry. This man was a wonderful ground-getter, great at bucking the line, but he was worse than anything in chemistry.

"There was great rejoicing when the Professor of Chemistry turned in his examination mark of 50. When they questioned him, he said: 'I know he had to get fifty, so I asked him two questions. I first asked him what the color of blue vitrol was, and he said, 'Pink.' So I said he was wrong, and asked him what the formula for sulphuric acid was, and he said, "I don't know.' So I said, 'You are right,' and I gave him fifty.'

"The European countries which are so coquettishly or even boldly inviting us to cancel their loan obligations to us, are themselves covered with a network of canals built at great expense and covering every section of their territory, supporting most admirably a railroad to provide transportation. Rather than accept this modest invitation to cancel all our war debts, by which United States would be the sole loser, and that to the extent of \$11,000,000,000, how much better it would be to spend this fund and other funds accumulated in our prosperity in developing a coordinated system of waterways, railroads, and roads under which violence would be done to no vested interest and Government operation was eliminated so far as possible. There are \$20,000,000,000 invested in railroads, and a large increase in the next



THREE OF THE WATERFORD SERIES OF FIVE LOCKS

Because the locks are so close together there are wide pools between them and by-passes around them. The canal in this locality is a land line joining the Mohawk and Hudson rivers

ten years could, with advantage be covered in many ways by waterways. In the early days waterways carried our freight. Then railroads came to the fore, and now with 40,000,000 of increased population in the near future the country needs waterways, railroads, and roads in a correlated system, supplemental to each other. We need to develop all the water resources of the United States, and water is our greatest undeveloped resource. Secretary Hoover said the other day that we could have 35,000,000 horsepower instead of the 11,000,000 we now have, together with 25,000 miles of canalized waterways, together with the reclamation of 30,000,000 acres of land. All of this is needed in the next twenty-five years.

"So I see a vision of this peace-loving people, always prepared for defense in a modest but effective way as outlined in the National Defense Act of 1920, pointing the path and leading the way to peace.

"Recent wars have been fought for the control of commercial markets. The incitement of a nation to anger, as with an individual, is strongest when a competitor invades, or adversely holds markets obviously belonging to that nation. The loss of a market to which their only right is previous occupancy arouses a sharp struggle, but not bitterness. Let us then put our American brains, our capital, and our dormant diplomacy at the task of winning away from competitors the market to the south and west of us and in the Orient. Let our drive be in that direction, retaining so long as we comfortably can, our business in other parts of the world which are not the cause of serious irritation. This seems the path for an intelligent pursuit of peace.

"Raw materials move naturally from the temperate zone, from the tropical zone north into the temperate zone, and manufactured materials move east and west in the temperate zone. These raw materials from the tropics will provide return cargoes for north-bound boats on the Mississippi. The Barge Canal, abundantly supplied with transportation companies, supplemented by an intelligent development of the Port of New York will thereby maintain our great seaport in its supreme position for the years to come. It is my belief that the great overplus of manufactured goods from the new industrial center of the country will increasingly, by the forces of nature and economic law pass to the south along the Mississippi route, and never to the north and through the St. Lawrence. We hold in our hands the industrial power of the coming years, and inland navigation bears its important and proportionate part in the fulfillment of our destiny." (Applause.)

MAYOR WALKER: Hon. Theodore Douglas Robinson, Assistant Secretary of the Navy and a former member of the Celebration Commission, will now address us:

THEODORE DOUGLAS ROBINSON:

"Mr. Toastmaster, Governor, Ladies and Gentlemen: I realize that long speeches are appropriate at some other time than this.

I am not for having children working overtime, and I am a child and I refuse to work overtime. I believe in waterways. I believed in the old Erie Canal when it meant so much to the State and Nation, and I believe the present channel can be made of equal usefulness. I will make no extended speech as I have prepared none, but, Governor Smith and Mayor Walker, the country needs the best waterway that can be provided from the Great Lakes to the Port of New York, and I know, Governor, with your help and the help of the Mayor of the great city of New York we will get it and develop it." (Applause.)

MAYOR WALKER: The next speaker of the evening was to have been Hon. George H. Silzer, President of the New York Port Authority, but who is unavoidably absent. However, Mr. Julius Henry Cohen, its General Counsel, will address us in his place.

JULIUS HENRY COHEN:

"Suggesting that children shouldn't work overtime, I assume, was an admonition to me to remain silent. One or two things happened today that may entertain you even at this late hour.

"Mr. Clinton was on the trip down the Bay. It was a beautiful day—I never saw a more beautiful day on the waters around New York. I asked Mr. Clinton whether the 26th of October, 1825, was as beautiful a day as this one, and this young man of over eighty told me that upon that day he left his umbrella home.

"Another Buffalonian read that a hundred years ago there had been taken out of Lake Erie a keg of water which was dumped into the Atlantic Ocean. I refer to the United States Attorney for the Western District of New York, Dick Templeton. He has brooded over that for many years, and he took advantage of this occasion to have a keg constructed of exactly the same dimensions as the one that was used in 1825, and as soon as we got into the Lower Bay he had the Captain stop the boat and let George Clinton put that keg overboard, and he is taking back tonight a keg of water from the Atlantic Ocean back to Lake Erie to repay the keg of water he says we stole from the Lake! And he expects by that to bring the Lake to its original level!

"That is the kind of memory they have in Buffalo. We haven't all memories of that kind; some of us have to get our history by reading.

"I won't deliver Governor Silzer's speech, which I was supposed to do, and which I have here tonight, but there are one or two observations that may be pertinent even at this late hour. The first is about DeWitt Clinton. If you turn to your encyclopedia, you will learn that he is described as 'an American political leader,' and both the gentlemen on my left and the gentlemen on my right will be interested to know that the encyclopedia records that 'he became a prominent factor in New York politics, and it was his plan to fill the more important offices with Repub-

licans, and divide the smaller places among parties somewhat in accordance with their relative strength.' He was called a politician for that reason. But I found in my library this week a volume printed in 1815 containing an address delivered by DeWitt Clinton, LL.D., before the Literary and Philosophical Society of New York, and issued in 1815, and as men reveal their character in their political documents, this man is revealed as a scholar, as a scientist, as a student, with a knowledge of history, a knowledge of classics. Why, he knew all about the geology of New York, the ornithology of New York, the zoology of New York. I find in footnote 24 that 'The fish mart of New York may be considered as the general deposit of every eatable and every curious inhabitant of the water. Everything that gratifies the appetite for food or for novelty centers here.' This was delivered and printed in 1815. Of course, even with the vision of DeWitt Clinton, he couldn't see the whale of a fish that would be produced in Fulton Market, that would plumb the depth of the waters through New York State, and yet, always keep its head above water!

"He calls attention in 1815 to the fact that a Russian who came over here to visit confidently asserted that dogs in this country suffer so much under the deteriorating influence of our climate that they lose the power of barking! Now, another visitor discovered that dogs under the influence of our climate, or Government of the City, I don't know which, have entirely disappeared!

"There is one paragraph here that seems to me to be of particular interest to us. He says, 'The style of our political writing has assumed a character of rude invective and unrestrained licentiousness unparalleled in any other part of the world, which has tended to injure our national character.' Of course, that was so a few years ago, but times have changed!

"I want to record here another historic event which took place last year. The port authorities officially appeared before the Board of Estimate and Apportionment in the City Hall, and its General Counsel appealed upon its behalf (no epithets used on either side of the fence). The Port authority Counsel went away without any bruises either to his feelings or character—indeed there was a spirit of cooperation shown. So there is hope that in 1926 we shall escape from this era of invectives which went on even in 1814-15.

"The reason the Port Authority was called upon here tonight, in the person of its Chairman, who unavoidably was prevented from attending, was because of the relationship of this canal, the vision and the courage and the resistance, and unjustified criticism and commercial insight in its relationship and the lesson it teaches with regard to the Port of New York. Dr. Finley has already told you, and you heard it in the Tableau, of Clinton's prophecy of what would happen to New York if this canal were carried through. When Clinton was referring to New York City, he was big enough to realize it was the whole Port of New York District, because as Dr. Henry Johnson testified in the New York Harbor case, this whole side of the port district owed its develop-

ment to the Erie Canal. The growth came with the opening of that canal—not the canal alone, but the canal coupled with the coming of the railroads, but which did not come until twenty-five or thirty years later.

"Now, it was the vision of DeWitt Clinton that settled the question as to whether or not the great port of this country was to be New York or New Orleans. Some of these clever writers with the gift of imagination that almost verges to poetry said that there was now going on the Battle of the Rivers, meaning the battle between the Mississippi and the Hudson. In Clinton's day it was a real battle of the rivers between the Mississippi and the Hudson, and literally, the Giants and Yanks of that day won, because it was New England shrewdness and the virility and courage and commercial capabilities of this New England section of the country that took the prize away from Philadelphia and made the Port of New York what it is today.

"This is no time to review that history. There are many interesting features about it—I have a good many notes here. The decision as given against Ogden, which was a controversy between New York City and New York citizens over monopoly of water, John Marshall's decision holding no State could hold monopoly over waters, thereby started the whole circulation of the country. Beveridge says that that decision of Marshall's did more to unite the people of this country than any single decision before. Then came the network of railroads.

"Now, the progress of this State, the creation of this great commercial center, was due to precisely the vision and the courage of men who like Clinton, had a background of knowledge, commercial understanding, engineering understanding, and historical knowledge. There are some men who get their great intellectual power through flights of the imagination, through inspiration. There are other men who plod and dig and work hard. Clinton was the type who plodded, and dug, and got his facts and his knowledge.

"On the 21st of April, 2021, they will celebrate the centenary of the signing of the compact between New York and New Jersey. Perhaps they will say something then about the wedding of the two States. Perhaps then some Dr. Finley will arise and disclose the difficult problems that faced these municipalities about here. Some one will tell about the difficulties in sovereignties, two States, each political sovereigns within their territorial boundaries, with power to regulate commerce within and between the States—with the new economic principle applied in England, it is true for over a century, but applied for the first time here, the idea of financing public improvement, not out of taxes, but out of the services performed by the public improvement at the lowest possible cost to the consumer, but sufficient to carry the cost of the enterprise itself. That is the theory upon which the Port Authorities were for founding economically. That is theory which is building bridges on Staten Island and New Jersey. That is the theory that has built a great bridge from New York to New Jersey over the Hudson, financed with its own bonds, no



FLEET OF BOATS LEAVING A BARGE CANAL LOCK AT WATERFORD

A striking contrast in size of locks is seen by comparing with the three old canal locks at the right.

deficits paid out of taxation, charging the consumer the cost of the service and the operating expense, setting up a reserve sufficient to protect the bond holders, and then giving the consumer the lowest possible price, the best possible service at the lowest cost, with no charge against the general taxpayers at all. That is the new economic method adopted in this section of the world for the first time. It ought to solve our problems; they can't be solved, except as the Governor pointed out, by continuity of administration by experts. The Port Authority can't win a case, no matter who its general counsel may be, it can't sell a bond, unless the financiers are right, and the correctness of the figures depends upon expert engineers or statisticians who must be uninfluenced by any other consideration than the economic factor.

"Now, so far as it has been successful, the Port Authority has gone forward with greater rapidity and progress than even those who were behind it thought possible. I remember in 1920, thinking of the epithets that were hurled at Clinton as the digger of 'Clinton's Ditch,' the city hall reporters had a show at the Hotel Astor. They had one of their number wearing a red wig dancing around with others, singing to the tune of 'London Bridge is Falling Down,' 'Outer Bridge is Falling Down.' The outer bridge crossing is now being erected at the outer periphery of the port district, and so, in spite of criticism, in spite of doubt, the men of courage and faith, the men of vision, the men of commercial knowledge, of 1920-21, may 100 years from now hear their praises sung as we sing the praises of the men who began the Erie Canal."

MAYOR WALKER: This occasion is adjourned for another hundred years."

The meeting adjourned at eleven thirty-five o'clock.

In concluding the account of the celebration in New York City, the Commission desires to place on record its appreciation of the aid and cooperation rendered it by Mayor Walker and his city officials, by organizations and citizens, and of the very efficient work performed by the Commission's executive staff.

While it is not practicable to list the names of all those to whom credit is justly due, special mention is made of the following: Albert Goldman, Commissioner of Plant and Structures and Executive Chairman of the New York Citizens' Advisory Committee, who extended to the use of the Commission the facilities and forces of his department, besides devoting to the project much of his personal time; Eugene F. Moran, Chairman of the Committee on Marine Pageant, whose work has been more particularly described heretofore; Alfred M. O'Neill, General Secretary of the State Commission, who from the inception of the celebration project devoted himself to the work with tireless energy and upon him had been placed the task of organizing the necessary assistance

in New York and Buffalo and executing the plans adopted by the Commission: J. Driscoll Tucker, Secretary of the Citizens' Advisory Committee and long experienced in affairs of similar nature, who for weeks preceding the celebration labored daily with the Commission's staff: Frances Doran Dulin, Assistant Secretary to the Commission and expert in organizing methods, who was in charge of finances and general correspondence; Jerome A. Myers who rendered most invaluable service in the arrangements for the public exercises of Thursday evening; and Maurice W. Williams whose historical research work was most helpful.

The Commission also gratefully acknowledges the receipt of financial assistance to the extent of \$820 from members of the New York Citizens' Advisory Committee, whose voluntary contributions made it possible to extend the scope of the commemoration exercises.

THE BUFFALO CITY CELEBRATION

FOR the extensive nature of the centennial celebration in Buffalo, and the success which attended it, the major portion of individual credit belongs to Richard H. Templeton, Executive Chairman of the Buffalo Citizens' Advisory Committee and a consistent and enthusiastic canal advocate. Conception of the idea to commemorate the 100th anniversary of the opening of the original Erie Canal is claimed in several quarters, but without seeking to trespass on the delicate ground of final decision, it seems clear that it was Mr. Templeton who first laid the project officially before Governor Smith, sketching his proposal in correspondence which was followed by personal interviews.

With the plan formally embodied in legislation and the project underway, Mr. Templeton took a leading part when details of the Buffalo celebration were under consideration by the State Commission. Several meetings were had and the outline of a program of events discussed. The appropriation made by the State being limited in amount, it was readily seen that without substantial aid, anything in the way of an ambitious schedule at Buffalo must be abandoned, and consideration was given to the holding of simple but appropriate commemorative exercises.

There was a general feeling in the city at the time, shared by the Commission and by citizens who had become interested in the proposed celebration, that a program of greater diversity and wider popular appeal was desirable. The State Commission, however, was powerless, its activities being circumscribed by the limits of its appropriation. In this emergency suggestion was advanced that appeal be made to Hon. Frank X Schwab, Mayor of Buffalo, who had previously given unmistakable evidence of his interest, and this was done by State Chairman George Clinton with request that the city of Buffalo aid in financing an adequate and proper program. Mayor Schwab's prompt pledge that the city would do its share was echoed in the City Council which, on the Mayor's recommendation, appropriated \$10,000 for expansion of the celebration plans. The expenditure of these city funds by a citizen's committee rather than placing the same at the disposal of the State body was deemed desirable, and on the recommendation of Chairman Clinton, Mr. Templeton was named by Mayor Schwab as executive head of the local committee.

Accepting the position, Mr. Templeton at once threw himself into the work with vigor. With the approval of the State Com-

mission, a program of events on land and water and in the air was mapped, and to aid in the vast amount of work entailed a large committee of citizens were appointed by the Mayor, the members of which were grouped by City Chairman Templeton into sub-committees, each charged with an important detail of the arrangements. As finally constituted the city committee was as follows:

CITIZENS' ADVISORY COMMITTEE OF THE CITY OF BUFFALO

Frank X. Schwab, Mayor, Honorary Chairman

Richard H. Templeton, Executive Chairman

Charles H. Armitage, Secretary

Finance Committee:

Frank X. Schwab, Mayor
John J. Love, Commissioner
James F. Moore, Commissioner
Frank C. Perkins, Commissioner
William F. Schwartz, Commissioner

School Committee:

Chancellor S. P. Capen
Ernest C. Hartwell
Calvert K. Mellen
M. Smith Thomas
David H. Childs
Elbert Rhodes
C. Brooks Hersey
Robert T. Bapst
James Storer
Adelbert Moot
Mrs. William F. Felton
Rev. P. J. Cusick
Dr. John F. Lappin
Thurston M. Davies
L. Gertrude Angell
Bertha Keyes
Leslie Leland
Dr. Harry C. Rockwell
Dr. C. H. Thurber

Historical Committee:

Henry W. Hill
Mrs. Frank H. Severance
George Clinton, Jr.
George Urban, Jr.
Miss Harriett Buck

Pageant Committee:

Mrs. John G. Wickser
Charles D. Sears
John D. Larkin
Philip Becker Goetz
George D. Crofts
John D. Wells
John Lord O'Brian
Mrs. G. H. Corbin
Miss Ruth Chapin

Water Sports:

H. Morton Jones
George L. Hager
Philip Schaefer
Michael Broderick
Edward Dray
Charles A. Criqui
Ulysses S. Thomas
William H. Sanford

Publicity Committee:

Edward H. Butler
Norman E. Mack
William J. Connors
William J. Connors, Jr.
Alexander F. Osborn
Frank Ruszkiewicz
Joseph J. Lunghino
Joseph Schifferli
Jerome F. Rozan
Burrows Matthews
Charles H. Armitage

Military and Parade Committee:

Col. William R. Pooley
Col. William F. Schohl
Commander Frank J. Bailey
Capt. George M. Denny
I. A. McClellan
Capt. Hamilton Ward
Gen. Louis L. Babcock
Col. Charles E. T. Babcock
Col. John L. Schwartz

Boy Scout Committee:

Horace Reed
G. Bartlett Rich, Jr.
Roland Lord O'Brian
Percy R. Smith
Harvey D. Blakeslee, Jr.
Emanuel Boasberg

Girl Scout Committee:

Mrs. Margaret S. Bolger
Mrs. Lawrence Arnold
Mrs. Conrad E. Wettlaufer



ENTRANCE TO CANALIZED MOHAWK RIVER
Showing westbound steel fleet

Clubs and Organizations:

Edward B. Holmes
Alfred C. Faul
Lewis R. Gulich
William T. Weppener
Mrs. Norman P. Clement
Mrs. Frank Messenger
George Mitchell
Mrs. James VanInnagon, Jr.

Fireworks Committee:

William H. Crosby
Chauncey J. Hamlin
J. Newton Byers, Jr.
Andrew S. Butler
J. Paul Dold
Martin J. Kratz
Albert B. Wright
DeWitt Clinton

Shipping Interests:

Nesbit Gramner
Adam E. Cornelius
Capt. W. E. Chilson
Godfrey Morgan
Edwin T. Douglas
Benjamin L. Cowles
Clement H. Cochran
John J. Boland
James Carey Evans
William P. Doran
Eugene J. Meyer
L. Lawton
James P. Doty
Huntington T. Morse
Henry G. Anderson
Frank B. Knapp

Manufacturers' Committee:

Frank B. Baird
Timothy Burns
Floyd K. Smith
William H. Denner
Ward Wickwire
Frank M. Barker
George P. Urban
George G. Raymond

General Commerce Committee:

Harry Roblin
John P. Williams
George C. Lehman
Edward L. Hengerer
R. T. Fiske
Louis P. Fuhrman
Hugh McLean
Edward Gaskin
Frederick J. Wing
John J. Doyle
William H. Fitzpatrick
Cornelius F. Coughlin
Owen J. Cavanaugh
Frank S. McGraw
Richard Humphrey
John G. Wickser
Mrs. S. Rowan

Program in Churches and Clubs:

Bishop Charles H. Brent
Rt. Rev. William Turner
Rev. P. F. Cusick
Rev. S. V. V. Holmes
Rev. Don Tullis
Walter N. Zink
Howard J. Smith
Samuel B. Botsford
N. Loring Danforth

Professions:

Daniel J. Kenefick
John R. Hazel
Dr. Marshall Clinton
Dr. Francis E. Fronczak
Walter P. Cooke
Edward H. Letchworth
Elijah W. Holt
Dr. Charles Carey
Roscoe R. Mitchell
Philip J. Wickser
Merritt M. Baker
Frank Burzynski
Dr. Charles R. Borzelleri
Louis B. Hart
Dr. Thew Wright
Dr. Nelson G. Russell

Public Affairs:

Frank X. Schwab
James P. MacKenzie
Christ S. Warren
Frank J. Moyer
Fred A. Bradley
S. Wallace Dempsey
James M. Mead
Clarence MacGregor
Henry M. Naylor
George A. Halbin
Henry Seilheimer
Clifford J. Chipman

Chamber of Commerce:

John P. Williams
Frank B. Baird
Edward L. Koons
Albert L. Kinsey
N. Loring Danforth
Sidney Detmers
George C. Lehmann

Decorations:

Dr. William Mehl
John L. Kelly
Louis B. Hart
Robert W. Gallagher
Charles E. McDonald, Jr.
Edward C. Bull
Arthur M. Suor

Banks:

George F. Rand
Howard Bissell
John A. Kloefer
Lewis G. Harriman
Robert S. Donaldson
Charles Diebold, Jr.
E. Corning Townsend
John M. Satterfield
Edward A. Duerr

Speakers' Committee:

N. Loring Danforth
Theodore G. Kenefick
Donald S. Dudley
George Clinton, Jr.
Charles J. Kennedy
George C. Lehmann
William K. Lyon
Edward G. Kuhn

Memorials Committee:

Henry W. Hill
George Clinton
Olive G. LaReau
James H. Rozan

Women's Committee:

Mrs. William F. Felton
Mrs. Frank X. Schwab
Mrs. John J. Love
Mrs. Frank C. Perkins
Mrs. William F. Schwartz
Mrs. A. Edward Allen
Mrs. Fred A. Bradley
Mrs. S. P. Capen
Mrs. Burton Fletcher
Mrs. David F. Foley
Mrs. Chauncey J. Hamlin

Mrs. E. C. Hartwell
Mrs. John Miller Horton
Mrs. Henry F. Jerge
Mrs. Ward Kendrick
Mrs. Charles Mead
Mrs. Eleanor F. Poole
Mrs. William R. Pooley
Mrs. Harry Roblin
Mrs. William H. Sanford
Mrs. James Storer
Mrs. C. E. Siegesmund
Mrs. Richard H. Templeton
Mrs. George P. Urban
Mrs. Hamilton Ward
Mrs. Henry Madde
Mrs. S. Wallace Dempsey
Mrs. James M. Mead
Mrs. George Clinton, Jr.
Mrs. Howard Bissell
Mrs. George F. Rand
Mrs. N. Loring Danforth
Mrs. Edward H. Butler
Mrs. DeWitt Clinton
Mrs. John P. Williams
Mrs. Charles H. Armitage
Mrs. Henry W. Hill
Mrs. George Clinton, Sr.
Mrs. Thew Wright
Mrs. Urquhart Wilcox
Mrs. Marshall Clinton
Mrs. Nelson G. Russell
Miss Catherine Clinton
Mrs. Leonard W. H. Gibbs
Mrs. John D. Wells
Mrs. Leonard R. Lipowicz
Mrs. Joseph J. Lunghiro
Mrs. Charles R. Borzelleri
Mrs. Eli T. Hosmer
Mrs. Daniel K. Stucki
Mrs. Leroy J. Siegrist

The commemoration of the canal's centennial in Buffalo was of a week's duration and began on Monday, October 11, 1926. In Lafayette Square a series of historic spectacles was staged each afternoon of the week exclusive of Thursday. The exhibitions and exercises held were so planned as to depict to the thousands that passed that busy center of city life the important events of the State's history and the part the original canal had played in the upbuilding of our commonwealth.

A replica of one of the original canal barges was erected at a prominent point in the square and beside it scenes of the early days, when Buffalo was young were reproduced.

One episode of much interest depicted the arrival by canal at Buffalo of Lafayette as the guest of the Nation for whose freedom he had fought. At the time of his visit General Lafayette on disembarking from the barge had proceeded to the square and there addressed the villagers who had gathered in large numbers to greet him.

George D. Emerson, arrayed in buff coat with lace ruffles and gold buttons, impersonated the gallant guest. Mrs. John Miller Horton, in purple velvet and fur, with plumed hat and antique jewels received General Lafayette and emulating her ancestor, Judge Townsend who had performed a like duty a century ago, greeted the distinguished visitor in his native tongue. One hundred years had passed since the first waterway was opened to travel but the sands that run through the hour glass of Father Time were forgotten when quaint old costumes of velvet and lace, bustles and bonnets, were once more seen in Court House Square (as the point was once called) in honor of the great Marquis.

Among the ladies who portrayed the townsfolk of that day, dressed in full skirts, paisley shawls, ruffs and bustles, were Mrs. F. B. Metzger, Miss Mildred Fenn, Mrs. C. P. Bonham, Mrs. William H. Sanford, Mrs. D. Frederick Potter, Miss Elizabeth Codd, Mrs. Margaret Codd, Mrs. Byron J. Torbron, Mrs. Charles B. Mead and Mrs. William F. Felton. Mrs. Horton told of the century old customs of Buffalo's forefathers who made possible the city of today by their support of the canal project and Byron R. Newton gave a brief introductory talk.

Another distinguished figure that revisited Buffalo in spirit was the hero of the Battle of Lake Erie, Oliver Hazard Perry. His great grandson, Oliver Hazard Perry Champlin, attired in the same uniform worn during the battle, personified his distinguished ancestor in a tableau symbolizing "The Marriage of the Waters." George D. Emerson portrayed Governor DeWitt Clinton and emptied a keg of water from the replica of the canal boat as was done from the deck of the "Seneca Chief." Participating in the stirring picture were Julian Park, George R. Stearns, Jr., Ernest F. Kelsey, H. B. Curtis and John T. Horton.

An interesting presentation, was that of "Pilgrims at Twilight," a church going group of grey clad women, staged by the National Society of New England women, participated in by Mrs. Frank Comstock, Mrs. Margaret Codd, Miss Elizabeth Codd, Mrs. D. Frederick Potter, Mrs. Caroline Prather, Miss Leona Prather, Mrs. B. J. Torbron, Mrs. Henry B. Saunders, Mrs. R. V. Hewlett, Mrs. William H. Sanford, Miss Edna May Sanford, Mrs. C. P. Bonham and Mrs. Charles B. Mead.

Indians revived the days when redskins were familiar figures on Buffalo streets. Chief Clinton Rickard of the Tuscarora nation had charge of this feature of the week's program.

In the autumn sunshine representatives of the Iroquois Confederacy danced their tribal dances and sang their songs. Chiefs and braves and their wives and children took part wearing their native

dress, topped by feathered headdresses. Featured in this event were the war dance, the thanksgiving dance, the beaver dance, the green corn dance and the dance of the medicine man. A sacred mask, a hideous, grinning false face, seldom taken from the Long House to be exposed in public, was used during the dance of the medicine man as originally used to drive away the evil spirit. A medicine rattle, made of shell, supplied the accompaniment to the ceremonial.

Chief Rickard delivered an address in the course of which he acclaimed the Erie Canal as "one of the greatest things your forefathers have done," and affirmed that the pledge of peace and eternal friendship given by his fathers to the city fathers of Buffalo at the time the canal was opened was renewed in the Centennial ceremonies.

Alvin H. Hewett, ninety-three years old and a veteran of the Civil War, was one of the picturesque figures participating in the ceremonial. A Tuscarora Indian, he had fought through the Civil War as a Union soldier. In the Indian dances he wore a costume of white buckskin. Included in the Indian group were Indians from the Grand River reservation, Canada, and from all the tribes that once made up the powerful Iroquois Confederacy. They were Dennis Pembleton, Edward Watkins, Freeman Staats, Mrs. Clinton Rickard and youthful sons, Chief Andrew Garlow, Mrs. Rachel Mountpleasant, known as the Indian Princess, Mrs. William John, Charlie John, Mr. and Mrs. Job Henry and their two babies.

Oldtime fiddlers added their bit to the success of the celebration. They captivated the hearts of the crowd and although not having met before the group played in unison and harmony. It was a spectacle to linger in memory, these venerable minstrels as they sat there, keeping enthusiastic time with pounding heels and rendering oldtime airs that set one's blood a tingling. As quaintly dressed ladies danced the old-fashioned square dances they rivalled the jazz bands of today by music that kept the feet of the crowd busy in sympathy with the strains of "The Irish Washerwoman" as the leader called "Swing your partner," "circle round," "forward and back," and "promenade."

The oldest of the fiddlers was Stillman T. Pratt, 82 years of age, who served as a drummer boy in the Rebellion. Others were J. Biglow of Springville, Lyman C. Pierce, George Marshall, Frederick W. Pratt, Sylvester Ely and D. Holden. Mr. Marshall played an old-fashioned dulcimer which was issued from the hands of its maker at the time Governor DeWitt Clinton turned the first spadeful of earth for the first canal.



BARGE CANAL HARBOR AT ROCHESTER

In the heart of the city, connected with the main canal by a spur in the Genesee river. Pool level maintained by a movable dam of combined bridge and submersible sector types. Terminal warehouses, one brick and one frame, appear above the dam; a viaduct approach to the terminal at the extreme left.

These early events which were viewed by vast crowds from the city and surrounding places were planned in detail by Mrs. Gilbert H. Corbin, whose grandfather, Timothy McEwan, was a resident of Buffalo in 1797 and had taken part in the canal opening ceremonies of 1825. Mrs. Corbin, as chairman of the Committee on Historical Scenes, was assisted in her work by the members of her committee, many of whom were descendants of the earliest settlers of America, and of those who had fought the battles of our country in the Revolutionary War, the War of 1812, the Rebellion, Spanish American War and the World War. In addition, the Daughters of the American Revolution and Sons of the American Revolution as organizations contributed largely to the successful execution of the plans.

On Thursday, October 14, 1926, was reached the climax of Buffalo's part in the canal centennial celebration and on that day Buffalo relived the scenes enacted 100 years ago in the dedicating to a century of usefulness of "Clinton's Ditch" as the skeptics of that day characterized Governor DeWitt Clinton's great waterway linking the Great Lakes with the Atlantic ocean and opening the door to the development of a vast agricultural and industrial empire.

Reversing the events of history, a fleet of boats, headed by the "DeWitt Clinton" of the Munson Line and the Standard Oil Tanker "Hartford Socony" left New York City on October sixth bound for Buffalo. In addition to their commercial cargoes, they carried food for the great centennial banquet which was to be held at Buffalo on the evening of the fourteenth and a cask of water from the Atlantic ocean to be redeposited in Lake Erie. It will be recalled that a hundred years ago Governor DeWitt Clinton, aboard the first boat that plied the new channel from the Lakes to the Sea, emptied into the ocean at Sandy Hook a cask of the waters of the lake. As a symbol of the west-bound traffic now developing on the State's inland waterway this ceremony was repeated but in reverse order. A replica of the original cask, for a century jealously guarded by the New York City Historical Society, was used.

The fleet was gayly decorated in honor of the occasion, and as it passed through the State it was greeted from place to place by citizens who were deeply interested. At Tonawanda, the western terminus of the canal, the authorities and almost the entire citizenry greeted the fleet and were addressed by Chairman Clinton and Hon. S. Wallace Dempsey, Representative in Congress. The boats then proceeded to Buffalo where a clamorous and withal a colorful demonstration marked their arrival at the canal terminal

at the foot of Genesee street. Sighted shortly after 10 o'clock the flotilla, gay with pennants, approached the wharf, decorated with the national colors, amid a noisy welcome from fire tugs, lake steamers and canal boats, locomotive and factory whistles.

Aboard the "DeWitt Clinton" was Richard H. Templeton, Chairman of the Buffalo Citizens' Committee who, as he stepped ashore, was welcomed by Chairman George Clinton of the State Centennial Commission and Mayor Frank X. Schwab. Back of them as a reminder of other days was a two-wheeled ox cart, drawn by a yoke of oxen, awaiting the cargo that had been brought from New York, the supplies for the banquet that was destined to bring the celebration to a close at the Hotel Statler that night. Old men in the welcoming throng recalled the early days of the canal when boats of less than 100 tons were drawn by horse and mule teams, and gossiped about them as they scanned the modern canal leviathans with a capacity of 750 tons, propelled by their own power.

The work of unloading began at once. A huge electric crane glided along the pier and was brought to a halt at the boat's side. A giant hook sank into the hold. In a moment boxes and bags were hoisted aloft and gently lowered into the ox cart, where the load was arranged by Russell French of Schenectady, who had brought cart and ox team to Buffalo to take part in the celebration. Nothing, perhaps, indicates more sharply the march of progress since the canal was opened. Ox teams, then as common on the farms and highways as tractors and automobiles are today, have almost become extinct. As a matter of fact, it was only with the utmost labor on the part of Chairman Templeton and his committee workers that an ox team still capable of playing its part in the day's program was located.

There was sharp contrast, too, between the means of transportation on land in Governor Clinton's day and ours when the ox cart began to wend its way slowly toward the Statler, the scene of the night's commemoration, surrounded as it was by swiftly darting gasoline driven trucks. Even as it was being loaded a huge motor truck, a tank wagon owned by the Standard Oil Company, drew up alongside the "Hartford Socony" and in an instant gallons of gasoline were pouring from the hold of the boat into the tank wagon on the dock.

With the unloading process completed, State Chairman Clinton boarded the canal boat and, by the side of City Chairman Templeton and Huntington T. Morse, of the Munson Canal line, emptied into the waters of the lake the cask of water brought from the Atlantic, in a sense restoring thereby the water taken from Lake

Erie for transmission to the ocean by his grandfather a century before. The original cask, brought from its permanent home in the custody of the New York City Historical Society, and its replica were objects of great interest in Buffalo as well as along the route of the canal during its trip from the metropolis. Finally, that night, it graced the big banquet table at the Statler before being returned to New York. The duplicate cask has since been presented to the Buffalo Historical Society for its permanent preservation.

There was another transfer of water from lake to ocean and return that day, exemplifying in still more vivid form the changes in transportation methods that have been wrought in a century. Water from Lake Erie was carried by airplane from Buffalo to New York, then poured into the ocean, and the return, with water from the sea to be poured into the lake, was made immediately, the round trip covering barely five hours. Governor Clinton, it will be recalled, consumed twenty-one days in transporting the original cask of water from Lake Erie to wed it with the waters of New York harbor. The airplane flight was made by Lieutenant J. D. Barner of the United States Marine Corps.

The program of Thursday afternoon, October fourteenth, was featured by two events, one a parade, showing by floats the development that has taken place in Buffalo and in the State and Nation since the opening of the canal; the other an Indian ceremonial in which representatives of the once powerful Iroquois Confederacy of Six Nations met and pledged anew their friendship for the white man.

The parade was started from Troop E armory in Delavan avenue and moved to The Front. Heading the line of march was a Boy Scout band. Next came the "Covered Wagon," symbolical of eighteen days of travel required by that means of transportation to reach Buffalo from Albany. Floats depicting early advocates of construction of the canal were followed by others showing the "Marriage of the Waters," the original canal boat and descendants of DeWitt Clinton and of those who made the first canal trip, the evolution of Buffalo's schools starting with the "little red schoolhouse" and depicting the general march of progress in Buffalo. Other floats represented all types of nationalities now resident in Buffalo. Bands discoursing patriotic and lively airs added to the occasion.

The climax of the moving spectacle was fittingly represented by the gift by New York State of the Erie Canal to the nation. Mrs. Bentley Craig represented "Miss New York" and Mrs. George Hold impersonated Columbia receiving the gift. At the conclu-

sion of the parade folk dances and tableaux were presented at The Front.

The Indian seasonal dances were held near the monument erected in honor of Commodore Oliver Hazard Perry, the hero of Lake Erie. Those taking part were Chief Johnson from the Grand River reservation, Brantford, Ontario, and accompanying warriors who brought with them their birch bark canoes, snow shoes and other primitive means of travel. They were received by Clinton Rickard, a chieftain of the Tuscaroras, and other braves from the Niagara reservation.

All of the pageantry and parade, and the colorful exercises and events of Thursday afternoon were the result of the plans and work of Mrs. John G. Wickser, chairman of the Committee on Pageants, assisted by Miss Jane Keeler and other members of her committee. To Mrs. Wickser's skill in imaginative design and planning is due in large measure the splendid and interesting results of the day's events which contributed so greatly to the popular enjoyment of the centennial program. Also through the efforts of the Committee on Pageants historic relics of the early canal and of the State's pioneer days were secured and placed on exhibition in the windows of many shops.

An ambitious program of water sports was staged on the Niagara river during the afternoon of Thursday in conjunction with the land pageant at The Front. In charge of it was a committee headed by Martin P. Flemming and otherwise composed of Commodore Joseph P. Broderick and Captain Arthur G. Baitz of the West Side Rowing Club, Commodore George J. Hager and Captain Emerson E. Coatsworth of the Buffalo Canoe Club, Commodore Philip G. Schaefer and Captain Alvin Ouchie of the Buffalo Launch Club, Commodore H. Morton Jones and Captain C. Ray Keyes of the Buffalo Yacht club, Commodore Frank Judd and Captain Harry H. Larkin of the Niagara Boat Club.

Participating actively in the arrangements was President Michael J. Broderick of the West Side Rowing Club, who, with Chairman Flemming, a longtime member of the same organization, arranged the program. Opening the water pageant was a procession of water craft representing all the clubs, following which each group of boats of similar class gave speed demonstrations over a course of a mile and a half, starting at a point opposite the New York State terminal and passing the reviewing stand at the foot of Porter avenue, finishing at a point beyond the club house of the Yacht Club. John M. Carmody acted as referee, with Michael J. Broderick as clerk of the course and James Griffin as timer.



PIERS 5 AND 6, EAST RIVER

The important downtown Barge canal terminal in New York City, the equal or superior of any pier in the harbor in equipment for handling freight. Some of the mechanical devices (five cranes of various types) are seen in the view.

The participating organizations and their individual members were as follows:

BUFFALO YACHT CLUB
Commodore, H. Morton Jones

Name of yacht	Owner
Yacht Eskimo.....	Owner, H. Morton Jones
Yacht Onaway II.....	Owner, W. G. Case
Yacht Marces II.....	Owner, Charles H. Walters
Yacht Wanderluer.....	Owner, Charles Larkin
Yacht Seaward.....	Owner, Harry Larkin
Yacht Lillyanna.....	Owner, Edward C. Boehm
Yacht LaTonka.....	Owner, Elmer Doyle
Yacht Mercedes.....	Owner, Charles Guernsey

BUFFALO CANOE CLUB
Commodore, George J. Hager

Yacht	Type	Owner	Skipper
Wood Duck.	Power Cruiser...	Charles H. Larkin.....	Com. George J. Hager
Spry.....	"R" Class.....	Wm. C. Warren, Jr....	Walter Heussler
Briquette...	Victory Class...	H. M. Hill, Jr.....	H. M. Hill, Jr.

BUFFALO LAUNCH CLUB
Commodore, Philip G. Schaefer

Name of boat	Owner
Arad 8.....	Ralph Sidway
Curtiss Wilgold.....	R. C. Keys
Miss Crystal.....	George Hall

NIAGARA BOAT CLUB
Commodore, Frank Judd

Name of boat	Owner
Snoozor 2nd.....	Frank Judd, Tonawanda
Ellen The Second.....	Harry Vigrass
Okocojii 2nd.....	LeGrand Simpson

WEST SIDE ROWING CLUB
Commodore, Joseph P. Broderick

LAUNCH "CHICQADEE"

Single Sculls

- | | | |
|----------------|---------------|----------------|
| 1. R. Sherman. | 2. R. Turner. | 3. I. Morrison |
|----------------|---------------|----------------|

Working Gigs

- | | | |
|---------------|----------------|--------------|
| 1. E. Atwell. | 2. R. Harding. | 3. I. Lawson |
|---------------|----------------|--------------|

Fours	Crew No. 1	Crew No. 2
Bow.....	J. Dorr.....	I. Wall
No. 2.....	C. Hooper.....	R. Wall
No. 3.....	J. Harding.....	C. Schamel
Stroke.....	C. Flynn.....	H. Wall

Eights	Crew No. 1	Crew No. 2
Bow.....	N. Konrad.....	R. Couch
No. 2.....	R. Harding.....	G. Fiske
No. 3.....	J. Farrell.....	L. Wolfe
No. 4.....	T. Reilly.....	R. Ogilvie
No. 5.....	J. Schamel.....	J. Jelly
No. 6.....	L. Hopkins.....	A. Murphy
No. 7.....	R. Nichols.....	C. Broderick
Stroke.....	W. Logan.....	B. Logan
Coxswain.....	P. Mahaney.....	M. Broderick

A most important part of the Buffalo celebration was a prize essay contest, the details of which were arranged and carried out by the educational committee of which Chancellor Samuel P. Capen of the University of Buffalo was chairman.

The contest was limited to the three colleges in Buffalo, the University of Buffalo, Canisius College and the State Teachers College, formerly the State Normal School, whose students were asked to submit essays on any one of three phases of the centennial celebration: 1. "The part which the Erie Canal played in building up the Empire State." 2. "The new Erie Canal and its value to the farmers of Western States," and 3. "The Erie Canal of 1825 and the new Erie Barge Canal of 1925, a comparison and an evolution." For judges of the contest the committee selected Hon. Henry W. Hill, George Clinton, Jr., and Mr. Walter L. Brown, the librarian of the Buffalo Public Library. Mr. Thurston Davies, principal of Nichols School and a member of Chancellor Capen's committee, had immediate charge of the contest. From the large number of essays submitted the judges made these awards:

First prize to Edward F. Barrett, Jr., No. 20 Hedley Avenue, Buffalo. (Canisius College.)

Second prize to Joseph Paul Desmond, No. 440 Norwood Avenue, Buffalo. (Canisius College.)

Third prize to Marie F. Neldenger, No. 54 Mandan Street, Buffalo. (University of Buffalo.)

Fourth prize to Julie Bendeman, No. 170 Blaine Avenue, Buffalo. (State Teachers College.)

In addition to the prize essay feature the committee evolved and successfully worked out a plan under which the student body in Buffalo high schools wrote letters explanatory of the coming celebration to mayors, postmasters and Chambers of Commerce throughout the country. A total of upwards of 14,000 of these letters were written during the few weeks preceding the celebration, all dwelling on the centennial as a spectacle designed to call nationwide attention to the Barge Canal and its wideflung benefits. A large percentage of these letters were answered by the re-

cipients, emphasizing the interest which was stirred in the celebration throughout the United States.

As was the case in New York City the official celebration in Buffalo reached its climax on the evening of Thursday, October 14, 1926, when a great public meeting and banquet was had. National, State and City Governments were represented and the citizens of Buffalo, both men and women, attended. The banquet hall was filled to capacity. The whole gathering was truly representative of the citizenry of Western New York and by their enthusiasm and interest in the proceedings did honor to the occasion.

At the speakers' table the following were seated: Frank M. Williams, Roy G. Finch, Col. Frederick S. Greene, Frank C. Perkins, John J. Love, William J. Roche, Henry W. Hill, George Clinton, John D. Wells, Frank X. Schwab, J. Hampton Moore, Richard H. Templeton, Leonard W. H. Gibbs, William J. Hickey, Rt. Rev. William Turner, Rt. Rev. Edmund J. Britt, James P. Moore, Edward S. Walsh and William F. Schwartz.

The invocation was pronounced by the Right Reverend William Turner, Bishop of the Catholic See of Buffalo. The meeting was opened by George Clinton, Chairman of the Erie Canal Centennial Commission, who spoke as follows:

MR. GEORGE CLINTON:

"Ladies and Gentlemen: It is my privilege to represent the Commission appointed by the Governor and the Legislature to conduct the celebration of the opening to commerce of the original Erie Canal. That canal was opened with elaborate ceremonies on October 26, 1825, but not until the year 1826 was it generally opened to commerce. The Commission was created for two purposes as specified in the law: One was to commemorate the historic event; and the other was, as forcefully as might be possible, by the celebration to promote traffic on the existing canal system. I have really nothing further to say to you but cannot turn the ceremonies over to our toastmaster, Mr. Wells, without telling you that the success of the celebration had last week in New York City, and the great success and co-operation we have had in Buffalo, is due so far as the State Commission has been concerned, to our secretary, Mr. Alfred M. O'Neill, who for a year has labored in the interest of the Centennial project, and to his very able assistant, Frances Doran Dulin. Also, on behalf of the Commission I express deep appreciation of the splendid co-operation and aid rendered by Mayor Schwab and the members of the City Council who made it possible to extend the scope of the celebration in this city beyond the limits set by the Commission; and in particular we extend our sincere thanks to Mr. Richard H. Templeton, Executive Chairman of the Citizens Advisory Committee, whose tireless

energy and never failing enthusiasm made Buffalo's celebration an event which will be long remembered, and to the splendid men and women who as sub-committee chairmen and members planned and produced the wonderful spectacles we have witnessed during the present week. I will now turn the conduct of the proceedings over to my friend, Mr. John D. Wells.

MR. JOHN D WELLS (Toastmaster) :

"*Mr. Clinton, Mr. Mayor, Distinguished Guests, Ladies and Gentlemen:* It is a very great pleasure to be here and it is a very great honor you do me in selecting me as toastmaster for this occasion, an important—a very important—milestone in the life of New York State.

"Toastmasters come in all shapes and all sizes, which perhaps is as good as any defense that can be offered for my official status tonight. But the real A-1, three-ply toastmaster, in addition to natural qualifications, should be fortified by experience.

"I do not wish to register conceit, but in this respect I am fortified, not by my own experience but by the experience of another—no less a person than Simeon Ford, that peerless bellwether of the gastronomic flock,—who once imparted to me these three invaluable precepts, following which any dinner of modern citizenry can be conducted to the very peak of success. Said he:

"'The easiest thing in the world is to get speakers for a banquet and the hardest thing in the world is to get them to stop.'

"Second: 'Be complete; at a celebration there is always a committee for everything, except taking down the decorations.'

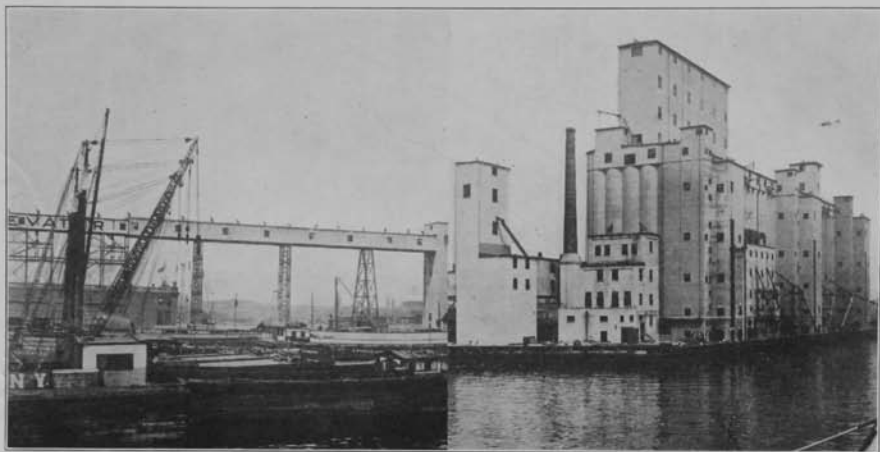
"Third: 'Godspeed the day of human improvement when it will be possible to buy a speech at the store and *have* it delivered.'

"Tonight is epochal—the 100th anniversary of what 100 years ago was the most stupendous effort ever made by a Commonwealth destined for world fame as a Commonwealth of limitless dreams fulfilled.

"One hundred years ago, the christening party poured a keg of water overside—the first great triumph of the dry party by the way—and today it comes back to us and strangely enough at a time when some weird hocus pocus has made a keg a curiosity. And this is no *small* part of the celebration.

"In this age of stupendous undertakings we find it difficult to get proper perspective—difficult to understand the task of financing, without proportionate volume of money; the vision required to properly inspire the people and promote the enterprise in that early day; of creating without a labor market—in short it is impossible for us to realize the obstacles overcome to create this great public utility which has meant so much to the State of New York and the settlement of her sister States to the westward. We fail because America has progressed so rapidly as to obliterate all standards by which we might make comparison.

"In an age when the Charleston seems to be the most important step in life it is impossible for us to comprehend the importance of the step our hardy forbears contemplated in spending millions on what must in prospect have been an uncertainty.



GRAIN ELEVATOR AND TERMINAL AT GOWANUS BAY, NEW YORK CITY

The point where ocean shipping and canal barges meet. At the right is the elevator. Extending out on the 1,200 foot pier is a conveyor gallery for carrying grain to deep-sea vessels. The terminal equipment is complete for all general traffic.

"Today, financing the Erie Canal, even at replacement cost, would not be difficult, thanks to the industrial and financial structure the canal had no small part in rearing. Doubtless, the process would be something like this:

"First, a promoter would appear, a man with horn rimmed glasses, who looked as though he had written a history of the world last night — as polished and fascinating as a bigamist.

"With admirable facility and not a little despatch, he would interest first the individual capitalists and then the bankers. With rubber heels he would approach the bankers—Mr. O'Sullivan did wonders for the world's dreamers — and by artful grouping of words would seemingly surrender his idea—this by the simple process of agreeing, until his idea was the bankers' idea, a good idea at last, for which the proper proportion of money would be forthcoming.

"While he is in bad standing with business experts, I still believe the 'Yes man,' the man who agrees, who adapts himself to the other's ideas, scores more frequently in life's sharpshooting.

"I once knew an applicant for teacher in a district school, who was being examined by the trustees.

": 'Which way does the Mississippi River flow, up or down?'

" 'Well,' said the applicant, 'I teach both ways.' And he got the job.

"Once having surrendered his idea to the bankers, in this day and age I doubt whether so good a thing as the Erie Canal would have had to resort to so modern a thing as high pressure salesmanship, loading and re-loading and the other things we have cause to know so well.

"Now, I respect modern methods. I yield to no one in my admiration of business brains, but somehow I am glad the Erie Canal was conceived and carried to successful conclusion in just the way it was and by the men and women who did it.

"It was a community enterprise if ever there were one. Up until its conclusion it was the greatest united effort in the State's history. I like to visualize the people of that time discussing it.

"You know it was talked for a hundred years before it was started — talked in the tavern and the rear end of the grocery store, I daresay.

"Then, I suppose the groceryman put a wire cage on the cheese and drove the disputants out into the open. Then and not until then, something was accomplished.

"I am told that the women had much to do with it. With traditional feminine intuition, they saw the business angle and fought for it. You know a women will skulk away and droop when she's crossed in love, but she will fight to the last ditch to get fifty-five clothes pins for a dime. Apparently, the State's women had the fifty-five-for-a-dime spirit then as now — the family intelligence was in the wife's name then as now.

"There was opposition. An old fellow townsman of mine once said: 'Next to being as good as your wife's folks, there's nothing as hard as provin' a thing that ain't never been done.'

"There were the usual number of men who would rather be wrong than president. But the tireless few kept the needs of the

new country to the fore and in the end triumphed. Some way, they remind me of a famous dramatic criticism of an Uncle Tom's Cabin show in a mid-western town's newspaper: 'The dogs were good but they had poor support.'

"I daresay the State was quite as upset about its problems as we are today about the referendum and refill.

"In one respect our forbears had the advantage, in the matter of labor. They were still in the day of the old-fashioned workman who spit on his hands. They didn't have to sharpen the stumps to keep the hired men from sitting down. There was no genius in the crew trying to invent a shovel with a clock in the handle and there was no Henry Ford dividing production by pay roll and getting a five-hour day out of it. This helped immeasurably.

"It is a matter of record, too, that there was one element that wanted to build only a part of the canal way, quickly cried down by the others who argued that it must be a complete canal if it were to be used, reminding me again of the homely philosophy of an old fellow townsman of mine, who once said 'There ain't no sense in marryin' a homely girl, 'specially if you're goin' to be home much.'

"So it was finished, a great glorious triumph of a people unused, at that time, to great achievements that had to be thought out in terms of millions of dollars and an army of men. The world applauded, and the world still applauds these resolute people.

"Their achievement has survived the century with usefulness unimpaired. A hundred years later, the canal, like baked beans, hasn't an enemy in the world.

"And it wasn't such a bad way to travel. Even in this day, when we travel around the world between 8 and 11 o'clock for sixty-five cents, changing films at the Buffalo and the Hippodrome, there are certain features of canal packet travel that are most alluring.

"Fancy, if you can, a transportation agency without a smoking compartment filled with fat drummers talking about Florida.

"Fancy no traffic congestion in the washroom between Batavia and Lancaster, at 7:30 A. M.; no hot water faucets that don't 'fauce,' no windows that stick, no ventilators that don't ventilate.

"And, best of all, fancy going into the dining room day after day between Albany and Buffalo and sitting down to a twenty-five-cent dinner with eight side dishes and a cross-barred piece of apple pie over in left field.

"Sometimes, I wonder about our boasted progress!

"Ladies and gentlemen, if I seem to have treated the canal subject a bit facetiously tonight I have done so for two reasons: first, because I know nothing about the canal, except its usefulness, a detail that is common knowledge; second, the speakers I am to present tonight are experts, men who know the State waterways and all their ramifications. But, before I introduce the first speaker, I do wish to be serious for just a moment. I want to read a little excerpt from a boy's diary — a diary written more than seventy years ago — grown yellow now with the notes dif-

ficult to decipher. I read it because in a somewhat impressive way it reminds us of the sentiment at least that clings to this old waterway. I daresay it touches many of us who do not know it. This would never have been known except for the preservation of the boy's diary through all these years.

"Embarked at Albany yesterday after a long coach ride from New York which could have been made by water, which we did not know until yesterday. This is a beautiful land we are passing with not many towns and only a few homes on the bank. Today father and I turned to and shod the mules and we paid back some of our passage money of which we are in great need not having much and not knowing what we are to find ahead of us. Mother is better after long illness and think she will be so. It seems so long since we started and feel so far away from all I know but know we shall like it and do well. I hope I shall live long here and see my children and their children happy in this beautiful land."

"And he did — saw his children and his children's children venture out fanwise from this terminal city of the waterway, to new homes and new friends 'On West' and only a comparatively few years ago we laid him away in his uniform of a soldier of Grant, bearing honorable scars of wounds sustained fighting for the land, in his adoration of which he quite forgot his beloved Wales."

THE TOASTMASTER: *Ladies and Gentlemen:* I have great pleasure tonight in presenting his Honor Frank X. Schwab, Mayor of the City of Buffalo, who will officially welcome the guests. Mayor Schwab. (Applause.)

MAYOR SCHWAB:

"Mr. Toastmaster, Distinguished Guests, Ladies and Gentlemen: I assure you I deem this an honor and a pleasure to welcome you to our city. I want to take this opportunity of expressing our gratitude and sincere thanks to all the committee, especially to Mr. Templeton, to the secretary, to Mr. Clinton, the boys and girls, to every one who helped to make this a success. Buffalo is proud of this day. We are celebrating a real birthday, and I hope and trust and I wonder, as I stand here, what Mayor Clinton would say if he were with us today, and Mayor Johnson and some of the other Mayors, to see the progress that has been made in this city, to see this city rise from 2,000 to 580,000. I hope and trust they are looking down upon us this evening and asking God, as we did in the start of this banquet, for His grace that we may have the grace of God showered upon the city of Buffalo which needs His providence for so many good things, and especially upon the Clinton family, and especially upon the man who made it possible for us to enjoy this evening, this canal and all the good things we received in the past.

"We are growing by leaps and bounds in this twentieth century and little do we realize who brought about the celebration that we

are enjoying today. By the sweat of their brow, by their homes, their families, they sacrificed all to make a waterway and a connection for transportation to make a contented and happy people.

"And I see before me members of the Legislature. I want to warn them at this time that we are passing resolutions tonight, that we will rap upon the doors of the Legislature in the near future, and I hope and trust that our aim to make this canal second to none, will be accomplished.

"I want to say in conclusion, Mr. Clinton, I wish you and your family God speed. May God spare you and keep you for a long time to come. (Applause.)

THE TOASTMASTER: Canal history has been very largely written by earnest men who have given time and study to the matter of State waterways. At every period of the canal's usefulness there have been men to defend it, to see clearly and learn its potential value to the State and business interests. In our own day and age no man in the State has given more unselfishly of his time and energy in this cause than former Senator Henry W. Hill. (Applause.) I think there is no man in the State who has more detailed knowledge of the waterways.

I have great pleasure in presenting Senator Hill who will address you. (Applause.)

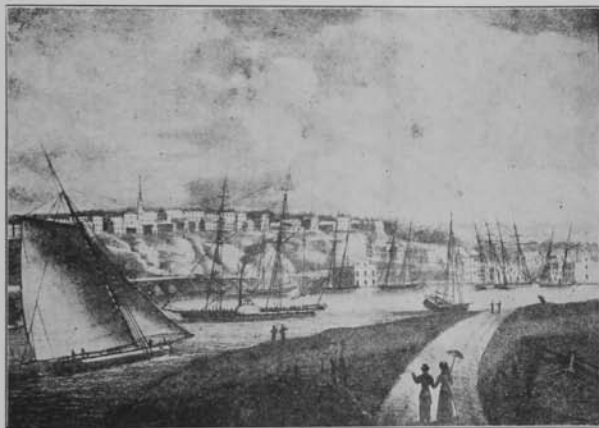
MR. HENRY W. HILL:

"*Mr. Chairman, Ladies and Gentlemen:* In the course of human progress, great achievements do not spring fully developed like Aphrodite from the foam of the sea, but are the culmination of antecedent studies and preliminary considerations and efforts eventuating in their production. Such were the conception and construction of the original Erie Canal.

'A consummation' long
'Devoutly wished.'

"Routes of trade and travel were extended westerly from the Hudson by the aborigines prior to its navigation by Henry Christiaensen in 1614.

"For a hundred years, a score or more of the builders of this Empire State recognized the physical adaptability of its territory to the construction of a navigable waterway between the Great Lakes on the west and the Atlantic Ocean on the east and they severally contributed something to the State's canal policy, which included the construction of the Erie, Champlain, Oswego, Cayuga and Seneca, Black River and some other canals since abandoned. It is well on this centenary anniversary to recall some of their names and in a word remind you of their services. Cadwallader Colden, Surveyor-General and Lieutenant-Governor of the Province of New York, reported at some length to Sir William Burnet, Captain General and Governor of the Province in 1724 on the



EARLIEST KNOWN VIEW OF BUFFALO



natural water courses of the territory and its adaptability to inland navigation. Lieutenant-Governor Clark in 1738 also reported to the Lords of Trade on the existing navigable communication along the natural water courses of the territory. Lieutenant-Governor DeLancey in 1755, Sir Henry Moore, Governor of the Province in 1768 and General Philip Schuyler in 1776 discussed phases of navigable communication over the water courses of the Province. General Philip Schuyler saw some of the canals of England in 1761 and became one of the earliest and most influential advocates of canal construction in this Province. The honor of the first proposer of a canal across the State is claimed by several, including the friends of Gouverneur Morris who announced to Philip Schuyler in 1777 that 'at no distant day the waters of the great western seas will by the aid of man break through the barriers and mingle with the Hudson. Numerous streams pass these barriers through natural channels and artificial ones may be conducted by the same route.'

"After touring some of the water courses of the State, including the Mohawk and Wood Creek, which empties into Oneida Lake and affords water communication into Ontario, General Washington in 1783 wrote to the Marquis de Chastellux 'Would to God we may have wisdom enough to improve them,' by which he meant those of New York and of other States.

"In 1784 Christopher Colles, an engineer from Ireland, who proposed the municipal reservoir for the distribution of waters through the streets of the City of New York, memorialized the Legislature on the improvement of the navigation of the Mohawk and was given \$125 for that purpose. In his report to the Legislature of 1785 he proposed connecting artificial channels between several of the water courses of the State, which would extend navigation to the five Great Lakes, 'which so beautifully diversify the face of this continent' and over which 'the luxuries of life may be distributed to their remotest parts.' That proposal and the bill not reported from committee, introduced by Assemblyman Jeffrey Smith of Suffolk county in 1786 for 'improving the navigation of the Mohawk River, Wood Creek and the Onondaga River, with a view of opening an inland navigation to Oswego and for extending the same, if practicable, to Lake Erie,' are the most concrete suggestions that so far were made for a canal connecting the Great Lakes with the Hudson River.

"In 1786 Goldsbroow Banyar, General Philip Schuyler and Elkanah Watson were appointed commissioners to report on making a canal from Wood Creek to the Mohawk River and generally as to the most judicious plan of making the river navigable. They reported in 1792 on the natural water courses between the Hudson and Oneida Lake.

"In 1787 Joel Barlow in his 'Vision of Columbus' prophesied the union of the river systems of New York and Ohio.

"In 1788 Elkanah Watson, a native of Massachusetts, visited Fort Stanwix and again in 1791 but said nothing at that time about the construction of a canal, though he claimed in his subsequently written Journal, that it was on his visit to Fort Stanwix

in 1788, that he first conceived the idea of the practicability of connecting those waters.

"In 1791 Governor George Clinton in his speech to the Legislature recommended the policy of continuing to facilitate the means of communication with the frontier settlements. As the result of a favorable report of a concurrent resolution proposed by Elisha Williams in the Senate, the act of March 24, 1791, was passed 'concerning roads and inland navigation.' A commission was appointed which surveyed the Junction Canal (route) between the Mohawk and Wood Creek, where the Western Inland Lock Navigation Company constructed its canal and approximately along which course 125 years still later the Barge Canal was constructed.

"Governor Clinton, General Philip Schuyler, Elkanah Watson and Senator Elisha Williams in 1792 urged the passage of 'an act for the construction and opening a canal and lock navigation in the northern and western parts of the State.' That bill was introduced by Senator Williams on February 7th, 1792, and was put into its final form by General Philip Schuyler, a member of the Senate, and passed the Legislature on March 24th and the Council of Revision on March 30th, 1792, and became chapter 40 of the Laws of 1792, entitled 'An act for establishing and opening lock navigation within the State.'

"Under that act, General Philip Schuyler organized the Northern Inland Lock Navigation Company to open up lock navigation between the Hudson River and Lake Champlain, and also the Western Inland Lock Navigation Company to open up lock navigation between the Hudson River and Lake Ontario and Seneca Lake. The Western Company encountered many physical impediments in the Mohawk and Wood Creek in addition to overcoming the elevation of 44½ feet at Little Falls and the construction of a canal at German Flats and the locks and canals at Little Falls and at Fort Schuyler, and in clearing the Mohawk of timbers and in damming it in places and in straightening and improving Wood Creek.

"There were five locks at Little Falls, 74 feet long, 12 feet wide and were deep enough for vessels of 30 tons capacity and of 3½ feet draft to pass through them. Little Falls are now overcome by one barge canal lock of 40½ feet lift with 12 feet of water over miter sills.

"The reports of the Western Inland Lock Navigation Company disclose many difficulties in the navigation of the Mohawk, Wood Creek, Oneida Lake, Oneida and Seneca Rivers similar to those encountered in Barge canal operation 125 years later.

"General Philip Schuyler was not an engineer but a man of great ability and extraordinary energy and did as much as any person prior to DeWitt Clinton to formulate the canal policy of the State. His speech in the Senate of 1792 led to the reconstruction of the Williams canal bill and to its passage in its amended form as chapter 40 of the Laws of 1792.

"General Schuyler devoted several of the later years of his life to the management of the Western Inland Lock Navigation Com-

pany, which was not a financial success, although it collected nearly \$75,000 in tolls between 1797 and 1804 and expended in the construction and reconstruction of locks, prism walls and other works and in its operation approximately \$480,000. The physical obstacles encountered in its construction, maintenance and operation were too great to be overcome by any such corporation at that period and that fact was recognized by the projectors of the Erie Canal as a State undertaking.

"The physical properties of the Western Inland Lock Navigation Company were finally acquired by the State at their appraised value of \$151,820.80 and interest, of which \$60,204.80 were retained by the State for the stock of such company which it held. There were those who took advantage of the ill success of such company to discourage further efforts at canal construction in the early part of the eighteenth century. However, it must be remembered that in consequence of the reduction in the cost of transportation over the Western Inland Lock Navigation Company's canals and connecting canals to Seneca Lake, that land values doubled and the value of agricultural products also greatly increased, which was a conclusive demonstration of the advantages of water transportation in this State, where there were no railroads and very poor highways.

"During the twenty year period, from 1797 to 1817, of the operation of such canals, boats of ten tons capacity passed from Seneca Lake to Schenectady, substantially along the route of the barge canals, in whose construction and operation physical obstacles have been encountered somewhat similar to those encountered by the contractors and operators employed by the Western Inland Lock Navigation Company. That route was traversed by the ancestors of such prominent families as the Wadsworths, the Porters, the Richmonds and other settlers of Western New York and over those early canals prior to 1817 were transported the goods, merchandise, agricultural and other products of this territory. That was the route of western trade and travel for some years before and after the building of the Erie Canal. It followed the natural water courses of the territory, which were readily convertible into navigable waterways as was done by the Western Inland Lock Navigation Company, the Seneca Lock Navigation Company and later for some distance by the Oswego Canal Company.

"However, there were two long and serious interruptions to water transportation between the Hudson River and Lake Erie. They were the 16 miles portage between Albany and Schenectady and the still more costly portage from Lewiston up the 'mountain,' as it was called, over land to Fort Schlosser on the upper Niagara river.

"The Niagara Canal Company, incorporated in 1798 to provide a canal between Lake Ontario and Lake Erie, where there is a difference in lake elevation of 300 feet, did not construct its canal. nor did any of the later Niagara Ship canal companies ever construct any canal between the two lakes. The territory around Lake Erie and the other upper Great Lakes was being rapidly

settled and becoming productive. The men of vision of this State familiar with the economies in transportation of merchandise and agricultural products over waterways took advantage of the opportunity within reach of New York to do the carrying trade fast increasing between the east and the growing west and planned to connect up the Great Lakes and the Atlantic Ocean with a navigable waterway adequate to transport the tonnage passing between such waters.

"We will not attempt on this occasion to name the person to whom should be accorded the honor of originating the idea of the Erie Canal. From what has already been said and from what follows it is evident that the germinal idea may have sprung from the mind of any one of the several projectors of that great undertaking.

"It should be remembered that Cadwallader Colden suggested as early as 1724 that a canal might be built from the head waters of the Seneca River to Lake Erie and that Jeffrey Smith introduced a bill in 1786 for improving the navigation of the Mohawk River, Wood Creek and the Onondaga River and extend the same if practicable to Lake Erie, which had theretofore been suggested by Christopher Colles.

"Such engineers as William Weston, James Geddes, Thomas Eddy, Simeon DeWitt, Benjamin Wright, Major Abraham Hard-
enburgh, Charles C. Broadhead, Holmes Hutchinson, John B. Jervis, William Peacock, Colonel G. Lewis Garin, Nathan S. Roberts, Canvass White, Frederick C. Mills, and the State Engineers and Canal Commissioners, have been accredited with some share in projecting and formulating the plans for the building of the Erie Canal.

"Among the legislators who introduced various canal bills and therefore are to be accredited with some share in formulating the canal policy of the State are Jeffrey Smith, Elisha Williams, General Philip Schuyler, Thomas R. Gold, Robert R. Livingston, Joshua Forman, William A. Duer, Jonas Platt, J. Rutsen Van Rensselaer, Nathaniel Pendleton, George Tibbits, Wheeler Barnes, William B. Rochester, Martin Van Buren, John Taylor, William D. Ford, who introduced in the Assembly on March 18th, 1817, the original Erie Canal bill, and possibly others at that early period had some part in the enactment of various legislative measures, all shaping the canal policy of the State.

"In addition to the foregoing among the leading public spirited citizens who had part in formulating the canal policy of the State were DeWitt Clinton, Simeon DeWitt, Thomas Eddy, Robert Fulton, Alexander Hamilton, James Kent, Jesse Hawley, writing as he did from Batavia under the title of 'Hercules,' Robert R. Livingston, Gouveneur Morris, North, Peter B. Porter, Stephen Van Rensselaer, Elkanah Watson, Samuel Young, Henry Seymour, William C. Bouck, Charles D. Cooper, Jonas Earl, Jr., Michael Hoffman, John Bowman, William Baker, Samuel Ruggles, Horatio Seymour, and others, and Governors George Clinton, John Jay, Morgan Lewis, Daniel D. Tompkins, John Taylor, DeWitt Clinton and Joseph C. Yates.



FRANK X. SCHWAB
Mayor of the City of Buffalo
and Honorary Chairman of the
Citizens Advisory Committee



"Canal development was of such importance throughout the country that it was recognized in the Congress of the United States. Senator John Pope of Kentucky and Peter B. Porter of New York sponsored bills in Congress for the improvement of the United States by roads and canals which contained a provision for 'Opening canals from the Hudson to Lake Ontario and around the falls of Niagara,' which failed of passage.

"President James Madison sent a special message to Congress on December 23, 1811, in which he said: 'The utility of canal navigation is universally admitted. * * * The particular undertaking contemplated by the State of New York, which marks an honorable spirit of enterprise, and comprises objects of national, as well as more limited importance, will recall the attention of Congress to the signal advantages to be derived to the United States, from a general system of internal communication and conveyance.'

"Prior to 1817 the Legislature authorized several surveys through the State of the most eligible route for a canal from the Hudson River to Lake Erie. Commissioners were appointed to take charge of such surveys and to report results of their investigations to the Legislature. Those reports were voluminous and threw much light on the topography and physical conditions of the territory as well as the obstacles that would necessarily be encountered in building a continuous waterway from Lake Erie to the Hudson with laterals extending to Cayuga and Seneca Lakes on the south and Lake Ontario on the north. The proposed interior route would necessitate the construction of aqueducts across the Genesee, Seneca and Mohawk Rivers and over thirty other intersecting streams. It also would involve the construction of 72 or more locks, 295 culverts and scores of bridges, and a dozen or more reservoirs and canal feeders.

"Most fortunately for the State, Canvass White, who had been in Europe and had examined the bridges, aqueducts and culverts in canal construction there, on his return to the United States and while employed as an engineer on the Erie Canal, experimented and perfected hydraulic cement, which was generally used thereafter in building canal structures. Notwithstanding all the surveys and preliminary investigations made prior to 1817, it was still necessary to convince the Legislature that the State should embark upon a project, which would involve millions of dollars, when the territory was only sparsely settled and still largely in a primeval condition.

"It remained for DeWitt Clinton, Thomas Eddy, Cadwallader D. Colden and John Swartwout, and principally for DeWitt Clinton, a member of the several canal commissions, which had theretofore reported to the Legislature the various surveys theretofore made, to draft the all-important Memorial of the citizens of New York in favor of a canal navigation between the Great Western Lakes and the tide waters of the Hudson. That was presented to the Assembly on February 21, 1816. Manifold as were his services to the State, and illuminating and refining as was the whole tenor of his life, it is doubtful whether or not he ever made a greater contribution of constructive statesmanship, or exhibited

greater prophetic discernment of the beneficial results of a state-wide commerce, than he portrayed in the phrasing of that immortal document.

"That Memorial contained a review of canal operation in other countries. It also contained a comprehensive statement of the conditions to be met in the construction of the proposed Erie Canal and the relative advantages to accrue from the operation of a canal between Lake Erie and the Hudson River. Mr. Clinton said: 'Great manufacturing establishments will spring up; agriculture will establish its granaries, and commerce its warehouses in all directions. Villages, towns and cities will line the banks of the canal and the shores of the Hudson from Erie to New York. The wilderness and solitary place will become glad and the desert will rejoice and blossom as the rose.' That prophesy was fulfilled within half a century and New York forged ahead to the potentialities of an Empire. In his comprehensive State papers, he proposed improvements of nearly all the water courses of the State and he in a masterful manner directed its waterway activities.

"The Memorial was published and made a deep impression on the people of the State. Petitions began to pour into the Legislature from most of the upstate counties urging favorable action on the part of the Legislature in conformity to the recommendations of the Memorial.

"On April 17th, 1816, chapter 237 of the laws of that year took effect, by the provisions of which Stephen Van Rensselaer, DeWitt Clinton, Samuel Young, Joseph Ellicott and Myron Holley were 'appointed commissioners to consider, devise and adopt such measures as shall be requisite to facilitate and effect the communication by means of canals and locks between the navigable waters of Hudson's river and Lake Erie and the said navigable waters and Lake Champlain.' Those commissioners were authorized to make full investigation into the most eligible routes, to apply for cessions of lands from the United States, to open subscription books for loans of money, to estimate the expense of such canals and to report to the next Legislature.

"On February 17th, 1817, the commissioners made their plain and comprehensive report of their proceedings, as required by the act under which they were appointed, which contains a description of the route and a detailed statement of the estimated costs of the proposed canal from Lake Erie to the Hudson River and they also made other reports on such other matters as were referred to them, including a report on the proposed Champlain Canal. Those reports were considered by the Legislature and on March 19th, 1817, Honorable William D. Ford of the joint committee on canals brought into the Assembly the bill entitled 'An act concerning navigable communication between the Great Western and Northern Lakes and the Atlantic Ocean.' That was considered in the Assembly and Senate and various amendments made thereto until April 15th, 1817, when it passed the Senate.

"In its passage through the Assembly it received 64 affirmative votes to 36 negative votes and 22 not voting. In the Senate it received 18 affirmative votes to 9 negative votes and strange to say, 6 of the negative votes were from the southern Senate District of

the State, which included Dutchess, Kings, New York, Putnam, Queens, Richmond, Rockland, Suffolk and Westchester counties.

"During the debate in the Assembly, Elisha Williams of Columbia, addressing himself to the leading member of the New York delegation, which was opposed to the passage of the canal bill, declared: 'If the canal is to be a shower of gold it will fall upon New York; if it is to be a river of gold, it will flow into her lap.'

"In the Senate ex-Governor Martin Van Buren of Columbia county made a strong speech in favor of the bill on its final passage, as did Senator Tibbits of Rensselaer county. It was approved on April 15th, 1817, by the Council of Revision, Chancellor James Kent casting the decisive vote and it became chapter 262 of the Laws of 1817.

"Canal construction was commenced at Rome on July 4th, 1817, and continued until October, 1825. At that time the State had a population approximately of 1,616,458, or two and one-half times the present population of Erie county, and an aggregate assessed property valuation of approximately three hundred and forty millions of dollars, about one-third of the present assessed property valuation of Erie county. The canal was 363 miles in length and its prism was 40 feet wide at the surface, 26 feet wide at the bottom and 4 feet deep. Its 77 locks were 90 feet in length and 15 feet in width, admitting of the passage of vessels 80 feet in length, 12 feet in width, carrying from 75 to 100 tons. It cost \$7,143,789.

"Prior to the completion of the construction of the original Erie Canal in 1825 there were several other canals in operation in the United States.

"The Dismal Swamp Canal in Virginia and North Carolina was completed in 1794 and enlarged in 1822. The Pawtucket Falls Canal in Massachusetts was opened in 1797. The Santee Canal in South Carolina was opened in 1802 and the Middlesex Canal in Massachusetts was opened in 1804.

"Several small canals were opened in 1812, namely, the Hooksett Falls Canal, Amoskeag Falls Canal, Union Canal and Sewalls Falls Canal in New Hampshire.

"The Champlain Canal in this State was completed in 1823. The Schuylkill Canal in Pennsylvania, the James River and Kanawha Canal in Virginia and Lockart's Canal in South Carolina were completed in 1825.

"The average cargoes of vessels navigating the Erie Canal prior to 1840 did not exceed 40 tons and from 1840 to 1855 did not exceed 95 tons, and after the first enlargement from 1855 to 1872 they did not exceed 190 tons and after the later enlargement from 1872 to 1895 they did not exceed 240 tons.

"One of the earliest packet boats between Rome and Utica in 1819 was 61 feet in length, 7½ feet in width and had 2 rising cabins built for passengers and drew 14 inches of water.

"The first packet or passenger boat navigating the Erie Canal between Utica and Rochester carried 84 passengers. There was daily service between those places with boats of 10 to 20 tons burden said to be 'fitted up in magnificent style.'

"The packet boats on the Erie Canal were generally constructed 80 feet in length, 14 feet in width and drew from 1 to 2 feet of water. The cabins occupied the entire deck except 8 or 10 feet reserved for the cook and 4 to 6 feet reserved for the pilot. The cabins were rooms 8 feet in height with single berths on each side calculated to accommodate from 30 to 80 passengers. The main room was used for a dining room during the day and a dormitory at night.

"Passenger boats were drawn by three horses placed one before the other and traveled day and night, with relays every 8 or 10 miles and made 4 miles an hour, or 85 miles in the 24 hours. Cargo boats did not generally exceed 55 miles a day. Such journeys were far more commodious than was that in the first century B. C. over the navigable canal between Forum Appii and Feronia, graphically described by Horace in the fifth of his first book of Satires.

"There were no railroads and the highways were hardly passable and the travel over the Erie Canal was heavy and the packet boats were frequently congested so that there was more or less discomfort in the overcrowded dormitories at night, but the journey was made without the jolting, dust and other hardships of stage coaches and the Erie route became the popular route as the tide of travel was setting strongly from the eastern to the western States, which were being fast populated from New England. Hundreds and thousands of the settlers of Ohio, Indiana, Illinois, Iowa, Michigan, Wisconsin, Minnesota and other central States found their way westward over the Erie Canal. For a century some parts of the agricultural and possibly other products of those States have found and are still finding transportation to the sea over that waterway now enlarged to the type of a barge canal.

"From 1851 to 1882 from one to two and eight-tenths million tons of the products of the western States passed over the Erie Canal to tidewater. The aggregate of such western States canal tonnage for those years was 59,182,473 tons, which averaged 1,849,358 tons a year.

"Canal tolls were abolished in New York in 1882 and since that time the State has received nothing whatever from transportation companies for the use of the canals of the State and they have been entirely free to shippers of this and other States, including the carriers of the great grain producing States of the central west. New York's liberality in that respect has no parallel in the history of transportation in this country.

"As already stated, the original Erie Canal was completed in 1825 at a cost to the State of \$7,143,789.

"In 1835 the Legislature authorized the first enlargement of the Erie Canal so that it would have a surface width of 70 feet, a bottom width of 56 feet and a depth of 7 feet and locks 110 feet long and 18 feet wide. Changes were made in the plans of enlargement, some locks were doubled and sections were deepened beyond the original estimates and other changes were made in the plans proposed in 1835 for the enlargement. By reason of straightening some sections of the original canal, it was reduced in

CITY COUNCIL OF BUFFALO



FRANK C. PERKINS



JAMES P. MOORE



WILLIAM F. SCHWARTZ



JOHN J. LOVE

length to 350½ miles with 72 locks and 3 guard locks. The carrying capacity of boats ranged from 75 to 175 tons. The enlargement continued from 1835 to September 1st, 1862. The entire cost of the enlargement was \$31,834,041.30.

"During the progress of the first enlargement some locks, reservoirs and other structures were incomplete and owing to the Civil War it was even proposed that the Erie, Oswego and Champlain Canals should be enlarged to permit the passage of boats adequate to defend the northern and northwestern lake coasts. It was even proposed that the locks on the Champlain Canal be enlarged to admit the passage of gunboats and later the same suggestion was made with reference to the Oswego Canal.

"The Legislature of 1863 authorized surveys and estimates for tiers of locks to be located beside existing locks on the Erie, Oswego and Champlain Canals, which new locks were to be not less than 225 feet long and 26 feet wide with a draft of 7 feet, admitting the passage of boats of 240 tons burden. Some of these improvements were designed to permit the passage of gunboats. It was also proposed to widen the prism of the canal to permit the passage of three or four boats or 'double headers' and many other changes were made.

"In 1870 the State had in operation 775 miles of artificial canals and feeders, all of which were abandoned after the legislation of 1878 except the Erie, Champlain, Oswego, Cayuga and Seneca and Black River canals.

"In 1863 the aggregate canal tolls collected amounted to \$5,-029,596.32 and in 1868 the tolls collected aggregated \$4,253,-224.92. For the years 1868, 1870, 1871, 1872 and 1873, the total annual canal tonnage exceeded six million tons, two-thirds of which was over the Erie Canal. In 1868 the canal tonnage aggregated 6,442,225 tons.

"The demands for canal transportation were so great and the revenues so large that the Governor and other public officials considered the Erie, Oswego and Champlain Canals the principal sources of State revenue.

"The additional expenditures for the later improvements of the Erie Canal down to 1882 aggregated approximately \$10,614,-022.70, thus making a total expenditure for the construction and improvements of the Erie Canal of \$49,591,853 and the cost of collection, superintendency and ordinary repairs aggregated \$29,-270,301 and the revenues from the operation of the Erie Canal from the time of its construction to the abolition of tolls in 1882 aggregated \$121,461,871. From this it appears that the State realized a net profit of \$42,599,718 over the cost of construction, enlargement and operation of the Erie Canal. The State also constructed the Champlain, Oswego, Cayuga and Seneca and Black River Canals, still in operation and nine other lateral canals that have since been abandoned, and sustained a loss on all of them except the Seneca River towpath and Cayuga inlet, from whose operation the State derived a small profit.

"Minor improvements were continued until it was proposed to still further enlarge the Erie Canal to permit vessels of 500 tons

burden to navigate it. In 1895 a referendum measure was approved carrying an appropriation of \$9,000,000 to deepen the prism of the Erie, Champlain and Oswego Canals to not less than nine feet and to complete the lengthening of the canal locks and to make other improvements. Those improvements were undertaken but for the insufficiency of the funds were never completed.

"There followed a renewed agitation in relation to a still larger canal and the United States caused a survey to be made for a ship canal which was reported in 1900 but not acted upon.

"In the meantime the Roosevelt Canal Commission headed by the late General Francis V. Greene made its investigation and report in 1900, the first to favor barge canals for boats of 1,000 tons carrying capacity. That was considered in its various aspects during 1900, when the Legislature authorized a survey for such barge canals from Lakes Erie, Ontario and Champlain to the Hudson River. That survey was made under the supervision of Honorable Edward A. Bond, State Engineer and Surveyor, and a corps of eminent engineers, who made a comprehensive detailed report to the Legislature of 1901. Among such engineers were Hon. Elnathan Sweet, ex-State Engineer and Surveyor, Chairman; George S. Morison, member of the Isthmian Canal Commission; Major Thomas W. Symonds of the corps of U. S. Army Engineers; William H. Burr, member of the Isthmian Canal Commission and a professor in Columbia College; and Major Dan C. Kingman, of the Corps of U. S. Army Engineers. That report is a monument to the industry, exhaustive researches and proposed solution of the many problems foreseen in the construction of the barge canal system of the State and the proposed acquisition of water for its supply. Although the plans were subsequently revised by the Legislature of 1903, it was the main reference book in the barge canal construction that followed.

"There were many conferences and continued agitation over the report and the proposed enlargement of the canals of the State to the barge type. The recommendations of the Roosevelt Commission for the construction of canals admitting of navigation by barges carrying 1,000 tons and the report of the State survey were under consideration from 1901 to 1903 when the Legislature passed the \$101,000,000 referendum measure known as chapter 147 of the Laws of 1903 which was introduced in the Senate by George A. Davis and in the Assembly by Charles F. Bostwick, and approved by Governor Benjamin B. Odell and at the November election following, providing for the construction of the Erie, Oswego and Champlain Barge Canals, with a bottom width of 75 feet, a depth of 12 feet and with cross sections of 1,128 square feet, except at aqueducts and through cities where it was to be modified as the State Engineer and Canal Board might deem necessary. In rivers and lakes the channel was to have a minimum bottom width of 200 feet and a minimum depth of 12 feet. The locks were to be 328 feet long and 28 feet wide, but that provision was subsequently modified and the locks were widened to 45 feet with 12 feet of water over the miter sills. Such locks admit the passage of vessels 300 feet long, 43 feet wide, with

a draft of $11\frac{1}{2}$ feet, carrying approximately 3,000 tons. Such increase over the report of the Roosevelt Commission made canals admitting vessels of 3,000 tons carrying capacity instead of vessels of 1,000 tons carrying capacity as recommended by the Roosevelt Commission. The Erie Barge Canal has a season capacity of 20,000,000 tons, twice the cargo tonnage passing by water from the Great Lakes to the sea for coastwise or trans-Atlantic shipment. The 34 locks on the Erie, 11 on the Champlain, 7 on the Oswego and 4 on the Cayuga and Seneca Canals are of concrete and electrically operated with lifts varying from 6 to $40\frac{1}{2}$ feet. The Oswego and Champlain and Cayuga and Seneca Canals are of the same dimensions as the Erie.

"The aggregate mileage of all the barge canals, including Cayuga and Seneca lakes and canal harbors at Rochester, Syracuse and Utica is 525 miles. For 382 miles their prisms consist of canalized natural water courses, over which the aborigines and early settlers transported their furs, families, merchandise and products before there were railways or highways.

"The movable dams across the Mohawk to control the level of that canalized river after the type of those across the Moldau River in Roumania with Boulé Gates, the great dams across the Mohawk at Crescent and Vischers Ferry, producing much surplus electric power, the siphon lock at Oswego, the great storage reservoirs at Delta and Hinckley, the siphon spillways, the spacious canal terminals and elevators at Oswego and Gowanus Bay in the City of New York and scores of other structures of the most approved type are essential parts of the barge canal system, the product of the most skilled engineers and transportation advisory experts of their generation.

"New York's barge canals are of the most modern type and altogether constitute the most perfect canal system in the world. They were constructed entirely at the expense of the State and represent in round numbers at the present time an investment of approximately \$170,000,000 for their construction and elevator building. They are free of tolls and are used by shippers from the Great Lake cities as well as from the commercial centers of the State of New York. They were designed and are believed to be the most practical and economic waterways that could be operated between the Great Lakes and the Hudson River;

'at ille
Labitur & labetur in omne volubilis aevum.'

"Dr. Leo Sympher, Supervising Engineer of the German Canal and Waterway Systems, who had made a thorough study of the plans for the barge canal system of New York, told me in his office in Berlin in 1905 that he considered the proposed New York barge canals the best type of canals that could be constructed between the Great Lakes and the ocean.

"The system of canals is the pride of the people of the State and their utilization will add still further to the upbuilding of the Empire State.

"Down to September 30, 1908, the State had received from loans, tolls and miscellaneous canal receipts \$361,785,497.36 and had expended on its canals \$340,990,568.54, leaving an unexpended balance in the treasury at that date of \$20,794,900.82. The receipts and expenditures included the \$9,000,000 canal improvement fund of 1895 and \$12,000,000 of the barge canal improvement fund of 1903.

"In this limited review of the men and measures that have contributed to the upbuilding of the canal policy of the State, all have not been mentioned for lack of time. The annals of the State show that New York has never been without its canal advocates among its farseeing and progressive citizens. Governors, legislators, commercial organizations and scores of public spirited citizens of the type of the Honorable George Clinton, the Chairman of this Centennial Commission, have been steadfast in their adherence to its canal policy, formulated during a century of canal agitation and canal operation. They have realized that the commercial ascendancy of the State has been largely due to the activities over its waterways, internal, lake and oceanic, which have afforded the most economic means of transportation of its agricultural, mineral and industrial products to domestic and foreign markets. They also had the vision to foresee that its waterways would become carriers of vast tonnage between the Great Lakes and the Atlantic, which would augment internal and overseas commerce more than other routes of trade and travel, by potentially regulating freight rates and thereby drawing into New York's transportation agencies the commerce of the Great Lakes and the high seas. They are among the builders of the Empire State and their names and services should ever be treasured in grateful memory. For such service to the State may be mentioned Governors Martin Van Buren, William L. Marcy, William H. Seward, John Young, Washington Hunt, Horatio Seymour, Reuben E. Fenton, John T. Hoffman, Frank S. Black, Theodore Roosevelt, Benjamin B. Odell, Charles E. Hughes and Nathan L. Miller.

"During the past century there have been in the State Legislature and were in the several State constitutional conventions influential members enough to carry forward the canal policy of the State. Large representations of various organizations met from time to time in canal conferences and conventions to voice public canal sentiment, which was expressed through the Metropolitan press and in such widely circulated journals as the Buffalo Evening News, Buffalo Courier and Express and Buffalo Times and in the Troy, Albany, Utica, Rome, Syracuse, Oswego, Watertown, Rochester and other up-state papers. Who will assume to estimate the influence during the past hundred years upon their readers of their reportorial and editorial contributions to the upbuilding and perpetuation of the canal policy of the State?

"During the century of canal operation manifold industries were established, agricultural interests were promoted, mercantile institutions multiplied and commerce flourished all to a degree unrivalled, where the advantages of transportation by water were not available.



RICHARD H. TEMPLETON
Executive Chairman of Citizens'
Advisory Committee



LEONARD W. H. GIBBS



HENRY W. HILL



JOHN D. WELLS

"The growth in a century from small villages to such cities as Buffalo, Rochester, Syracuse, Utica, Schenectady, Troy and a score or more of smaller towns and the phenomenal growth of the City of New York and of the State as a whole can not be accounted for otherwise than upon the hypothesis of the low cost of canal transportation and the reduced railroad freight rates, adjusted to meet low canal rates. Millions of dollars were thus saved to shippers and consumers, who realized that New York's transportation facilities afforded the cheapest freight rates between the Great Lakes and the sea.

"Within the canal zone of 30 miles in width affording low freight rates, extending across the State from Lakes Erie, Ontario and Champlain and down the Hudson River, are located many of such industries and commercial institutions and 75 to 80 per cent of the 11,162,151 population and approximately 80 per cent of the \$20,795,221,086 assessed valuation of the property of the State.

"From what has been said it must be apparent that New York's unique position between the Great Lakes and the Atlantic and the utilization of its natural water courses, when connected by means of artificial channels produced by the art and industry of its enterprising people, were some of the advantages of this State over those of other States for the development of a vast waterborne commerce, that has contributed much to its industrial expansion, municipal growth, its agricultural development and its commercial supremacy. The builders of the State's canals, which have been great arteries of commerce, were inspired by the efforts of the prophetic statesmen of the last century and by such utterances as those of George Washington, himself a great constructive statesman, who declared that 'commerce and industry are the best mines of a nation'—a political maxim which has been conclusively demonstrated in the phenomenal prosperity of this State.

"Carl Ritter never uttered a more sagacious statement than that 'commerce is the greatest combiner of all the activities of the world,' as is shown by the flags of the ships of many nations floating in New York Harbor, where they discharge and receive their cargoes.

"As already stated, the Interstate Commerce Commission some years ago reached and announced its conclusion, in substance, that the Erie Canal was the greatest regulator of freight rates of any known agency on all shipments between the Mississippi River and the Atlantic Ocean. That accounts for the phenomenal traffic through the State of New York. It also accounts for Buffalo becoming the greatest grain port in the world and also accounts in part for New York City being the greatest commercial port in the Western Hemisphere. It also largely accounts for the State's phenomenal growth and unrivalled prosperity. *Esto perpetua!*

"The men who formulated the State's canal policy and have builded its waterways are legion. Scores of them with their individual contributions to the upbuilding of this Empire State are given in the publications of the Buffalo Historical Society, in the histories of New York's Canals and in other publications. They are worthy of place in New York's Valhalla. Is the present generation being trained for similar public service?

"Empire builders as they were, who without reward or the hope of reward, planned and labored and struggled until New York's greatest was achieved, they are among its immortals." (Applause.)

TOASTMASTER WELLS: The next speaker is a man who has had unusual opportunities to appraise the canal at its real value and to see clearly its potential value as a carrier. During a long and active legislative career it was his fortune to be frequently designated to important matters pertaining to the canal and its operation. Perhaps his most important service was as chairman of the special legislative committee appointed to investigate the waterway and determine how its usefulness might be increased. His fund of information, gathered during that service, has been of great value to the State.

I have pleasure in presenting State Senator Leonard W. H. Gibbs.

SENATOR GIBBS:

We listen with interest to the story of the building of this great inland waterway, the greatest artificial waterway in the world, and now that it is completed by the expenditure of no small sum, let us go over to Brooklyn and to the Gowanus Bay where is located the great Gowanus Elevator with a storage capacity of 2,000,000 bushels, at which canal boats unload the grain which passes through Buffalo, an elevator which is equipped with all the modern appliances, including a drier for grain which may have been damaged by water.

"Then let us take one of the numerous canal boats for an excursion trip over the 800 miles of waterway which we have just constructed.

"We will leave Gowanus and pass through the New York Harbor, the greatest shipping center in the world, and up the beautiful Hudson where almost immediately we behold the grandeur of the Palisades.

"We pass many historic cities and villages about which so much of our national history is woven on to Albany, a distance of something over 150 miles.

"Here we learn that the Federal Government has begun the deepening of the Hudson river to allow ocean-going vessels to dock at the port of Albany, thus bringing the destination of our canal boats loaded for export, 150 miles nearer and increasing the profit on our manufacturers' goods by reducing the cost of transportation.

"Leaving Albany we pass on to Troy and through a lock maintained by the Federal Government. Here we find rail connections with the eastern States, allowing the canal to supply Boston and other seaport cities by water and rail.

"On up the Hudson canalized, we enter the Champlain Canal where at Mechanicville we learn that a paper mill by using the

canal saves in freight alone in the neighborhood of \$35,000 per year.

"Passing on up the Champlain Canal into Lake Champlain, we learn that here are found some of the richest iron mines to be found anywhere. We here pass the famous Fort Ticonderoga which was taken many years ago, 'In the name of the Great Jehovah and the Continental Congress.'

"On through Lake Champlain we enter the Canadian canals and down the Richelieu River to the St. Lawrence.

"Returning to Waterford, just above Troy, we will continue our passage westward over the Barge Canal.

"Within a very few miles we are lifted by a series of locks up the side of the mountain 169 feet above the level of the Hudson into the Mohawk River. These locks are all equipped with the most modern appliances and are electrically operated by electricity derived from the water passing through them.

"Upon entering the Mohawk, we behold the great Crescent and Vischer's Ferry Dams with their large power plants, which return a considerable revenue into the Treasury of the State.

"Through this section, which is the foothills of the Adirondacks, the scenery is most beautiful, and those of you who are beauty lovers should plan to take this canal trip.

"Soon we are in Schenectady, the home of the great General Electric Company. This company has had special boats built to carry large units of machinery impossible to be loaded on railroad cars.

"Through the Mohawk Valley made famous as the place where were fought many military battles upon which hinged the continuation of this great United States.

"Arriving at Little Falls, we pass through what for years was the highest lift lock in the world. We are lifted forty-one and one-half feet to the upper level.

"Leaving the Mohawk Valley, we either turn north through the Oswego Canal and pass through several locks to Oswego and Lake Ontario, and either down the St. Lawrence to Montreal and the ocean, or up Lake Ontario to the Welland Canal.

"At Oswego we find another State-owned elevator equipped with all the most modern appliances and a capacity of 1,000,000 bushels of grain.

"While we are traveling over the Oswego Canal, we must bear in mind that it is an engineering possibility which has been seriously discussed, to so deepen the canal that the waters of Lake Ontario will flow as originally through the Mohawk and Hudson Valleys, and thereby develop vast quantities of electric energy.

"We must also bear in mind that from Oswego to Albany, via the Oswego Canal and the Mohawk River is planned the main part of the all-American Ship Canal about which there is so much difference of opinion, and which the Federal Engineers have recently decided against.

"At Syracuse we learned of a lumber dealer who, buying his lumber on the Pacific coast, moved it by way of the Panama and Barge Canal and saved \$4,000 on 2,000 tons of lumber, and that

there had been a direct saving in freight rates of about \$140,000 on lumber shipped over the canal that year.

"If we do not take the northern Oswego route, we will travel westward over the Erie Canal, branching off to the Seneca and Cayuga Canals through the Montezuma Swamp in which are found those great fertile muck gardens made possible because of the drainage through the canal; on through the Finger Lake region, the so-called Switzerland of America, over Cayuga Lake to Ithaca and Cornell University, and over Seneca Lake to wonderful Watkins Glen, these lakes the bottoms of which are below sea level and which do not freeze over in winter.

"Just before reaching Ithaca we pass large salt mines at Myers where quantities of salt are shipped to New York City by barge.

"Here we learned that on one shipment of 11,000 tons there was saved over the rail freight rate \$19,250.

"Arriving at Rochester we pass through her beautiful parks made more beautiful by the artistic bridges erected over the canal by the State, and into a very spacious harbor on the Genesee River.

"We here learn that a concern which uses large quantities of nitrate of soda saves \$2,223.28 on 4,881 tons of soda received.

"Leaving Rochester we enter upon what is known as the sixty-mile level passing through Orleans county which boasts of having produced apples which in competition at the Panama-Pacific Exposition, took first prize over the much heralded Oregon and California apples.

"On our next stop at Middleport we are informed that the Niagara Spraying Corporation, a large manufacturer of insecticides, saved in one season \$63,409.83 freight on sulphur brought in over the canal, or a net saving of \$3.12 per ton. This would indicate that on the 177,869 tons of sulphur shipped over the canal during the year there was a freight saving of \$554,564.36.

"Continuing to Lockport, we are lifted up to the Niagara level, through the Tonawandas and up the Niagara River to Buffalo where are located the great iron, steel and flour industries, the western terminal of the Barge Canal with over forty millions of bushels elevator capacity.

"There we talk with John Garmon, the veteran Harbor Master, who for over thirty years has served his State well.

"From him we learn that last year over 700 pleasure craft traversed the canal; that each year the business of the canal has increased materially over the preceding year; that in spite of the fact that the ice in the Buffalo Harbor delayed the opening of the canal for nearly a month, that more freight will be carried this year than last; that this year for the first time a line of packet boats has been installed on the canal by the Munson Steamship interests, operating coastwise ocean, canal and lake boats.

"After some meditation we realize that we have passed over an artificial waterway which made New York City the greatest city in the world, wresting the trade supremacy from Baltimore and Philadelphia, which made New York State the Empire State of the Union, richest in agriculture, manufacturing and wealth.

"An artificial waterway which has been so attractive that a twelfth of the population of the United States, paying a fourth of the entire tax necessary to maintain our national government, has settled within thirty minutes' ride of its banks.

"A waterway which saves to the shipper on an average a dollar a ton on all commodities shipped and saves to the people of the State over \$50,000,000 annually in depressed freight rates.

"In our travels along the canal we have passed such boats as the Twin Cities and Twin Ports, wonderful modern steel boats capable of carrying 2,000 tons, equipped with refrigeration plants for the purpose of preserving perishable freight.

"We have passed numerous palatial Standard Oil boats built specially for barge canal service supplying oil and gasoline from New York to Buffalo and all the lateral canals. We have passed large fleets of many forwarding companies operating on the canal.

"We have observed the modern freight handling machinery at nearly every city dock.

"This, my friends, in a few words is the picture of the present canal which started so modestly, the centennial of which we are celebrating today." (Applause.)

TOASTMASTER WELLS:

You may have been impressed with the fact that up until now this canal celebration has been entirely a State affair—almost selfish it would seem.

It must be remembered, however, that the Erie Canal has a larger importance—much more than a state aspect.

You are particularly privileged tonight in having with you a man who can talk of the Erie Canal and other waterways in the larger term that give these utilities the greater importance they deserve.

I have great pleasure in presenting the Hon. J. Hampton Moore, veteran congressman from Pennsylvania, former Mayor of Philadelphia, and president for thirteen years of the Atlantic Deeper Waterways Association.

HON. J. HAMPTON MOORE:

Ladies and Gentlemen, in view of that handsome introduction I want to compliment you upon the choice of your Chairman. He is not only eloquent in his infectious wit at all times, but mighty effective in presenting a stranger. Yet I feel I am not a stranger altogether to Buffalo. I find friends at this table, from one end to the other, and it is mighty agreeable indeed to come here from Philadelphia to give a short talk to you tonight.

"I revere the Clinton family. (Applause). No student of American waterways could do otherwise. I revere the memory of DeWitt Clinton, but for what he is himself I honor and reverence

George Clinton. All the traditions of the family are preserved in him and in this son of his who sits at yonder table. (Applause.)

"I glory in the association and friendship of Henry W. Hill. (Applause.) For more than thirteen years he and I have been talking waterways together, I as one sitting at the feet of Gamaliel. He has been an inspiration to me and I have gladly followed on where he led, because he knew best. He was posted and equipped; I a mere agitator following him. So I feel at home in this audience.

"Then I see here men who come from other sections of New York than Buffalo—Brother Roche here all the way from Troy over yonder on the Hudson, a gallant fighter for the Hudson River and the deeper channel, and that has been at last secured, at least so far as Congressional authorization is concerned.

"Then on down here Senator Gibbs who made that splendid speech by way of an excursion along the Mohawk Valley and the New York State Barge Canal. I would not have transgressed upon it for a moment.

"How many of you have made that trip? How many will? All of you should. But the difficulty with most of us in this busy life of ours is that although we may sit opposite Independence Hall as I have done for years, I find that the lady or gentleman who comes from Buffalo once in a year knows a little more about its contents than I do.

"And so maybe coming from the outside and looking in a little tonight I may have some suggestions with respect to the Erie Canal and its wonderful connections which may be of information to some who live along its banks.

"I would not permit the occasion to pass without referring to two men, old colleagues in Congress—Wallace Dempsey as Chairman of the Rivers and Harbors Committee who has had much to do with the development of the Barge Canal. My friend MacGregor who stands with him for the improvement of this harbor and for general assistance to waterways throughout the country. One of the nicest things I know about MacGregor is that he left Buffalo with all its universities, to come down, then a member of Congress, to get an education at the University of Pennsylvania.

"This morning not being available for the various parades and incidents of the celebration I journeyed down Genesee Street to the lake front. I have done it before, but I wanted to refresh myself today, and so I passed on down to the harbor of Buffalo. I wanted to see the big ships, and there they were, the lake carriers. I wanted to see the railroad terminals, and there they were—great terminals of great railroads of the United States. I wanted to see the smaller vessels which are the feeders of the great ships and of the great railroads, and there they were, all around the magnificent terminal of the New York State Barge Canal.

"And I was interested in those barges because we have them in other sections of the country than Buffalo. We are building them rapidly out yonder upon the Ohio River where canalization is now taking place at the expense of the Federal Government, which means you can see for over a thousand miles from Pittsburgh craft



Col. FREDERICK STUART GREENE
Superintendent of Public Works



EDWARD S. WALSH



CHARLES H. ARMITAGE
Executive Secretary, Buffalo Advisory
Committee



ROY G. FINCH
State Engineer and Surveyor

carrying the coal production of Pennsylvania and sand and heavy material on down to Cairo to the mouth of the Mississippi and all that over yonder to get nine feet of water thrown up behind locks and dams, while here you have an assured twelve feet from one end of your State to the other, from the Great Lakes to the sea.

"And I looked at those barges which are the feeders of the larger ships and the feeders of the railroads and I gloried in the work of the New York State Waterways Association of which Henry W. Hill is president, which shortly is to meet in the city of Troy, I said, these are the men who are inspiring the work of development in the Empire State and who are encouraging us elsewhere to do likewise.

"What did I see on those barges? Men, some women, wives of captains, and I conversed with them, as I am wont to do whenever I can get away from the crowd. 'Hello there! What are you laden with?' 'Phosphate rock.' 'Where are you bound for?' 'Cleveland.' 'Hello there! What are you laden with?' 'Sugar.' 'Where did you come from?' 'New York.' 'How long did it take you to come here?' 'Eight days.' 'How did you like the trip?' 'Fine.' Of course I wondered why the sugar was coming here. I suspected for a moment that possibly it was Mayor Schwab's method of catching Mitten. (Laughter.) But I could understand that sugar did not originate in the city of New York. That sugar came from somewhere else. It may have come from Hawaii, it may have come from Porto Rico, it may have come from Cuba. It did not originate in the City of New York. But it settled there, from the great ship, upon the barge which toured the State of New York and made that excursion which Senator Gibbs a little while ago so happily described, and it landed in Buffalo for distribution from this point. To where? I suspect to Ohio; I suspect to some port on the Great Lakes; I suspect for distribution into the interior until it reached the corner grocery.

"Then I saw the 'Clinton' there and I took off my hat because, as I have already indicated, I reverence the name. 'What are you laden with?' 'Sulphur.' So I said to myself, 'I do not know that any sulphur originates around the port of New York.' 'Where did that sulphur come from?' The captain was not able to tell me. I asked myself for just a moment just why is sulphur here? Then I began to think possibly it was to enliven and to encourage Henry W. Hill in any attack he might have to make upon the St. Lawrence Canal project.

"There were a number of those barges there and they were laden with a variety of material that does not originate wholly in the State of New York. There was the 'Governor Al Smith.' 'What are you laden with, Captain?' 'Grain.' 'Where did you come from?' 'Somewhere out west.' 'Where are you bound for?' 'New York.' I did not ask him why grain on the 'Governor Al Smith,' because I understand that any discussion that pertains in any way to a very wet or dry subject is taboo in this campaign. You may discuss it in Pennsylvania but not in New York.

"Then after inspecting these vessels and finding out that Buffalo

was no mean place, that there was a variety of business at the port of Buffalo, that the canal was producing it, I came on back to the hotel.

"I observed on my way some of the industries of Buffalo—certainly not all, because I did not see a sign of the great electric industry for which this city is so celebrated, but I did see a furniture plant and I saw a plaster-making plant and I saw pipes and valve fittings and things of that kind, and I saw the grocery stores and the chandlers, and I saw fish markets and I saw waste paper places and paint and gas works, wire works and bakeries on the way back the few squares to this hotel. At the end of all the children's playground, indicating that population goes on in this vicinity. And then a little further the finishing up of the Buffalo University, and then the McKinley Monument, and then the disappearance of these famous residences of yours, even that, overlooked from time to time of Millard Fillmore; the disappearance of the Old Buffalo and the erection of the New Buffalo in stately majestic buildings that indicate, not that this is an old city, historically even as Mr. Hill described, but a city at the beginning, a city which is just starting on its way. (Applause.)

"A glorious prospect awaits Buffalo, as I viewed it this morning, and I began to think, on returning here, that if some of these other eloquent gentlemen did not refer to it, that I might draw slightly upon statistics to prove that Buffalo is some city, and that it will be a greater city if it appreciates the value of the asset it has in the New York State Barge Canal.

"Here is a brief extract from a report of the Erie Canal Centennial Commission. I think it answers all those who have attempted to criticize even the expense of the operation of this canal:

"Its building and some of the early enlargements cost the people nothing, but on the contrary enriched the State treasury. The amount collected as tolls up to 1881, when they were abolished, exceeded the total sum expended upon it previous to that year by more than \$42,000,000."

"How many of the good citizens of Buffalo know that the old Erie Canal that has been described tonight, the 100th anniversary of the opening of which we are celebrating, left a profit in the treasury under the toll system at the time they were abolished of \$42,000,000 which was devoted to other enterprise in the State?

"The report continues: 'It carried through this State a steady flow of commerce, enriching all communities along the way.

"'It focused attention here and attracted capital and genius to the State.

"'It made New York City the greatest seaport of the New World and the metropolis of the Nation.

"'It made this Commonwealth the Empire State of the Union.

"As a mere outsider I affirm that statement. As a Philadelphian I admit that New York has become the great metropolis.

"And tonight in this presence, though I have done it elsewhere, often as a matter of chiding of those who will not act for them-

selves in their home communities, I say it was due to the energy of men like DeWitt Clinton and his conferees of the time that New York City was made the metropolis and given the supremacy over the city of Philadelphia, which up to that time had been supreme.

"We were first in maritime affairs; we were first in merchandising; we were first in political supremacy, and we were gradually working our way to the west through our waterways and by portage roads that were being rapidly built toward that great rich lake territory about which our surveyors were informing us. Our roads were being built from the real capital of the Nation, Philadelphia, toward the Great Lakes. Pittsburg out yonder at the junction of the Ohio and Monongahela and the Allegheny was our objective—not necessarily that we could get in the days of the whiskey rebellion an entire cask of whiskey for the price of a single hatchet, but because our far-seeing men saw in that country a rich, a growing territory, the proceeds and the business of which we desired to attract to ourselves.

"Along about 1811 or 1812—Mr. Hill may have included this in the paper that he sacrificed for that delightful extemporaneous speech—DeWitt Clinton and his associates attempted to interest the Government of the United States in this wonderful project the surveyors had so highly recommended, connecting the Great Lakes with the Atlantic Ocean through the Mohawk Valley. Did they receive assistance from the Federal Government as other canals subsequently did? No. They reached a point where finally on a proposition to have the Government sell the lands, the proceeds of which were to go toward the construction of this canal, they found themselves outvoted in the Congress, such western States as had reached statehood at the time voting generally against it, many of the Atlantic Seaboard States also opposing it. It was a wonderful effort they made to interest the other citizens of the United States in this great scheme, and it was only upon the failure to have the Government join that they undertook upon their own account in this State to enact that legislation which Senator Hill described tonight which finally resulted in the construction of the Erie Canal under the auspices of the Empire State, solely at the expense of these people.

"And rarely can we find anywhere in the world another example of such self sacrifice, of such far-seeing self sacrifice as was made by the people of New York in this construction, not of a State highway, not of a local project, but of a project that was destined to be national in its effect, and which under the toll system in a brief span of years left in the treasury of New York a profit of \$42,000,000. Then it was turned over to the people and then it became as useful to the people of Wisconsin and Michigan, some of which had opposed it, as it was to the people of New York.

"Let us see. In view of a certain attack made upon it now because of its enlargement at the expense of running it, let us see just exactly what answer may be given to those who criticize, to those who think they are paying a large bill because this great national artery under the auspices of the State of New York is given to the

people of the United States. From that wonderfully comprehensive report prepared by Senator Gibbs' committee I read this:

"From testimony given by traffic men it would appear that during 1925 the Barge Canal saved the people of this State approximately \$52,000,000; \$2,000,000 of this is estimated as being the direct saving on tonnage floated at the lesser water rates; the \$50,000,000 is accredited to freight carried by rail which, due to canal competition, is apparently handled in New York State at lower rates than in States which lack water competition."

"As there might still be a skeptic or two with respect to these utilities and the value of this State enterprise, let me quote from a railroad man, the vice-president of the Delaware and Hudson, who in a recent address before a waterways conference at the City of Trenton, over which I had the honor to preside said this (I quote Mr. C. S. Sims, Vice-President of the Delaware and Hudson Company):

"I am more than sure that well thought out waterway projects, giving favorable deep water conditions, will result in transportation by water at much lower rates than can be made by rail. The conditions must, however, be favorable. And now I will prove it," says Mr. Sims.

"Water transportation on the Upper Great Lakes has particularly favorable conditions and fortunately we have a record of the cost of the great traffic passing through the Sault Ste. Marie Canal—over 66,000,000 tons in 1922.

"This traffic paid during the year 1900 an average of 1.18 mills per ton per mile, while the railroad freight traffic for the entire United States during that year paid an average of 7.29 mills per ton per mile—nearly seven times as much by rail as by water where the conditions are favorable—nearly seven times," says Mr. Sims, 'the cost of the water transportation. In 1922 this water transportation cost 1.20 mills, while rail transportation cost 11.94 mills, or practically ten times as much. Just about the same comparisons apply to every intervening year.'

"So that if there be a skeptic as to the value of waterway transportation, let him look up these statistics that I have just presented.

"Now I read from one of the morning papers of Buffalo an extract from a letter sent by your Mayor to that other vigorous personality who presides as executive over the City of New York. He was sending greetings with respect to this 100th Anniversary celebration. 'I have,' said your Mayor, 'the honor of sending by aeroplane the greetings of the people of Buffalo and the western end of New York State to the Mayor of the Greatest city in the world and to the people of that city, Greater New York.'

"I like the man who loves his own town but is not given to boasting. I think very little of the man who runs down his own town. But I do like to have comparisons made sometimes with by own town, if for no other purpose than that they may benefit my own people.

"It is true, Mayor Schwab, that New York has become the metropolis of the Nation, and it may be taking it from the World

Almanac or some other such publication, that it has become the greatest metropolis of the world, but I have just indicated that Philadelphia was the metropolis of the United States in 1812, and I have just indicated to you that New York's supremacy had not arisen until DeWitt Clinton and others pointed the way by which New York might first reach rich territory of the Great Lakes. The difference was that you got there first. Philadelphia might not have been slow in attempting to get there, but it was not geographically located so that it might make those western connections as speedily and as readily as you did here. The Nation may have been against you, but your own courage and that of your own great statesmen citizens saw you through." (Applause).

TOASTMASTER WELLS: It is a very great pleasure, indeed, to call on Colonel Frederick Stuart Greene, State Superintendent of Public Works, who, aside from his own high post, represents Governor Alfred E. Smith tonight, who is absent for reasons that are very well understood.

COL. FREDERICK STUART GREENE:

"*Mr. Chairman, Ladies and Gentlemen:* In addition to the telegram which His Excellency, the Governor, has sent, I am asked to convey to you his personal regrets that he cannot be here, but, as you know, this is a period when men in public life are busy, particularly so this month.

"Now, being an engineer, unfortunately for myself, and fortunately for the audience, I am no orator, I cannot really make a speech, but I do know, at this time of night, the best speech is a short one. I am here to give you, briefly an accounting of our stewardship in the running of the canal.

"What have we done? Well, in my opinion, the best thing, and the most important thing, is that we have divorced the canal from politics. (Applause.)

"Let's be frank about this. Everybody who knows anything about the canal knows, that for fifty years it has been used—and let's be fair—by both political parties as a safe harbor in which to moor lame political ducks. That condition no longer exists.

"Under the old regime, the management, control and operation of the canal was left to three politically appointed assistant superintendents, who were removed, as sure as the skies are above us, whenever there was a change in the political aspect of this State. As a rule these men only served for two years. What would a great railroad corporation think of appointing its chief operating men for a period of but two years, and changing them every two years? Besides that, during the two years they were there, you never had but eleven months work out of any one of them, during any one year. They had good jobs. and during the month before election they were supposed to show their appreciation, and they were working for their political party, and not for the people of the State. Now, there is no question about that.

"We have today, instead of three men taking care of five hundred miles of canal—three politically appointed men—five trained

engineers are filling their places, men who have had experience in this highly complicated property of the State; and better than that, men who are in civil service, who cannot be thrown out of office, except on charges, so that continuity of their services is assured. And you are going to have men from now on—for I do not believe anybody can ever change this policy back to the old patronage system—you are going to have men that you know can be counted on, who will be devoted to their job, and who are thinking first of their State and job instead of thinking of politics.

"We made another improvement; no longer are contracts on the canal handed out to some favored contractor on the cost-plus or the plant rental basis—we do not hire dredges any more, at \$300 a day, and pay for all the repairs, and pay for every breakage of machinery, and pay for the lost time, and pay for raincoats, and hats, and soap, and towels that the men used. All this was done in the past. It is impossible, really, to figure the savings that have come to the canal through the consolidation of departments and through the elimination of politics.

"If you will ask somebody who wants to juggle with figures, he will say: 'I don't see any saving; we are appropriating just as much as we ever did, for the maintenance of the canal.' That is true, and even larger appropriations have been asked and granted under the present administration for the maintenance of the canal than ever before, but today we are getting not less than three cubic yards of earth dredged from the canal for the price we used to pay for one cubic yard, and we are getting not less than three cubic yards of rip-rap for the bank protection, for the price we used to pay for one cubic yard. There is your big saving, and it is reflected in the condition of the canal today.

"Let me speak just a moment of tonnage. During the year of 1925 the Barge Canal carried more tonnage than in any other of its history. This year, due to a peculiar situation, continued westerly winds, which packed the ice in the harbor of Buffalo—conditions, I believe, Mr. Chairman, which will never occur again; certainly they never have occurred within the memory of anyone here, before—we were nearly four weeks late in opening the canal, as against 1925, so that we started 150,000 tons behind the record of 1925. But I am glad to tell you that we have almost caught up that shortage, and unless something entirely unforeseen occurs between now and the closing of the canal, we shall not only have caught up that lost tonnage, but we will carry not less than 50,000 more tons than we did in 1925. (Applause.)

"Now, here is a peculiar thing, and, I believe, a temporary condition—we are going to float that tonnage on the canal this year with fewer vessels than we had in 1925. At the present time, during this season, there have been only 745 cargo boats on the canal, as against 801 cargo boats in 1925, and yet, we have floated more tons per day, with fewer boats during 1926 than we did with more boats in 1925. Why? There is only one answer you can make—please don't think I am boasting—but the reason we floated more tons with fewer vessels is because we have made better navigable conditions: the channel is deeper, several bad bends

or curves in the canal have been taken out, so that the boats can carry more and pass through the canal at a faster rate than they could heretofore.

"Don't take that from me—I see here in the audience several of the gentlemen who are operating boats on the canal, and who have operated them in the past; ask them, and I think that you will find that they will bear out this statement, that the navigable conditions on the canal this year are improved over last year, that 1925 was an improvement over 1924, and I believe that under this system of having the canal managed by engineers, who know how to manage the canal, conditions are going to improve year by year.

"There is one other policy that we have adopted, which, I think, is going to assure continued improvement: we are now building our own dredges, tug boats, and scows, to take care of our canal, as rapidly as we can get the money from the Legislature to build this equipment, and what is more, it is a modern plant we are now building; steel hulls for every vessel and scow. We are building a large Diesel steel hull dredge, which will be launched within two or three weeks; one of the most modern steel hull Diesel tug boats that has ever been on the canal, and I am glad to say that we have had the pleasure of naming it in honor of your Chairman's distinguished grandfather, DeWitt Clinton. (Applause.)

"We have built, in the last two years, thirty-five pieces of new equipment. I will not bore you by going into details, but I will say, for instance, that sixteen of these are scows: we have six small steel tow-boats, or service boats, to attend to our dredges. We have new buoy tender boats under way, in addition to the other plant that is necessary for the proper maintenance of the canal, and we have rebuilt seven pieces of old equipment.

"It is only a few years ago when they tried to maintain this canal with old, antiquated material, inherited from the Erie Canal, and entirely unfitted. Some of our dredges, when we have to pass under the fixed bridges—have to be disassembled; the spuds and A-frames have to be lowered, and to put all this equipment up again, takes from three to four days. With our new equipment, the days will be cut to hours, and, consequently, we will get a larger service out of our boats. By the way, our dredges are now operated on the two-shift plan, of sixteen hours a day, instead of one shift of eight hours, which means twice as much work for the same money invested in plant.

"We have set ourselves a mark, and think we will accomplish it—we hope, by the end of 1927, to be in such a position that we will never again have to call for contracts for the maintenance work on the canal. The State will, by that time, have enough modern, up-to-date equipment to do all the work that is necessary with our own forces. It means getting the work under way earlier in the spring, and cutting out the red tape and delay of going through the legal process of letting State contracts, and I believe that we will get the work done just as cheap, if not cheaper, than a contractor can do it, because our plant is especially designed to work on this particular waterway.

"Now, Ladies and Gentlemen, I am a constitutional officer, responsible for the operation and the maintenance of the canal. Let me assure you that I take that responsibility most seriously, and I promise you here tonight, and all friends of the canal, Mr. Chairman, that as long as I am honored with this position, I shall do everything within my power to advance the canal, and make it one of the greatest waterways, and even a greater success that it is at the present time." (Applause.)

Chairman Clinton then introduced Richard H. Templeton, Executive Chairman of the Buffalo Citizens' Advisory Committee. Mr. Templeton described the trip of the Centennial boats through the canal from New York to Buffalo. Moving pictures of the day's pageant and other celebration scenes were shown, and with these the exercises ended.

From 7.30 to 8.00 P. M., on the same evening, Edward S. Walsh, former Superintendent of Public Works of the State of New York, delivered an address over the radio, which by special arrangement was broadcasted throughout the entire West. He spoke as follows:

HON. EDWARD S. WALSH: "Much has been said, and much has been done during this past week in commemorating the State's most splendid achievement, The construction of the Great Erie or Grand Canal. History relates many circumstances connected with this important event that now, at this Centennial period seem to bring us back to those years in the last Century when an aspiring and commercially ambitious people struggled to find a place in the sun and with no difficulty we can feel the impulse and sense the efforts of the pioneers of our great State to contribute to posterity, a bulwark of commercial strength, that would guarantee the commonwealth of the future and a security in trade and a supremacy in commerce, unequalled in the history of the World.

"The serious and determined purpose of the people of a great state sometimes finds expression in but simple deeds, and when, in October, 1825, the distinguished Governor of the State of New York, poured the fresh waters of the Great Lakes into the salt waters of the Atlantic Ocean, 'twas but a simple deed, but the significance of that act, the importance of that operation, reverberated throughout the World.

"Nations have been conquered through force of arms, under the leadership of men whom the world has called great, territorial boundaries have melted away under the persuasive eloquence of accomplished statesmen, the political destinies of great States and Nations have changed under the skillful manipulation of astute diplomats, but where else, in the whole world, has the commercial supremacy of a great State been guaranteed, been so conclusively protected for all time by the forging of a link in a chain of natural transportation resources that welded together the opportunity of providing and the ability of moving the commerce of a Nation to

the rest of the world? This link, my friends, was forged in our State one hundred years ago.

"A progressive far-seeing patriotically ambitious Governor finally supported by an aspiring, determined people, threw open an avenue of commercial communication between the vast, but hitherto sparsely developed Western section of our Nation, and the Marine gateways of the East. This great Governor of 1825, was DeWitt Clinton, and his stupendous achievement will live for all the time, and down through the years that followed, the people of the Empire State jealously guarded this great enterprise of theirs, zealously watched over its destinies, wisely and intelligently extended its activities and its ramifications, until they possess what the world has acknowledged to be the finest and most efficient system of inland waterways under the sun, and then, my friends, to eternally safeguard this priceless heritage and guarantee its safety and its availability for the future welfare and glory of their State, they wrote into their commonwealth's most sacred document, their Constitution that unmistakable admonition—"The Canals of the State shall not be sold, leased or otherwise disposed of, but shall remain the property of the State and under Its management, forever."

"Just a casual survey of our commercial history will convince us of the greatness of purpose and the wisdom of action of the people of our State when they dedicated this magnificent enterprise to the future. Hardly had the waterway of Clinton been opened up when commerce began to move. Freight and passenger traffic developed from day to day. People from distant Nations of the World, arriving on the welcome shore of our country, found their way westward through the Grand or Erie Canal, and established their farmsteads and homesteads along the line within the border of the State or continued on into the West, and North, and Southwest, there to carve out of the virgin wilderness our great Empire of the West.

"Our own State strode forward by leaps and bounds. Hamlets became villages, villages became towns, towns became cities, until, in the fullness of time, like mammoth beads on a giant string, the banks of our waterways sheltered the most populous and commercially prolific centers of human activity ever assembled in a single State.

During these years of Canal development and increasing movement of Commerce through our waterways the people of the State exercised a watchfulness over their enterprise that was indicative of their purpose. Let me for a moment quote from a report of a Special Committee on surplus waters to the State Legislature on March 18, 1870: 'May they (the Canals) ever be maintained as channels of internal commerce, so free that every man who, by means of his own hard earnings, or by credit, gained by his probity and industry, and who has the ambition, energy and ability to own or control a boat, may engage in the business of their navigation without let or hindrance; and may that time never come when a railroad king shall exercise control over them to the least possible extent; and may they be highways or avenues of trade upon

which the monopolist's hand can hold no grasp, neither be able to levy a tax nor impose a burden upon the industries or necessities of our people,' and now, naturally, in view of this splendid opportunity for progress and expansion, what have we done to develop and utilize this great artery of transportation, to what good purpose have we put this splendid utility? During the years from 'Clinton's Ditch' of a four foot depth and a lockage width of seventeen and one-half feet, from a thirty ton carrier, through successive stages of improvement and development, to the boat of 240 tons, and up to the period of the great canal improvement inaugurated in 1903, the waterways of our State served nobly and well. Thousands of barges were in operation and millions of tons of essential commodities found their way by canal to the Great Lakes, and to the ocean gateways leading to the great outside world.

"During this long period of time, the canals functioned well and prospered and the State and Nation correspondingly reflected this prosperity. American products of the field, the mines and the forests found their way to the markets of the world because of this Great Waterway, because of this splendid opportunity to create and serve; and, then, approaching the new century the people of this State sensed newer and greater benefits that would result from a greater and more active waterway, and the State-wide demand for the greatest improvement and enlargement of our waterways met with the approval of the whole people and chapter 147 of the Laws of 1903, known as the Barge Canal Act, was passed by the Legislature, signed by the Governor, and the vast work of improvement begun. Our channel of seven feet was to be deepened to twelve feet, our locks were to be rebuilt with an inside vessel clearance of 300 feet and width of forty-five feet and the smaller type of carrier was to be supplanted by the carrier of greater dimensions, and consequently greater tonnage. The State of New York looked forward to the time of completion of this wonderful improvement of its waterways with justifiable pride and knowledge of the fact that the newer and greater Canals would insure the retention of its commercial supremacy.

"The years of reconstruction and improvement of our Canals showed a steady and consistent decline in tonnage in both directions. The great work in progress was not in any way conducive to dependable service. The ambitious engineering feat of rebuilding a vast waterway system and using it at the same time did not seem possible, and, consequently carriers and tonnage gradually disappeared from the canals until, when nearing the completion of the improvement in 1918, only a skeleton of the great operating fleet of the past was in service and but the shell of the vast commerce that formerly flowed through our canals was evident. Other routes were found and alternative gateways to the sea were developed until, when our improved canals were actually opened and ready for use, we were sadly lacking in facilities and equipment. The forwarding and shipping agencies of the past had withdrawn and although the newer and better opportunity was with us, the facility to service was poor indeed; and, now with the Great World War waging and the costs of labor and material soaring to

unreachable heights, the present State of the canals seemed desperate, so far as its ability to serve was concerned.

"The Federal Government striving to relieve the railroads (which it had taken control of) of their burdens, sought to utilize our canals in the transportation of essential commodities, and with this purpose in view, constructed a splendid fleet of steamers and barges to engage in canal traffic under Federal management during the period of the War. This fleet appeared on our canals in 1918, and immediately private enterprises ceased all effort to engage in canal service. The war over, the Federal fleet continued to operate and the consequent effect upon private enterprise was deplorable. The citizens of the State, who had built, maintained and operated on their great canal system without Federal assistance of any nature, held aloof from investment in canal equipment and resented the continuance of government operation within the borders of their State. This resentment found adequate expression in the Nation's capitol and finally Congress enacted legislation discontinuing Federal operation on the waterways of New York State, and the Government withdrew its canal fleet and retired from participation in canal transportation.

"A new and serious problem then presented itself. The citizens of New York State could not tolerate Federal competition and operating control of the canals but were loath to see the fleet of boats built by the government withdrawn. It was felt that this fleet was constructed for the particular purpose of operating on the State canal system and it should be preserved for and restored to that service. A private company was finally organized and the Government fleet purchased and restored to the New York State canal system.

"During the period between Government operation and the present, our great canal system is gradually but surely justifying itself, and commerce is finding its way back to the waterways. Confidence is restored, and once more the waterways are fulfilling the dream of DeWitt Clinton. The West and the East have been drawn closer together, manufactured products of iron and steel find their way down the canals and through the connecting waterways to the New England States, grain flowing down the Great Lakes moves to the doors of the ocean by canal and river and once again merchandise and small package freight is shipped by canal. Fast freight service from Lake Erie to New York and back to Lake Erie is offered to the shipping public. Responsible and dependable organizations are once again in the business of canal transportation.

"The Munson Steamship Line, one of the largest, if not the largest steamship organization in the world, is seriously operating the former Government fleet on the canal, and maintains a high-class dependable package freight service. We have the Transmarine Corporation operating and others. Freight in quantities has found its way from western canal and lake ports to China and Japan, and all the way by water.

"Our canals have established themselves permanently in the commercial life of this State. They will continue to serve and to meet the requirements of the steady forward march of our com-

mercial progress. Our waterways were helpful and useful in times of emergency and stress. The co-ordination and co-operation of all transportation arteries was essential during the great War. Is it not worthy of consideration that such co-ordination and co-operation is desirable in times of Peace?

"Governor DeWitt Clinton deserves and has received the undying gratitude of a great State, but there are other men who shouldered the burdens of Clinton when occasion demanded; men who helped to make Clinton's dream come true; men who fought within and without the lines of politics and parties; men who have passed beyond, and men who are still with us. To those who have passed, we, at this Centennial time, dedicate a thought of gratitude and understanding, to those who are with us, we tender a salute.

"The history of canal achievement, and all that it conveys to this great State, would not be well written were names like George Clinton, Henry W. Hill omitted, and all those other public spirited citizens of our State who have given so unselfishly of their time, their means and their effort to progress and perpetuate this splendid commercial enterprise, and, in passing, let us not forget the men, who, commissioned by the State to carry on the great work of reconstruction, applied themselves so diligently to their tasks. Men like Frank M. Williams, who served the State for five terms as state engineer; men like LaDu and Finch and others in the office, the drafting room, and in the field, who served with head and heart and hand to carry out the mandate of their sovereign State, and provided, as a result of their labors, a better and a greater waterway, with a better and a greater future.

"The Canal, my friends, is not a project. It is a policy of the great State of New York. Its protection is safely concreted right into the very heart of the State's Constitution. Governors have come and gone since Clinton, Governors will continue to come and go; the political complexion of our legislatures changes from time to time; policies of administration survive and perish, but the people of the Empire State have decided long ago, that—"The Canals of the State shall not be sold, leased or otherwise disposed of, but shall remain the property of the State and under its management, forever"—and that, my friends, means a long time.

PROCEEDINGS AT NEW YORK WATERWAYS ASSOCIATION

AS First Vice-Chairman of the Commission, William J. Roche delivered an address before the annual convention of the New York State Waterways Association held at Troy, N. Y., on October 22 and 23, 1926, taking the canal centennial celebration as his subject. After making reference to the statutes creating this Commission, Mr. Roche spoke in part as follows:

"The Centennial Anniversary of the Opening to Commerce of the old Erie Canal and the holding of the seventeenth annual convention of the New York State Waterways Association have both fallen in the year 1926. The recognition that was due to the former memorable event found expression in acts passed by the legislature. * * *

"Chapter 778 of the Laws of 1926 continued the Commission but provided that the celebration should be had in that year of the one hundredth anniversary of the opening to commerce of the original Erie Canal and 'that such celebration shall be held in the cities of New York and Buffalo,' and it made an appropriation of \$25,000 to carry into effect the purposes of the act. It will be readily seen that this provided for only a very restricted celebration compared with what the commission originally proposed.

"The plans for such celebration were carried out in the cities of New York and Buffalo; in the former on October 7th and in the latter on October 14th. The one in New York was characterized by a splendid and colorful marine pageant upon the Hudson river and the inner bay and by a notable banquet at the Waldorf-Astoria, which was attended by several hundred persons at which Mayor Walker acted as toastmaster and addresses were delivered by several persons, including Governor Smith. That at Buffalo was marked by many commemorative exercises and pageants extending over a period of several days and a banquet at the Statler Hotel, which was largely attended. Mayor Schwab extended welcome to the guests and addresses were delivered, among others, by Henry W. Hill, the President of the New York State Waterways Association; J. Hampton Moore, President of the Atlantic Deeper Waterways Association, and Frederick Stuart Greene, Superintendent of Public Works of the State.

"An interesting feature of this celebration was the departure from New York on October sixth of a Standard Oil barge and the barge *Clinton* of the Munson Lines which made the trip up the Hudson river and thence through the canal stopping at intermediate cities and arriving at Buffalo on the fourteenth inst. These boats demonstrated the value of the canal and its potentialities. The *Clinton* was loaded with package freight of a most varied character, having its origin in different States and countries and every pound of which had been transported over water alone.

Both were gaily decorated and as they came into the harbor of Buffalo were met with a reception that was noisy and thrilling. The object lesson thus afforded was a most impressive one. * * *

"It was very appropriate that these two dinner assemblages should have been called to order by George Clinton of Buffalo, the grandson of DeWitt Clinton.

"The public interest shown and the enthusiasm and spirit displayed in connection with these celebrations were very gratifying and should give promise of the larger and wider use of our canal system which was contemplated by the legislative act of 1924 and the advantages to our merchants and industries that would be derived from such use. * * *

"When the great enterprise was authorized by chapter 262 of the Laws of 1817 the population of this State was small and its resources were very limited. At that time there were only five cities in this State, of which Troy was one. There was not an incorporated city between Schenectady and Lake Erie. Utica, Syracuse, Rochester and Buffalo did not become cities until after the canal was completed. Virgin forest and marshland stretched across the State and the trail of the Indian and the traps of the hunter were to be found in the valleys and along the hillsides where now are great communities pulsating with industrial and commercial life and thousands of homes of an intelligent and prosperous people. * * *

"Troy was deeply interested in the movement for the building of the canal.

"The financing of the project was a serious problem in those days. That was solved by a plan proposed by George Tibbitts, the Senator from the Troy district, and which was adopted by the Legislature. The Eastern section of the canal was opened before the whole canal was completed, and Troy merchants, with characteristic foresight and enterprise, celebrated that event in 1823 by loading the boat known as the *Trojan Trader* with freight consigned westward along the canal, and painted on her flag these words: 'From Troy. The first western boat loaded at Hudson's River.'

"Thereafter fleets of boats owned by Trojans operated for many years upon the canals and the river and their prosperity materially contributed to the growth of the city.

"Among the foremost advocates of the canal was Stephen Van Rensselaer, one of the ablest collaborators with DeWitt Clinton, and who held the office of Canal Commissioner for twenty-three years. His experience in the canal planning and construction convinced him that there was great need of engineers—not mere surveyors—but engineers and geologists, and for that purpose he founded at Troy, in 1824, the Rensselaer Polytechnic Institute, the first purely scientific school of its kind in this country. That institute has flourished ever since, and today it has from 1,000 to 1,500 students upon its rolls.

"The canal boat was the 'covered wagon' of the early days, for it was the medium of transportation of families from New England and this State who settled in the West and Northwest. In

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the progress of time the use of the canal grew less and less because of the competition of the railroad; the narrow waterway, the tow path and the mule were up against the mogul locomotive, the ballasted railroad and the brains of the ablest men in the land. In the effort to preserve this great asset of the State and increase its value, the Barge canal was built pursuant to the referendum law, chapter 147 of the Laws of 1903, which was approved by the people at the polls. We may here say that if DeWitt Clinton was the builder, his grandson, George Clinton was the rebuilder of that canal; and we may here pay the warm tribute of our respect and deepest appreciation to George Clinton and Henry W. Hill of Buffalo as the leaders in the great accomplishment. Their worth and their service to this State and to this country and the value of their inspirational example cannot be measured today, and will not be measured in the days to follow merely in the count of dollars and cents.

"Our canal system must be upheld; it must be kept under friendly management; it must be maintained as a competitive agency and it must be nourished by needed appropriations at each session of the Legislature. While as to some services and under certain conditions, regulated monopoly may give more satisfactory results, when you come to deal with a matter of such volume and territorial extent and so vital in its nature as the transportation of the persons and property of the people, competition is the safer and wiser policy and monopoly must not be allowed to exist.

"When you pause to consider how our State and country have grown within the last fifty years and then project your vision into the future 'far as human eye can see' and contemplate what invention, engineering and mechanical skill will achieve in the coming era, what intensive agriculture will produce, the growth of the nation in population and wealth and the illimitable productions of mine and forest, factory and soil, you will grasp the need and the wisdom of supplying and keeping in the highest form of efficiency every agency of transportation. Greater by far than the wealth that was borne by the famous argosies of Spain, or the spice-laden ships of the Netherlands, the glittering diamonds extracted from South African field and the golden ore of Alaskan mine is the value of the products of soil and factory that are carried every month in the year upon the railways and waterways of this Nation. We are only upon the threshold of the marvelously rich treasure houses of our country. The demands of the day, the necessities of the future, wise foresight in planning for individual comport and national growth and vigor, all call upon us to make highly developed use of the waters of the State and nation as Providence has so bounteously given them to the people."

CENTENNIAL MEDALLIONS AND BOOKS

ARTISTICALLY designed gold and bronze medallions were prepared under the Commission's direction as permanent souvenirs of the celebration both in New York and Buffalo. There was also issued in both places during the evening exercises a twenty-four page book, containing a brief history of the canal and important information as to the old and new waterways. The many illustrations depicted the progress of water commerce during the past 100 years. Both medallions and books were distributed among those who took part in any of the events and in addition copies have been placed on file in all public libraries.



CANAL CENTENNIAL MEDALLION

On the reverse side appeared the names of the members of the State Commission; and in a special issue for New York and Buffalo, the names of the Mayors and Executive Chairmen of the Advisory Committees also were given.

CONCLUSION

IN concluding this its final report, the Commission makes public expression of its appreciation of the aid and hearty cooperation given it by Government, State and Municipal officials, organizations and citizens, whose names have not been specifically mentioned, but whose unselfish services contributed to the success attained in the commemoration of the original canal's one hundredth anniversary.

Respectfully submitted,

GEORGE CLINTON, *Chairman*

WILLIAM J. ROCHE, *First Vice-Chairman*

HENRY MOSKOWITZ, *Second Vice-Chairman*

WILLIAM J. HICKEY

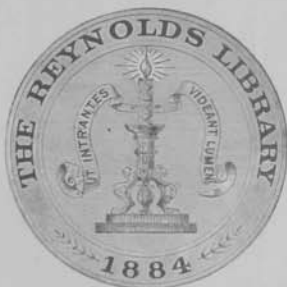
THOMAS C. BROWN

PERLEY A. PITCHER

VICTOR C. LEWIS

WALLACE R. AUSTIN

JOHN J. HOWARD





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