IMPROVEMENTS OF NEW YORK HARBOR, 1885-1891

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Improvements of New York Harbor, 1885-1891 by Joseph Edwards

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JOSEPH EDWARDS

IMPROVEMENTS OF NEW YORK HARBOR, 1885-1891



IMPROVEMENT

OF



NEW YORK HARBOR,

1885 TO 1891.

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JOSEPH ĘDWARDS.

NEW YORK, 1893.

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WYNKOOP & HALLESBECK, PRINTERS, 441-44? Pearl St., New York.

ENGINEER OFFICE, U. S. ARMY.

Room F 7, Army Building, 89 Whitehall Street,

NEW YORK, N. Y., May 3, 1893.

Mr. Joseph Edwards,

President, The Joseph Edwards Dredging Co., 16 Exchange Place, New York City.

SIR—I have the honor to state, in answer to your inquiry, that the United States made, during the four years beginning April, 1887, and terminating February, 1891, six contracts with The Joseph Edwards Dredging Company, New York City, for the improvement, by hydraulic dredging, of the southern entrance to New York Harbor, extending from the sea face of the bar in Gedney Channel westward and northward along the Main Ship Channel to and beyond the northern entrance to the Swash Channel, Lower Bay.

The contracts were successfully and satisfactorily executed by the use of "Edwards' Cataract Pumps," installed in steamers, and the total quantity of material excavated in this way by The Joseph Edwards Dredging Company was 4,300,000 cubic yards.

Very truly yours,

G. L. GILLESPIE,

Lieut.-Col., Corps of Engineers.

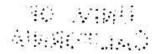
BECAUSE of having designed the plant with which the Improvement of New York Harbor has been successfully accomplished, as well as having had the general management of the same and the execution of the work so far as done by the Joseph Edwards Dredging Company, I am receiving various inquiries relating thereto, from engineers and others, who are contemplating similar improvements elsewhere; for which reason I have deemed it advisable, as a means of facilitating response to such inquiries, to prepare the following account of this Improvement, including the accompanying description and illustrations of the means employed.

JOSEPH EDWARDS.

UNIV. OF CALFORNIA

PREFACE.

The following account of the Improvement of New York Harbor refers briefly to the necessity which had arisen for deeper water in the Lower Bay; the location and character of its channels, and their condition before the undertaking was commenced and at its completion; the projects recommended by Government Engineers to improve them; why dredging was finally adopted; nature and magnitude of the work; difficulties encountered and results attained; Government appropriations made for, and estimated and actual cost of the Improvement; means and method of executing the work, and evidences of its permanency; by whom the work was successfully performed, and the various prices per cubic yard paid therefor; together with a brief description of the plant employed; and why the Swash Channel should be improved.



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