

GUIDE TO THE  
MICROFILM EDITION OF THE  
**JOHN ERICSSON PAPERS**

ESTHER CHILSTROM MEIXNER



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THE AMERICAN SWEDISH HISTORICAL FOUNDATION  
ESTHER CHILSTROM MEIXNER

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## INTRODUCTION

This pamphlet and the accompanying rolls of microfilm which it describes is published by The American Swedish Historical Foundation. It is intended to serve as a guide for the users of the microfilm of the John Ericsson Papers in possession of The Foundation. It also indicates other material relating to John Ericsson which was not included in the microfilm edition.

Esther Chilstrom Meixner

*Project Director*

The American Swedish Historical Foundation

# ACKNOWLEDGMENTS

The American Swedish Historical Foundation is pleased to present its John Ericsson Papers in Microfilm Edition.

Among those scholars to whom we especially express our appreciation for their encouragement and interest in making available the historic papers in the John Ericsson Collection of The American Swedish Historical Museum, are the Director of Kungliga Biblioteket, Dr. Willers, Stockholm, and the Director of National Archives, Dr. Rhoads, Washington, both of whom have indicated the importance of presenting the material in this form. Just as importantly the late Carola Goldkuhl of Lidingo, Sweden, author of the authoritative biography "Mannen och Uppfinnaren," in which she gives new dimensions to her illustrious ancestor, has been an influence in the determination to microfilm the collection.

We are indebted to Dr. Elmer W. Engstrom, New York, for his personal interest in having the collection microfilmed and his financial aid, which has made the filming and the preparation of the accompanying guide possible.

The editorial assistance of Dr. Oliver W. Holmes and Mr. Fred Shelley of National Archives Historical Publications is acknowledged and greatly appreciated as is the guidance in technical problems connected with the microfilming by T. Wistar Brown, President of Rhistoric Publications, Philadelphia.

Dr. Esther Chilstrom Meixner, member of the Board of Governors at the American Swedish Historical Foundation, must be given credit for initiating this project, and we are grateful to her for her interest of many years in the John Ericsson Collection and her dedication to the preservation and the cataloging of this historic treasure housed in the American Swedish Historical Museum. With the assistance of Peter Wahren, a museum trainee from Stockholm, the actual work on the project started in 1969 and under Dr. Meixner's direction progressed to a successful conclusion.

It is hoped that the John Ericsson Papers on microfilm will be useful to individuals and representatives of institutions who wish to advance their research and study in this field. An invitation is extended to them to visit The American Swedish Historical Museum, 1900 Pattison Avenue, Philadelphia, where among other exhibits pertaining to the lives and accomplishments of Americans of Swedish birth or descent there are two rooms devoted to John Ericsson with important documents, memorabilia and models of his inventions on display.

Roy F. Larson  
President  
The American Swedish Historical  
Foundation and Museum.

## BIOGRAPHICAL SKETCH OF JOHN ERICSSON

John (Johan) Ericsson was born at Langbanshyttan, Sweden, July 31, 1803. He was the second son of Olof Ericsson and Britta Sofia Yngström. A brother, Nils, born 1802, was destined to make his mark in the field of transportation and became known as "The Father of the Swedish Railroads."

The Ericsson family lived in comfort at their estate in Långban. The father was an inspector of mines and was involved in private mining enterprises. The children received a splendid education for the times. The two boys early showed their inventive genius and mechanical ability. They were encouraged and aided by their father, who often took them to the mines where they studied the construction and machinery. At six years of age John had completed his first construction after his own drawings. This was a fully equipped miniature working mine. At ten, he had designed and constructed a sawmill of small scale that delivered boards of pencil thinness. Beginning with these early years he drew continually all through his adult life. More than eighty years later, a few months before his death, he signed his last sketch. The work at the mines slackened and through other misfortunes the Ericssons lost their home and moved into a small cottage, Kytthagen. Here they lived during the years 1807-10. Then Olof Ericsson secured employment on the great waterway being constructed across the Kingdom of Sweden--The Göta Canal. Nils and John were thrilled over the move to Forsvik. Here they were surrounded by tremendous construction, and saw armies of men and machinery at work from early morning until late at night. Best of all, a number of the engineers and supervisors boarded and lived at the home their mother, Sofia, had established in this new setting. The boys listened in wonder to the plans discussed, pro and con, about this great waterway. Through their father's pleadings the boys soon had permission to draw in the canal offices. "It was like coming to a holy room. Here I did my first drawing to scale and learned to draw maps. At the end of 1812, I could do a relatively accurate drawing and had full knowledge of and ability to use drawing instruments." John was now nine years of age.

So Ericsson wrote in retrospect in 1866 about those early happy years. He made his own instruments by ransacking his mother's sewing box. There he took pins, needles and pincers to make drawing pens. After much pleading, he took some hairs from her muff (where they didn't show) for his brushes. At eleven years, John Ericsson had laid the foundation for his extraordinary ability in machine drawing. The boy's drawings were shown to Count Baltzar von Platen, the superintendent of the Göta Canal construction. He was, perhaps, the first person to realize the great future that lay before John, and praised the youth. In 1816, John, now 13, became assistant surveyor at the Canal project. Six hundred men worked according to his drawings. They wondered at the youth who knew so much at his age--still so small that a stool had to be provided for him to stand on to read his surveyor's instruments. The drawings executed by young Ericsson when he was 12, 13, 14 years of age were remarkable, and are preserved to this day in the archives of the Göta Canal.

In 1818 Olof Ericsson died. The first of John Ericsson's tremendous correspondence to be preserved is the touching letter he sent to his bereaved mother. The lad was now fifteen, and gainfully employed with the railroad.

John Ericsson went into military service in 1820 and was assigned to a regiment in Jamtland, a province in northern Sweden. This seems to have been a happy period for the young man. He loved the natural surroundings and was inspired to write poetry. His comrades related how he danced and sang. The handsome lieutenant composed a song for his regiment which is still sung today by those who serve in Kongliga Jämtland's Fältjägeri. After Ericsson's death, his biographer, William Church, found some forty of his poetic works tied up with a bundle of drawings.

In later years when Ericsson was wholly absorbed in his serious work this appreciation for music and poetry remained. But few very close associates and friends were admitted to his residence, 36 Beach Street, New York. Jenny Lind, the Swedish nightingale, was always welcome. She would sing for the recluse songs in his native language. Another well-known musical personality would call on him, Ole Bull, the Norwegian violin virtuoso. A letter from Ole Bull's widow, Sara Bull, dated December 4, 1880, indicates the

closeness of these two men. "His piano, the principles as developed with your frame, he considered a success. The instrument and your great service will be mentioned." Ericsson enjoyed the serenades of the Swedish singing societies who always came and hailed him on his birthday anniversaries.

John Ericsson left his regiment in Jämtland, and went to England to further his career; in reality he was a deserter. But in 1827, he received a captain's commission for his efforts during the time he served, and for the very splendid maps he prepared of that part of the country. The rank of Captain he treasured, and used it the rest of his life. It was in Jämtland that young Ericsson met the love of his life, Carolina Lillieskold. She was the mother of his only child, Hjalmar Elworth. Their marriage was forbidden, and Ericsson, broken-hearted, left his native land never to return. The next thirteen years, 1826-1839, were spent in England.

Letters from this period give a picture of Ericsson's busy life. It was his friend, Adolf von Rosen, who accompanied him to England and became his personal emissary trying to promote and sell Ericsson's inventions in Europe, particularly in Belgium, France and Sweden. Fortunately, Ericsson made the acquaintance of John Braithwaite, who owned a machine shop. Braithwaite became very interested in Ericsson's inventions and aided in their construction and also entered into partnership with him.

Ericsson worked on more than forty inventions during this period, of which some thirty were patented. His steam fire engine (1829) was a success, but not accepted for use in London. It took too much water, and would put the hand-brigades out of work. Berlin was the first modern city to adopt it. The revolutionary screw-propeller, the caloric and steam engines were to bring Ericsson more fame and success. He pinned his hopes for financial gain on the steam locomotive "The Novelty." In the famous race at Rainhill, England, in 1829 with Stephenson's "Rocket," "The Novelty" showed far superior speed and smoothness. But a minor break forced it out of the competition. Ericsson's name now became internationally known, but his fortunes did not improve. He was constantly burdened by debts from financing his inventions and trying to promote them. Several times he sat in debtors' prison. Brother Nils came to London and rescued him. In 1826,



Ericsson married Amelia Byam; so he had added financial responsibilities. Robert Stockton, a naval officer from New Jersey, persuaded Ericsson to demonstrate the efficiency of the screw propeller for naval transportation. Later, to his dismay, Ericsson was to find that Stockton was unscrupulous in his business dealings. The considerable sum that was to come from the "Princeton" was not paid to him, but appropriated by Stockton. Ericsson's bitterness is revealed in a number of letters to Stockton and in other correspondence relating to this unfortunate affair.

John Ericsson came to the United States in 1839 with hope of promoting some of his inventions and straightening out financial matters. Though this was to be a temporary visit, he never returned to Europe or to his native land during his lifetime. For fifty years he devoted his every waking hour to construction, drawing and inventions. His wife, Amelia, joined him in New York, but later returned to England. John seemed too occupied with his work to pay her much attention.

Ericsson became a naturalized American citizen in 1848. His great contribution to his adopted land came during the Civil War period. To Lincoln he wrote August 29, 1861. . . "The writer constructed the first propeller-driven warship. . . and offers to construct another to destroy the rebel fleet in Norfolk and rid the Southern States' rivers and harbors of all ships. I make this offer without seeking any profit. Fortunately, I have 1000 of my caloric engines in service and receive economic returns from these. It is my attachment to the Union alone which impels me to offer my services at this fearful crisis--my life if need be--in the great cause which Providence has called you to defend."

After long debates with the naval and military experts, with members of the Cabinet, and with committees of all kinds in Washington, Ericsson finally got the approval to go ahead. On September 28, 1861, he wrote to Gideon Welles, Secretary of the Navy. . . "I have the honor to return to you the contract for building an iron clad steam battery . . ." But the ship had to be ready within 100 days--not much time to build a steel clad equipped with over forty new devices. Over 3000 drawings were executed by Ericsson for this revolutionary ship. The *Monitor* was ready, and that fateful day, March 9, 1862, it met The *Merrimac*

at Hampton Roads. Within a few hours Ericsson had become a national hero, and his "cheese box on a raft" had changed the navies of the world. Songs, poems, and dances were composed in his honor. People smoked Monitor cigars, and wore Monitor hats. Soon the news of the *Monitor's* triumph spread throughout the world. Orders poured in from foreign lands: Chile, Peru, Denmark, Russia, Spain; all wanted Monitors of varying sizes to add to their fleets.

Ericsson's correspondence reveals that he was conscious of what the victory at Hampton Roads meant to the slaves of the South. In 1863 he wrote. . . "God's hand is clearly visible in this fight between freedom and slavery." In 1867 he wrote to brother Nils . . . "It was the cannons in the revolving turret at Hampton Roads that broke the shackles on 4,000,000 slaves." In 1890, a group of Negro singers came to Filipstad, sang at Ericsson's mausoleum, and placed a wreath bearing these words--"From former slaves and the children of slaves to the memory of John Ericsson, one of the great champions of freedom." The caloric engine Ericsson considered to be the finest of his inventions. Twelve thousand were ordered for use in New York alone. This engine was sent to London to be exhibited at the great fair in the Crystal Palace, together with seven other inventions. Queen Victoria presented an imposing testimonial to the man who earlier had spent time in London's prisons.

Ericsson, who had done so much to change naval ships and warfare, looked beyond his own era to the oceans of the future. "My only concern is to have the oceans acknowledged by all nations as a peaceful neutral area. The torpedo will be for the good of mankind by keeping the oceans free. This is my life's dream." So he wrote in 1870. How important this is now, 1970, one century later!

In 1876, Ericsson participated in the Centennial Exhibition held in Philadelphia. Many of his models were on display. He published "Contributions to the Centennial Exhibition, 1876," fully illustrated with his own drawings. This volume covers his works during the years 1839-1876. Another volume, "Radiant Heat," was published, 1877. It was in 1876 that Ericsson met his son, Hjalmar

Elworth, for the first time. The son had been sent as a representative to the Centennial Exhibition. The father was now 73 years of age, and the son, 52.

The last twenty years of Ericsson's life were devoted to experiments in solar energy. In 1868 he published his first work in this field. The following year he issued a series of 26 articles describing the instruments he designed and constructed for solar exploration, and the utilization of the sun's energy. One hundred years later, teams of scientists and technologists are working to make solar energy usable in nearly all aspects of human life. Ericsson has been called "The pioneer in solar energy" by The Association for Applied Solar Energy.

In 1883, at the age of 80, John Ericsson constructed the most noteworthy of his many solar machines. In 1886, he constructed a steam engine machine which produced power for twelve years for Edison generators.

John Ericsson's busy and productive life was drawing to a close, but up until the last months, he kept on with his drawing and signed his final sketch a short time before the end came. Early in 1889, his secretary, Taylor, noted that Ericsson's health was failing. On March 8, 1889, he breathed his last. These last weeks of Ericsson's life are painstakingly described by the faithful Taylor, who served the Captain as personal secretary and friend for over thirty years.

John Ericsson received many honors during his lifetime. His adopted land returned him to the land of his birth on the U.S.S. Baltimore with full military honors and escort. Twelve "Monitor" type vessels of the U.S. Navy acted as honor guard, and a salute of 21 guns was fired.

Impressive monuments and markers were erected in Norfolk, Hampton Roads, Annapolis, New York, Brooklyn, Philadelphia, Washington, England, and his native Sweden. There are schools, both elementary and secondary, throughout the nation named "John Ericsson," as well as lodges, organizations and learned societies in great numbers.

The John Ericsson Medal, given bi-annually, is a coveted award presented to distinguished inventors and scientists. So his name is kept alive. Plans are being made to include John Ericsson in the

Bicentennial Celebration, 1976, for his tremendous contributions to the growth and progress of our nation.

## ORIGIN OF COLLECTION

The American Swedish Historical Foundation secured its collection of John Ericsson correspondence and other items from a number of sources. The principal collectors and donors to the Foundation were The United Engineering Trustees, New York, The John Ericsson Society, New York, and The American Society of Swedish Engineers, New York. The United Engineering Trustees, New York, are the donors of the originals and copies of Ericsson's models which are housed in the Museum. Many of Ericsson's personal belongings came from this source which in 1957 transferred from "loan" status to "gift" many items that had earlier been presented to The Foundation. The last check signed by John Ericsson--in an almost illegible scrawl--dated March 7, 1889--was added to the collection by The United Engineering Trustees.

The American Society of Swedish Engineers, founded in 1888, New York, took a leading part in the funeral arrangements for their illustrious countryman. When his remains were to be returned to Sweden in 1890, they participated, and also at the unveiling of the Ericsson statue at the Battery, 1891. It was to this Society that William Church, Ericsson's biographer, presented much material that he had at his disposal. This Society, in turn, presented their Ericssoniana to The American Swedish Historical Foundation to be housed in the Ericsson Rooms of the Museum in Philadelphia.

In 1907, The John Ericsson Society, New York, originally a branch of The American Society of Swedish Engineers, became a separate organization. The purpose was "to promote the science of engineering and to commemorate the achievements of Captain John Ericsson." Frank Taylor, the son of Ericsson's secretary, presented the Ericssoniana left to his father to The John Ericsson Society. This Society also transferred its Ericsson collection to The American Swedish Historical Foundation, where it is preserved in the Ericsson Rooms. One copy of Ericsson's privately printed "Contributions to the Centennial Exhibition, 1876" came from the

collection of The John Ericsson Society. It was originally presented and autographed to "Captain E.P. Dorr by his friend the author."

A second copy of this same volume came from The United Engineering Trustees. This was inscribed in Ericsson's hand to "Colonel W. C. Church by his friend the author." The Ericsson book "Radiant Heat" came from John Ericsson Taylor, and was originally inscribed to Samuel W. Taylor.

Individual donors have added a considerable number of items to the Ericsson collection. Among these are the late Col. H. Lagerlof, New York, and the late E.T.I. Thygesson, both connected with the societies mentioned earlier and extremely interested in preserving Ericssoniana. Much correspondence has been presented from the John Sargent Estate and the William Church collection.

John Ericsson appointed William Conant Church as his official biographer. Church, as Editor of the Army-Navy Journal, knew Ericsson well through his many scientific contributions to this publication. He could also draw on his own personal friendship with Ericsson, which covered many years. Church relates that one day, to his dismay, Ericsson had destroyed volumes of drawings, notes and carefully kept diaries. Ericsson, when questioned, said he did not wish posterity to know of his many failures. The material which was saved and used by Church gave him a wealth of data and formed the basis for his two-volume biography published in 1890, the year following Ericsson's death.

To Church, the writing of John Ericsson's biography was a labor of love. "I have set forth as faithfully as I could what he actually accomplished. The relative value of his work, it is not for his biographer to determine. For that is required a point of view impossible to one who draws too near his subject. Though it is true, as I have said already, that his inventions were not the result of waking dreams, but of the studious application of engineering and mechanical knowledge to new problems, those who knew him most intimately were accustomed to speak of him as in all respects the most original man they had ever known and originality was the striking feature of his engineering work."

Since the acquisition of the main bulk of Ericsson papers and other memorabilia, individual items have been added from time to time. Two Ericsson Rooms were donated to The American Swedish

Historical Museum. These were presented by the late Mr. and Mrs. John A. Westerlin of Chicago. Here the models of Ericsson's inventions have proper housing. Tables, desks, chairs, cabinets belonging originally to Ericsson and from his Beach Street, New York, residence are also here. Personal items such as eye glasses, razor and case, cane, wallet and calling cards add life and vividness to the personality of this genius whose writings are the basis for this microfilm edition.



## DESCRIPTION OF THE COLLECTION

The John Ericsson correspondence in The American Swedish Historical Foundation collection is of great range and variety. The letters consist of four groupings: those in Ericsson's own hand; those written by his secretary, Samuel W. Taylor, for and signed by Ericsson; letters and replies received by Ericsson; and the separate correspondence carried on by Taylor. The letters in this part of the collection are listed alphabetically according to addressee or sender, and also chronologically arranged by years. There are letters in the miscellaneous grouping also. They relate directly to Ericsson but are not written by him or his secretary.

There are over 700 original letters. Of these 237 were addressed to Ericsson's close friend, John Sargent, lawyer and journalist. "There is no man in this world for whom I have deeper feelings of friendship. There is no one to whom I am more indebted than to you, John Sargent." Much of Ericsson's correspondence was with his business associates. First among these must be listed his dear friend, Cornelius H. DeLamater, at whose Iron Works many of Ericsson's constructions were completed. Among others were John Bourne, S. B. Browning, C. S. Bushnell, John A. Griswold, R. B. Forbes and John F. Winslow, men who were in constant communication with Ericsson, the engineer and inventor. There are personal letters to old friends of long standing in England and Sweden: Adlersparre, von Rosen, von Platen. Of special interest are those to his son, Hjalmar Elworth, and his brother, Nils. Ericsson addressed many communications to members of the President's Cabinet. Fifty-four are to Gustavus Vasa Fox, Assistant Secretary of

the Navy, and relate for the most part to Ericsson's participation in naval construction. Others are to Secretary of the Navy, Gideon Welles; Secretary of the Navy Penslow; Secretary of State Seward; Secretary of the Navy Bancroft; Admiral John Dahlgren; and two corrected copies to President Lincoln. These give an insight into the problems of the period, and to some of the leaders of the nation at this critical time.

Samuel W. Taylor had handwritten 385 letters for Ericsson to leading personages in Washington and branches of the government. There are also 45 drawings and sketches, 60 letters patent, 56 agreements, 18 papers on the caloric engine, and 141 descriptions and memoranda relating to other inventions.

Another grouping of letters are those addressed to and received by Ericsson. The earliest is dated 1841. This is from Robert Stockton, the man who urged Ericsson to come to America. Assistant Secretary of the Navy, G. V. Fox, sent 57 replies to Ericsson's persistent pleadings.

One category of papers deals mainly with the legal battles and controversies relating to inventions and proposed projects and patents. There are court communications and transcriptions and legal documents beginning with year 1844 and extending to 1890, after Ericsson's death. Eight of these documents, 1856, concern John Ericsson vs. The United States of America. There are 531 items in this particular group.

Samuel W. Taylor not only copied but carried on original correspondence for John Ericsson. The majority of these letters are dated during the later years of Ericsson's life. This is understandable as Ericsson had to be relieved of some of the strain of his great volume of correspondence. It was Taylor who wrote to Ericsson's relatives and close friends in 1889 telling of his demise.

The miscellaneous group of papers contain many interesting items. The newspaper articles and clippings reveal the esteem with which Ericsson was regarded. Ericsson's military record is included, as well as family lineage. There are inventories of personal possessions and a copy of his Last Will and Testament. Many of the honors and testimonials are preserved. Included is some of the correspondence of other personages relating to John Ericsson. For example, there are letters exchanged between R.W. Forbes and the

son of Robert Stockton, which give their version of the feud that existed between the two principals. Detailed logs showing the performance of various ships of the time which interested Ericsson are in this grouping. The most noteworthy and touching item, perhaps, is Taylor's detailed account of the last weeks of Ericsson's life. It begins on February 23, 1889, and ends at 12:39 A.M., March 8, 1889. Here is recorded every change in the Captain's physical condition. The faithful secretary rarely left Ericsson's bedside during the final days. When the doctors advised Ericsson of his precarious condition, he remarked, "Then give me rest." His last words to Taylor were, "I am resting. This rest is magnificent, more beautiful than words can tell." The letters, articles, notes and other documents included in the Ericsson collection present a rich source of information. It is most valuable to those doing research in this fifty-year period (1839-1889). There is vital information on government and political affairs. Insight into the leading personalities of the times can be gained through these communications. Those interested in court procedures of that period will find a wealth and variety of material. The progress and problems connected with construction and inventions of machines of all types are revealed here in endless numbers. Ericsson's works run the gamut from very simple household devices to construction of the most complicated and delicate machinery. They went beyond his time and reached into the present century, when scientists are concerned with explorations in oceanography and solar energy. In the John Ericsson Collection of The American Swedish Historical Foundation are papers not included in the microfilm edition. Here will be found materials that were of interest to Ericsson. He collected articles, pamphlets, drawings, newspaper clippings and many descriptions of others' inventions, especially those relating to furnaces, steamers, and research into measuring of temperatures. There are reports of celebrations and programs and invitations addressed to Ericsson from many learned and scientific societies. Although Ericsson became more and more of a recluse as the years went on, he kept abreast of affairs, both national and international. His fertile mind was always seeking new projects. He contributed articles to leading scientific journals. He wrote his thoughts to the newspapers of the day. These letters, documents,



sketches, and notes reveal the many sides of Ericsson's personality. He was kind to his family and very generous when his fortunes improved. He wrote affectionately to his friends. Other communications show bitterness against business opponents, the unimaginative members of committees who hindered progress of his work, and those who made efforts to appropriate his ideas and inventions.

The letters and papers, together with the two major publications, "Contributions to the Centennial Exhibition, 1876" and "Radiant Heat, 1877" reproduced in microfilm give a very complete and comprehensive insight into the era in which John Ericsson lived and made his contributions to mankind.

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The Bulletin of The American Society of Swedish Engineers, N.Y., Taylor, Frank H., *Glimpses from John Ericsson's Private Life*, Mar. 1940.

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The biography by Wm. Conant Church relates to John Ericsson's years in America for the most part. Carola Goldkuhl's biography (in Swedish) a more recent publication, presents Ericsson in a more personal light and with an appreciation of his contributions as seen from the present era. *John Ericsson's Brevvaxling* by Carola Goldkuhl (in Swedish) gives a comprehensive compilation of the correspondence to be found in all the Swedish collections.

Other relevant material pertinent to John Ericsson may be found in the Manuscript Division of the Library of Congress and in the collections of the New York Historical Society.

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to the Centennial Exhibition")

# ROLL LIST

## I. ORIGINAL LETTERS FROM JOHN ERICSSON TO:

Recipient	Date & No. of Documents	Roll
Adlersparre, Axel	Commodore '65(2) '66(3) '74(1)	1
Allen, H.	'59(1) '72(1) '73(1)	1
Aragon, R.	'63(1)	1
Babcock, G.	'66(2) '67(1)	1
Bache, A.	'62(1)	1
Bancroft, George	Secretary of '46(1)	1
	the Navy	
Barnard	'66(1)	1
Bennett	'62(2)	1
Bishop	'57(1)	1
Borg, Selma	'74(1)	1
Bourne, J.	'65(2) '66(8) '69(2) '76(1)	1
	'77(2) '79(1)	
Boynton, C.	'66(1)	1
Browning, S.	'77(1) '83(1)	1
<u>Builder</u>	(Editor of) '53(1)	1
<u>Bull</u>	'66(1) '81(1)	1
Bureau of Ordnance	'85(1)	1
Calburn, Z.	'63(1) '66(2) '67(1) '70(1)	1
Candon, F.	'80(1)	1
Chairman of the Committee,	'61(1)	1
Steel Clad Vessels		
Church, W.	Captain '64(1) '67(1) '70(1)	1
Chute	'77(2)	1
van Cleue	'77(1)	1
Cronstedt, Adolf	Count '67(1)	1
Dabbin, J.	'54(1)	1
Dahlgren, C.	Admiral '64(1)	1
Delamater, C.	'67(1) '68(2) '69(3) '77(1)	1
	'78(2) '80(2) '81(2) '82(2)	
	'83(1) '84(1) '86(1) '88(1)	
Delsanto, A.	Captain '62(1)	1
Dimmach, C.	'44(1)	1
Donemus, R.	Professor '77(1) '81(1)	1
Elworth, Hjalmar	'81(1)	1
<u>Engineering</u>	(Editor of) '70(1) '74(1)	1
<u>Ericson, Nils</u>	'66(1)	1

Recipient		Date & No. of Documents	Roll
Flint		'80(5)	1
Forbes, R.B.		'66(1) '67(1) '72(1) '74(2)	1
		'76(3) '81(1) '83(1) '84(2)	
		'85(1)	
Fox, G.	Assistant	'62(13) '63(8) '64(9)	1
	Secretary of	'65(12) '66(7) '67(1)	
	the Navy	'74(2)' - (2)	
Giles, H.		'68(1)	1
Gould		'66(1)	1
Gregory	Rear Admiral	'63(3) '64(1) '65(1) '66(2)	1
		'64(2)	
Griswold, John		'62(1) '63(1) '65(3)	1
		'66(10) '67(1) '68(1)	
Hanefond	Professor	'61(1) '62(1) '63(1) '78(1)	1
Haswell		'77(1)	1
Haward, W.	Captain	'68(1)	1
Hawkins		'85(2)	1
Henny, J.	Professor	'77(1)	1
Hollingsworth, H.		'62(1)	1
Hoover, H.		'62(1)	1
Isherwood, B.		'63(1) '66(1)	1
Jeffers, W.	Commander	'74(1) '80(1)	1
King		'46(1)	1
Klemming, J.		'82(1)	1
Langley	Professor	'77(2)	1
Lawber, A.		'60(1)	1
Lesby		'77(1)	1
Lincoln, Abraham	President of the United States	'61(1) '64(1)	1
Loning, H.		'62(1)	1
Lyford, S.	Colonel	'77(1)	1
Macten		'77(1)	1
Mansfield, G.		'62(1)	1
Marchand, J.	Commodore	'69(1)	1
Mason, John		'44(2)	1
Mayor of New York		'77(1)	1
Mc Clellum		'77(1)	1
Milliken, D.		'85(1)	1

Recipient		Date & No. of Documents	Roll
Munn & Lo		'58(1) '61(1)	1
Mullany, J.	Captain	'67(1)	1
<u>Nature</u>	(Editor of)	'71(1) '72(1) '75(1) '83(1)	1
Newton, Isaac		'64(1) '73(1) '77(1)	1
<u>New York Herald</u>	(Editor of)	'80(1)	1
North, C.		'69(1)	1
<u>Nya Dagligt Allehanda</u>		'70(1) '83(2) '--(1)	1
Nystrom, John		'77(1) '80(1)	1
Odhner		'74(1)	1
Palman, C.		'58(1)	1
Pannatt, R.	Captain	'66(1)	1
Papt, P.		'66(1)	1
Penkins		'61(1) '62(1)	1
Piper, Edward	Count	'62(1)	1
von Platen, Baltzar	Count	'65(1) '66(1)	1
Penslaw, Ballard	Secretary of the Navy	'49(1)	1
Pond		'67(1) '68(3) '69(1)	1
Rabin, E.		'64(2) '65(2)	1
Radgens, John	Captain	'63(1)	1
Risley, S.		'77(1)	1
Rietz, S.		'83(1)	1
Robinson, G.		'81(1) '85(1)	1
von Rosen, Adolf	Count	'65(1) '68(1)	1
Rowlund		'85(1)	1
Ruggles, S.		'66(3)	1
Sagurs, W.	Lieutenant	'84(1)	1
Sargent, John		'44(6) '45(23) '46(49) '47(4) '48(19) '49(67) '50(10) '51(10) '52(6) '53(10) '54(29) '55(2) '56(9) '57(4) '58(22) '59(8) '60(17) '61(30) '75(1) '76(1) '--(11)	1
Seward, W.	Secretary of State	'62(1) '64(1)	2
Smith, J.	Admiral	'61(1) '62(2) '63(1)	2
Stockton	Captain	'40(1)	2

Recipient		Date & No. of Documents	Roll
Stakes		'69(1)	2
Stanton, E.		'63(1)	2
Staughton		'69(1) '70(1) '74(1) '75(1)	2
		'81(1) '82(1)	
Stimens, A.		'63(3) '64(1)	2
Stjernsvard		'68(1)	2
Thurston, R.	Professor	'77(1) '81(1) '84(1)	2
<u>Times</u>	(Editor of)	'53(1) '60(1) '62(2) '65(1)	2
Tyler, P.		'50(2) '51(2) '53(4) '54(9)	2
		'55(2) '56(2) '61(1) '66(1)	
Wales, S.		'75(1)	2
Warnen, W.		'65(1)	2
Welles, Gideon	Secretary of the Navy	'62(9) '63(6) '64(4) '65(1)	2
Wenstrom, W.		'59(1)	2
Whitney, A.		'71(1)	2
Vieteling		'57(5) '58(3) '59(1) '60(3)	2
		'62(1)	
Vignate, C.		'67(1)	2
Wise, H.	Chief of Ordnance	'64(9) '65(1) '66(9)	2
Worthington, H.		'73(1)	2
Woodcraft, B.		'65(2)	2
<u>World</u>	(Editor of)	'62(1)	2
Recipients Unknown		'57(1) '58(15) '59(25)	2
		'60(13) '63(1) '79(1)	

## II. COPIED LETTERS FROM JOHN ERICSSON TO:

Recipient		Date & No. of Documents	Roll
Adlersparre, A.	Commodore	'65(9) '66(1) '68(1) '71(1)	2
		'74(4)	
<u>Aftonbladet</u>		'75(1)	2
Almen, J.	Vicar	'75(1)	2
Almy, John	Inspector of Ordnance	'69(2)	2
Aragon, Rafael		'69(4)	2
Atlantic Works		'70(1)	2
Bancroft, George		'46(1)	2

Recipient		Date & No. of Documents	Roll
Baptista, Juan	Admiral	'74(1)	2
Barnard	Major General	'65(1)	2
Barrett, E.	Captain	'70(1)	2
Bell, C.H.	Rear Admiral	'67(3)	2
Bourne, John		'64(1) '65(7) '66(18) '68(1)	2
Breese, R.R.	Captain	'75(1)	2
Browning, S.B.		'86(2) '88(1)	2
Bull		'83(1)	2
Calkin, H.C.		'74(1)	2
Campbell, J.B.	Captain	'87(2)	2
Case, A.S.	Commodore	'68(1) '69(10) '70(30)	2
		'71(2)	
Chandler, W.E.	Secretary of the Navy	'82(1) '83(1) '84(1)	2
Christensen, C.	Royal Danish Charge d'Affairs	'70(1)	2
Clary, A.G.	Captain	'74(1)	2
Clitz, J.M.	Assistant Inspector of Ordnance	'70(1)	2
Clute Brothers		'65(1)	2
Colburn, Z.		'70(1)	2
Coy, S.	House of Rep- resentatives	'74(2)	2
Cragin, A.H.		'86(9)	2
Creighton, J.B.	Ordnance Department	'86(1)	2
Danielsson, C.		'75(1)	2
Delamater, C.H.		'69(2) '79(2) '81(1) '86(2)	2
Delano, B.F.		'66(3)	2
Dorr, E.P.	Captain	'74(3) '77(1)	2
Elworth, H.		'79(1) '84(1)	2
Engineer	(Editor of)	'70(1) '74(1)	2
Erben, H.	Captain	'70(1)	2
Ericson, Nils	Baron	'74(1)	2
Ericson, Werner		'80(1)	2
Fish, H.	Secretary of State	'69(1)	2



Recipient		Date & No. of Documents	Roll
Forbes, R.B.		'77(1) '83(1) '86(1)	2
Fox, G.V.	Assistant	'62(5) '63(6) '64(2) '65(1)	3
	Secretary	'66(15) '67(12) '68(1)	
	of the Navy	'74(3) '75(1)	
<u>Franklin Journal</u>	(Editor of)	'--(1)	3
Fraser, A.		'46(1)	3
Gabriel, A.		'76(1)	3
Gregory, F.H.	Rear Admiral	'66(12)	3
Griswold, John		'65(6)	3
Holmgren, K.A.		'86(1)	3
Hull, Virginia		'86(1)	3
Hunt, P.		'65(1)	3
Isherwood, B.F.		'66(7) '67(5)	3
Jeffers, W.N.	Commodore	'74(1) '75(3)	3
Jenkins, T.A.	Commodore	'66(2)	3
Klemming, G.E.		'--(1)	3
Laird, John		'70(1)	3
Lawber		'65(1)	3
Lawton, E.		'66(1)	3
Lenthall, John		'66(1)	3
Lincoln, Abraham	President	'64(1)	3
	of the		
	United States		
Malcampo, J.	Admiral	'70(1)	3
Matthews, J.K.		'75(1)	3
McMahon, G.		'75(1)	3
Mullany, J.R.	Inspector of	'66(4) '67(2)	3
	Ordnance		
<u>Nature</u>	(Editor of)	'74(3) '85(1)	3
Norwegian Prime Minister		'75(1)	3
<u>Nya Dagligt</u>	(Editor of)	'79(1)	3
<u>Allehande</u>			
Odhner, Claes	Professor	'74(1)	3
Odhner, Wilhelmina		'81(1)	3
Oscar II	King of	'79(1) '81(1) '82(1)	3
	Sweden		
Parker, C.		'65(1)	3
Pauldning, H.	Rear Admiral	'62(1) '63(1)	3

Recipient		Date & No. of Documents	Roll
Preston, B.	Secretary of the Navy	'49(1)	3
Ringgold, C.	Commodore	'66(1)	3
Risley, Samuel		'74(2) '76(1) '88(1)	3
Robie, E.W.		'65(1)	3
Robinson, George		'74(1) '82(2)	3
Roe, F.A.	Captain	'66(2)	3
Rollins, E.A.		'68(1)	3
von Rosen	Count	'67(1) '80(1)	3
Rowland, F.		'74(1)	3
<u>Scientific American</u>		'75(1)	3
Simpson, E.	Captain	'69(4) '70(3)	3
Stewart, A.		'75(1)	3
Stillman, J.S.		'65(1)	3
Stockton, Robert	Captain	'41(1)	3
Thomas, W.		'65(1)	3
Thompson		'84(1)	3
Thurston	Professor	'74(1)	3
Towne, J.P.		'64(1) '65(2)	3
Walker, R.	Secretary of the Treasury	'46(1)	3
Welles, Gideon	Secretary of the Navy	'63(1) '64(2) '66(11)	3
Wenstrom		'59(4) '61(1)	3
Whitney, W.C.	Secretary of the Navy	'86(1) '87(3)	3
Vieteling		'65(1)	3
Wise, H.A.	Chief of Bureau of Ordnance	'65(2) '66(27) '67(11)	3
Woodcraft, Bennett		'64(1) '65(3)	3
Angstrom, A.	Professor	'74(1)	3
Recipients Unknown		'44(2) '46(1) '58(1) '59(1)	3
		'63(1) '64(1) '68(1) '75(1)	
Song Titles and Poetic Fragments			

### III. VARIOUS WRITINGS AND PROJECTS OF JOHN ERICSSON

Subject	Date & No. of Documents	Roll
<u>Sketches and drawings</u>	(45)	3
<u>Patents</u>	'36(1) '43(1) '44(2) '45(10)	3
	'46(2) '51(2) '59(3) '60(8)	
	'61(1) '64(4) '65(6) '66(3)	
	'81(1) '---(16)	
<u>List of patents granted to John Ericsson</u>	(2)	
<u>Agreements</u>	'43(2) '44(6) '45(8) '46(1)	3
	'47(5) '50(1) '54(3) '57(1)	
	'58(10) '59(8) '60(10)	
	'61(1)	
Caloric Engine	(18)	3
<u>Inventions, descriptions, and memoranda</u>	'42(1) '44(1)	3
	'45(2) '46(5) '47(3) '49(15)	4
	'50(2) '51(2) '52(3) '54(5)	
	'55(1) '56(1) '58(5) '59(2)	
	'60(6) '61(4) '62(2) '63(2)	
	'64(3) '65(8) '66(5) '67(2)	
	'68(1) '69(4) '72(1) '77(1)	
	'80(1)	
<u>Inventions, descriptions, and memoranda</u>	(53) (no dates)	4
<u>The Monitor</u>	(3)	4
<u>Calculations</u>	(12)	4

### IV. LETTERS TO JOHN ERICSSON FROM:

Author	Date & No. of Documents	Roll
Abenius, A.	'66(3) '67(2)	4
Ahlqvist, C.	'61(1) '---(1)	4
Andrews, C.	'74(1)	4
Aragon, R.	'70(1)	4
Baptista, Juan      Admiral	'74(1)	4
Berglin	'80(1)	4
Bloodgood	'54(1)	4
Bourne, John	'65(1) '66(4) '67(1)	4
Brown, William	'44(1) '79(1)	4

Author	Date & No. of Documents	Roll
Browning, S.	'84(6) '85(63) '86(61) '87(32) '88(15)	4
Buckner, W.	Lieutenant	'64(1) 4
Bull, S.		'80(1) 4
Bushnell, C.		'61(1) 4
Campbell, J.	Captain	'87(1) 4
Caryl, A.		'58(1) 4
Carlsund, E.		'76(1) 4
Chandler, W.	Secretary of the Navy	'84(1) 4
Clark, Thomas		'86(1) 4
Dahlgren		'62(2) 4
Dansin and Buel		'65(2) 4
Delamater		'60(1) '64(1) 4
Eads, B.		'62(1) 4
Ekenstam, Carl		'76(1) 4
Forbes, R.		'46(2) '80(1) '83(1) 4
Fox, G.	Assistant Secretary of the Navy	'62(7) '63(3) '64(9) '65(7) '66(10) '67(4) '68(2) '70(3) '73(3) '74(4) '75(3) '77(1) '78(1) 4
Gladstone, C.		'86(1) 5
Green		'73(1) 5
Gregory, J.	Admiral	'62(3) '64(5) 5
Griswold, John		'61(4) '62(4) '64(1) '66(1) 5
Guellemat		'67(1) 5
Haswell, C.		'46(1) '75(3) 5
Hedlund, S.		'73(1) 5
Henry	Professor	'70(2) 5
Horsfond, E.		'61(1) '66(1) '79(1) '88(1) '--(1) 5
Jeffers, W.		'74(1) '75(1) 5
Lang, John		'73(1) 5
Langley, S.		'74(1) 5
Malcampo, Jose		'69(1) '70(1) 5
Markoe		'78(1) 5
Mason, J.		'44(1) 5
McClellan, B.		'77(1) 5
Meade, R.	Commander	'77(1) 5

Author	Date & No. of Documents	Roll
Mittag, G.	'84(1)	5
Monten, A.	'67(2) '68(1)	5
Morgan, C.	'62(1)	5
Morris, I.	'61(1)	5
Newton, Isaac	'62(2) '64(2) '77(2)	5
Nicolai, AA LL	'66(1)	5
Nyberg	'68(1)	5
Ogden, F.	'43(3) '46(1) '88(1) '---(1)	5
Oscar II	King of Sweden '79(1)	5
von Otter	'79(1)	5
Pannett	'66(1)	5
Phillips, P.	'58(1)	5
Phoenix	'44(1)	5
Pond	'64(1)	5
Postmaster	'77(1)	5
Raynold, G.	'69(1)	5
Reed	'73(1)	5
Ridderstad, C.	'67(1)	5
Robeson, G.	'73(1)	5
Rodgers, John	Commodore '64(1) '65(1) '73(1)	5
von Rosen, G.G.	'66(1)	5
Rothman	'64(1)	5
Rowland, F.	'78(1)	5
Royal Court of Bruxelles	'51(1)	5
Sargent, John	'62(1) '76(1) '88(1)	5
<u>Scientific American</u>	'62(1)	5
Secard, M.	'86(2) '88(1)	5
Simpson, E.	'70(3) '79(1) '80(5)	5
Smith	Admiral '61(6) '62(9)	5
Sokoloff	'74(1)	5
Stimes, A.	'62(2)	5
Stockton, R.	'41(14) '42(5) '43(15)	5
Stoughton	'44(2) '---(1)	
Warrington	'64(1) '67(1) '70(1) '74(1)	5
Welles, Gideon	Secretary of the Navy '44(1)	
West	'62(2) '64(3)	5
	'79(1)	5

Author	Date & No. of Documents	Roll
Winslow	'61(3) '62(1)	5
Wise, A.	Chief of Bureau of Ordnance	'65(1) '66(1) '67(1) 5
Woed	'64(1)	
Woodcraft, B.	'66(1)	
Worthington	'80(1)	

## V. LEGAL AND COURT COMMUNICATIONS RELATING TO JOHN ERICSSON

Subject	Date & No. of Documents	Roll
John Ericsson vs Charles Morgan	'44(6)	5
John Ericsson vs R. Borden	'44(7)	5
John Ericsson vs Peck and Clyde	'44(2)	5
John Ericsson vs Francis P. Smith	'44-48(79)	5
John Ericsson vs Henry B. Norton and Lewis Squire	'45(9)	5
John Ericsson vs J. Emerson	'45(45)	5
John Ericsson vs Charles Dimmock	'46(42) '49(1)	5
John Ericsson vs United States	56(8)	5
Emerson vs Hogg and Delamater	'	6
	(cont'd)	7
M.C. Heath vs Ericsson's Estate	'90(1)	7
Samuel W. Taylor, witness	'90(3)	7

## VI. LETTERS FROM SAMUEL TAYLOR TO:

Recipient	Date & No. of Documents	Roll
Adams, M.	'86(1)	7
Adlersparre, A.	Captain '65(1)	7
Ahlbom, N.	'86(1)	7
Arthur, W.	Captain '80(1)	7
Bauforth, F.	'85(1)	7
Borg, Selma	'74(1)	7
Brandt, C.	'86(2)	7
Braun, M.	'67(1)	7
Bushnell, C.	'86(1)	7
Clark, Thomas	'86(1)	7

Recipient		Date & No. of Documents	Roll
Colin	Professor	'89(1)	7
Commercial Advertisers		'89(1)	7
Delamater, C.		'84(1) '86(4)	7
Dorr, E.	Captain	'74(1)	7
Elington, Karl		'86(1)	7
Elworth, H.		'74(1)	7
Elworth, Sophie		'89(1)	7
Ericson, John	Baron	'89(1)	7
Ericson, Werner		'80(1)	7
Forbes, R.		'89(1)	7
Frain, G.		'89(1)	7
Gardiner, A.		'89(2)	7
Handels-Tidningens Bolag		'74(1)	7
Hazellius, A.		'89(1)	7
Hubert, P.		'86(1)	7
Hughes, W.	Lieutenant	'86(1)	7
Lusk, L.		'86(1)	7
Man, W.		'74(1)	7
van Mostrand, D.		'86(1)	7
Olson, A.		'74(1)	7
Perry, W.		'89(1)	7
Pond, George		'86(1)	7
Rennerfelt, C.		'74(1)	7
Ruckman, W.		'86(1)	7
Sargent, John		'86(1)	7
Smith, A.		'87(1)	7
Star	(Editor of)	'89(1)	7
Taylor, Frank		'00(5)	7
Thurnton, R.	Professor	'89(1)	7
Tribune	(Editor of)	'89(1)	7
Trotzig, S.		'86(1) '72(1)	7
Wise, H.		'64(1)	7
Recipients Unknown		'69(1) '88(1) '89(1) '---(1)	7

## VII. LETTERS TO SAMUEL TAYLOR FROM:

Author	Date & No. of Documents	Roll
Ericson, Werner	'80(1)	7
Forbes, R.	'89(1)	7

Author	Date & No. of Documents	Roll
Gardiner, A.	'89(3)	7
Soley, J.R.	Assistant Secretary of the Navy	'90(1) 7
Swinton, A.	'86(3)	7
Taylor, Frank	'11(1)	7
Wenstrom, W.	'89(1)	7
Zortman, J.	'89(1)	7
Church	'90(1)	7

### VIII. MISCELLANEOUS PAPERS

Subject	Date & No. of Documents	Roll
John Ericsson's illness	'89(2)	7
John Ericsson's will	'72	7
The John Ericsson family line	(2)	7
John Ericsson's military records in Sweden	'26(1)	7
Nils Ericson's biography	'45(1)	7
List of John Ericsson's possessions Nordic Museum, Stockholm	(1)	7
Printed Material (American & Swedish)		7
Lists (Vessel logs and statistics)		7
Newspaper Clippings (American & English)		7
Monitor	(9)	7
Princeton	(13)	7
Massachusetts	(4)	7
Dictator	(17)	7
Destroyer	(8)	7
Patents--J. Emerson	(11)	7
Patents--propeller	(16)	7
Patents	(32)	7
From Robert Stockton	'44(2) '52(1) '41(1)	7
From S. Browning	'84(3) '85(15) '86(8) '87(1)	7
To S. Browning	'84(1) '85(3) '86(12) '87(1)	7
	'--(3)	
From G. Fox	'73(1) '74(1)	7



Subject	Date & No. of Documents	Roll
Newton to Delamater	'62(1)	7
Photostats		7
Miscellaneous - related to John Ericsson		7
Miscellaneous letters		7
Miscellaneous papers		7
<i>Radiant Heat</i> by John Ericsson, Ll.D.	'77	8
<i>Contributions to the Centennial     Exhibition</i> by John Ericsson	'76	8

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