## **Primary Sources**

Artist Rendering of Virginia Class Sub. 2012. Photograph. U.S. Navy. Navy Times. U.S. Navy,

2012. Web. 2 Feb. 2013.

This is a computer simulation of a submarine shooting a torpedo. I used this on the torpedo page to show the advances since the Nautilus. This is a primary source because this picture is from the modern time it represents.

A Treatise on the Improvement of Canal Navigation Cover. Photograph. Albany, NY. Albany

Institute of History & Art Library. Albany Institute of History & Art Library.

Web. Feb. 2013.

This is a picture of the cover of Fulton's book "A Treatise on the Improvement of Canal Navigation". I used this to support the claim that Fulton suggested the Erie Canal.

Colden, Cadwallader D. The Life of Robert Fulton,. New-York: Published by Kirk & Mercein,

No. 22 Wall Street., 1817. Print.

His close friend, Cadwallader Colden, wrote this book right after Fulton's death. I counted this book as a primary source because it contained a lot of primary information such as quotes and original sketches by Fulton. The author was a close friend who lived during Fulton's time.

Collins Class Submarine. Photograph. BAC Group. BAC Group, c.2006. Web. 2 Feb. 2013.

I used this photograph of a modern submarine on the submarine page to show advances in the submarine since Fulton's design. I counted this as a primary resource because the picture is from the time period of a modern submarine.

Engraving of the New Orleans. c. 1811. Engraving. Howard Steamboat Museum, Jeffersonsville,

IN. ExplorePAHistory. WITF. Web. 1 Feb. 2013.

This engraving is from the year the New Orleans made its historic trip down the Mississippi River. I used this on the steamboat page to show what Fulton's New Orleans steamboat looked like because no photographs of the ship exist.

Fulton, Robert. Double Inclined Plane for Moving Tub Boats from One Level to Another on a

Canal. 1796. Sketch. A Treatise on the Improvement of Canal Navigation. London:

I.J. Taylor, 1796. Print.

This is a Robert Fulton sketch of a double incline plane used for moving boats without locks. I used this on the Erie Canal page.

Fulton, Robert. "Robert Fulton's Experiments in Submarine Gunnery." Scribner's Monthly

4 Aug. 1881: 563-70. Web. 7 Feb. 2013.

This was a letter from Robert Fulton to Thomas Jefferson published in a magazine article in 1881. In it were many Fulton sketches of underwater cannons. I used one as a link from the Demologos page to show what Fulton was trying to design

Fulton, Robert. Fulton's First Sketch for a Steamboat 1793. 1793. Sketch. Robert Fulton:

Engineer and Artist. London: John Lane, 1913. Print.

This original Robert Fulton sketch was the first drawing he made when beginning work on a steamboat. I used this sketch on the steamboat page.

Fulton, Robert. Fulton's Sketch of Nautilus. 1810. Sketch. Torpedo War, and Submarine

Explosions. New York: W. Elliot, 1810. Print.

This is the original 1797 Fulton sketch of the Nautilus. Since no photographs exist of his submarine, I used this on the submarine page.

Fulton, Robert. Fulton's Steam Warship Demologos. November 1813. Sketch. U.S. Naval

Historical Center Photograph. Web. 2 Feb. 2013.

This is Fulton's sketch of the Demologos warship. It shows several different views of the ship. I used this sketch on the steam warship page.

Fulton, Robert. Interior Chambers for Crew, Ballast, and Submarine Bombs. Sketch. Library of

Congress. Library of Congress. Web. 2 Feb. 2013.

I used this original Fulton sketch on the submarine page to show what the inside of the Nautilus looked like.

Fulton, Robert. "Letter on Canals." Letter to George Washington. 5 Feb. 1797. Robert Fulton.

New York: Macmillan, 1915. Print.

This letter sent by Robert Fulton talks about Fulton's canal ideas that he sent to George Washington. I used a quote from this letter on the bibliography page to support the claim that Fulton was the first to suggest the Erie Canal.

Fulton, Robert. Original Drawing of Robert Fulton's First Steamboat, France, Circa 1803. Circa

1803. Photograph. Coris Bettman. ExplorePAHistory. WITF. Web. 3 Feb. 2013.

This is Robert Fulton's sketch of the steamboat that he tested successfully in France. I used this on the steamboat page.

Fulton, Robert. Plate 1. 1810. Sketch. View of the Brig Dorothea as She Was Blown Up.

Torpedo War, and Submarine Explosions. New York: W. Elliot, 1810. 5. Print.

This original Fulton sketch shows the destruction of the Dorothea by his torpedo. I used this sketch on the torpedo page.

Fulton, Robert. Plate 2. 1810. Sketch. Fulton's Sketch of Floating Torpedo. Torpedo War, and

Submarine Explosions. New York: W. Elliot, 1810. 8. Print.

This original Fulton sketch shows one of Fulton's many ideas for his torpedo. I used this sketch on the torpedo page.

Fulton, Robert. Plate 3. 1810. Sketch. Harpoon and Clockwork Torpedo. Torpedo War, and

Submarine Explosions. New York: W. Elliot, 1810. 9. Print.

This Fulton sketch shows his idea of shooting a torpedo using a harpoon gun.

Fulton, Robert. Plate 4. 1810. Sketch. Stern of Boat and Harpoon. Torpedo War, and Submarine Explosions. New York: W. Elliot, 1810. 10. Print.

This Fulton sketch shows how to use torpedoes by using a rope to join two together.

Fulton, Robert. Plate 5. 1810. Sketch. Fulton's Sketch of Torpedo. Torpedo War, and Submarine

Explosions. New York: W. Elliot, 1810. 12. Print.

I used this Fulton sketch on the torpedo page to show how he proposed that small boats would attach torpedoes to a ship to destroy it.

Fulton, Robert. "Robert Fulton to George Washington, February 5, 1797." Letter to George

Washington. 5 Feb. 1797. Library of Congress. Library of Congress. Web. 7 Feb. 2013.

This is a letter from Robert Fulton to George Washington that Fulton's friends say supports the claim Fulton was the first to suggest the Erie Canal

Fulton, Robert. "Robert Fulton to George Washington, February 5, 1797 Transcript." Letter to

George Washington. 5 Feb. 1797. Rochester University. Rochester University. Web. 7

Feb. 2013.

This is the transcript for the Robert Fulton to George Washington letter I used. I thought this would be easier to read than the picture of the original letter.

Fulton, Robert. "Robert Fulton's Torpedo." Universal Gazette. Web. 7 Feb. 2013.

This article appeared in the Washington DC newspaper, Universal Gazette in 1805. The article gives Fulton's account of the experiment in which he blew up the Dorothea with one of his torpedoes. I used this as a link from the Torpedo page.

Fulton, Robert. Sighting Mechanism and Details. Plunging Boat [submarine]. Section. 1806.

Photograph. Library of Congress. Library of Congress. Web. 4 Feb. 2013.

This Fulton sketch shows the sighting mechanism of the submarine since periscopes did not exist yet. Fulton drew a self-portrait of himself looking into the sight.

Fulton, Robert. Steam Battery "Fulton Launching at New York City", 29 October 1814.

Engraving published by B. Tanner, No. 71 South 3rd. St., Philadelphia, Pennsylvania, 27

March 1815.

This picture is showing the launching of the Demologos based on a drawing by J.J. Barralet after a sketch drawn at the launching. Theodore Roosevelt donated this to the U.S. Naval Historical Center in 1936. I used this on the steam warship page.

Fulton, Robert. Submarine above and below Water Level. 1806. Photograph. Library of

Congress. Library of Congress. Web. 4 Feb. 2013.

This Fulton sketch shows how Robert Fulton's "plunging boat" can go under water or use sails when it comes to the surface. I used this on the submarine page.

Fulton, Robert. Submarine Vessel, Submarine Bombs and Mode of Attack. 1806. Sketch. Library

of Congress. Library of Congress. Web. 3 Feb. 2013.

This Fulton sketch shows the inside of the Nautilus. I used this sketch on the submarine page.

Fulton, Robert. Susan Hayne Simmons (Mrs. Manigault Heyward). C. 1790. Heilbrunn Timeline

of Art History, New York. The Metropolitan Museum of Art. The Metropolitan Museum

of Art, Oct. 2006. Web. 1 Feb. 2013.

I used this Robert Fulton painting on my biography page as an example of his artistic ability. The painting shows that he had some talent as an artist and shows his attention to details like jewelry

Fulton, Robert. Torpedo War, and Submarine Explosions. New York: W. Elliot, 1810. Print.

This is Robert Fulton's book written about torpedoes and submarines. It is full of sketches, drawings, and quotes. Fulton explained his ideas and designs about torpedoes, submarines, and how they could affect naval battles. He included many sketches to explain and illustrate his work. I used this for information and quotes on several pages of my website.

Fulton, Robert. A Treatise on the Improvement of Canal Navigation. London: I. & J. Taylor,

1796. Print.

This book written by Fulton book explains his views on canal development. Fulton explained why he believed that canals were so important. He showed design and technical issues about canals in many sketches. I used this for information about his connection to the Erie Canal.

Knego, Peter. Queen Elizabeth 2. 2008. Photograph. Maritime Matters. Martin Cox. Web. 2 Feb.

2013.

I used this picture of the Queen Elizabeth II on the conclusion page to show a modern steamboat. I counted it as a primary because it is from the time period of the ship.

Modern Torpedo. Photograph. US Military. About.com. Web. 2 Feb. 2013.

I used this photograph to show a modern torpedo. I used this picture to show how far torpedoes have advanced since Fulton's original torpedo. I used this picture on the Conclusion page. I considered a primary source because it is a modern time photo of a modern torpedo.

Teeples, Brandon A. The Los Angeles-class Fast Attack Submarine USS Annapolis.

Photograph. The U.S. Navy. The U.S. Navy, 25 Oct. 2005. Web. 2 Feb. 2013.

This picture shows a modern submarine. I used this picture on the conclusion page to show how far submarines have advanced since Fulton's Nautilus. I counted this as a primary source because it is a modern picture of a modern submarine.

The Advantages of the Proposed Canal from Lake Erie, to Hudson's River Cover. Photograph.

Metro Old York Library. City University of New York. City University of New York.

Web. 7 Feb. 2013.

This is a picture of the cover of Fulton's letter to Gouverneur Morris in 1814 about the Erie Canal. Fulton proposes charging tolls and compares transportation costs between the canal, rivers, and roads. I used this on the Erie Canal page.

The Nuclear Powered Aircraft Carrier USS Carl Vinson. 2005. Photograph. US Department of

Defense. US Department of Defense, 15 Mar. 2005. Web. 31 Jan. 2013.

I used this picture of a modern steam powered ship to emphasis the advances made since Fulton's Demologos. This is primary because it is showing a modern steam warship from a modern time period.

## **Secondary Sources**

1807: Fulton's Steamship Pikes Expedition, and the Embargo Act. Prod. Schnurman. 1807:

Fulton's Steamship Pikes Expedition, and the Embargo Act. Youtube, 8 Nov. 2009. Web.

Web.2013.

This video is about Robert Fulton and the steamboat. I used this video on the steamboat page.

Bachman, Frank P. "Robert Fulton and The Invention of The Steamboat." Great Inventors and

Their Inventions, New York: American Book, 1918. Print.

This is a book about great inventors and their inventions. I used this to find general information about Robert Fulton.

Bettman, Otto. Portrait of Robert Fulton. Portrait. Corbis Bettman. ExplorePAHistory.com.

WITF. Web. 31 Jan. 2013.

This is a portrait painted from another painting by Fulton's friend and mentor, Benjamin West. I used this picture on my home page.

The Clermont on The Hudson. 1830-1835. Painting. I.N. Phelps Stokes Collection, Miriam and

Ira D. Wallach Division of Art, Prints and Photographs, The New York Public Library, Astor, Lenox and Tilden Foundations.

Since there are no photographs of Fulton's Clermont, I used this picture to show what the Clermont looked like. I used this picture on the steamboat page.

Cutler, Thomas J. "Demologos." Proceedings June 2011: 93. Print.

This is an article about Fulton's warship, the Demologos written by a retired Lieutenant Commander in the US Navy. Currently he is Fleet Professor of Strategy and Policy with the Naval War College and the Director of Professional Publishing at the U.S. Naval Institute. The author explained how the Demologos changed naval warfare. I liked this article so much that I contacted him and obtained an interview.

Dampfærgen Odin (Steam-ferry Odin), Late-nineteenth Century. c1880. Photograph. The Danish

Immigrant Museum, Elk Horn, IA.

I used this photograph on the steamboat page to show how the steamboat evolved by 1870 to transport people across the ocean to America.

Dickinson, H. W. Robert Fulton, Engineer and Artist; His Life and Works, . London: John Lane,

1913. Print.

This book had copies of Fulton's original letters and drawings. This gave me more Information about Fulton's life.

"Enlisted Ratings and Jobs in the U.S. Navy." Enlisted Ratings and Jobs in the U.S. Navy.

Department of U.S. Navy, Web. 02 Feb. 2013.

This document gave a description of enlisted jobs or ratings in the U.S. Navy 1775-1970. It also provided brief history of the development and importance of steam in the navy. I used a quote on the steam warship page.

Hill, John William. View on the Erie Canal. 1832. I.N. Phelps Stokes Collection of

American Historical Prints, The New York Public Library.

I used this picture on the Erie Canal page to show Robert Fulton's connection to the canal project.

Iles, George. Leading American Inventors. New York: H. Holt and, 1912. Electronic.

This book told about Fulton's life, provided pictures and quotes

"Interveiw with Lieutenant Commander Thomas Cutler". E-mail interview. 3 Feb. 2013.

Retired Lieutenant Commander Thomas Cutler is currently Fleet Professor of Strategy and Naval Institute. He has written numerous articles about naval ships including the Demologos. I contacted Lieutenant Commander Cutler after reading a magazine article that he had written about the Demologos. He was very supportive and provided great information. His information on the warship helped inspire my research on the ship.

"Interveiw with Stephen H. Cutcliffe". E-mail interview. 14 Jan. 2013.

Professor Cutcliffe is Chair of Lehigh University's History department. He is the director of the Science, Technology, and Society program. I read his research paper on Fulton's torpedoes and pictures that Lehigh has. I interviewed him about the torpedo and was able to view Lehigh's Fulton torpedo sketches. He provided me with information about Fulton and the torpedo that I used on the torpedo page.

"Inventor of the Week: Archive." Inventor of the Week: Archive., June 2000. Web. 31 Jan.

2013.

This article published by MIT featured a different inventor each week. This article about Robert Fulton provided information. I used a quote from this website on the steamboat page. The quote allowed me to show how important Fulton's contribution to the steamboat was even though he was not the first to invent it.

Map of Pennsylvania Counties. Photograph. Google Maps. Google. Web. 2 Feb. 2013.

I used this drawing of Lancaster County, Pennsylvania on the biography page. The picture highlights the city and county in Pennsylvania where Robert Fulton was born.

Parsons, William Barclay. Robert Fulton and the Submarine, New York: Columbia UP, 12.

Print.

This book focuses on Fulton's submarine and torpedo. Many of Fulton's sketches and letters are included in this book.

Philharmonia Slavonica & Henry Adolph. 1812 Overture. Point Classics, 2011. Itunes. Web. 8

Feb. 2013.

This is an excerpt from the 1812 Overture that I used on my home page. I picked this song because the war of 1812 was important for Fulton's submarine, torpedo, and warship, even though they were never used in war.

Plan of the "Clermont" as Reproduced by the Hudson - Fulton Celebration Commission, 1907.

1907. Photograph. Leading American Inventors. New York: Henry Holt and, 1912. 62.

Print.

This sketch is a reproduction of the plans for Fulton's Clermont. The 100-Year Hudson/Fulton Celebration commissioned this reproduction in 1907.

Reigart, John Franklin, and Robert Fulton. The Life of Robert Fulton. Philadelphia: C.G.

Henderson, 1856. Print.

This book provided quotes and original sketches of Robert Fulton. The book talked about Fulton's life. I used information from this book throughout the website.

Robert Fulton's First Experiment. c. 1860. Lithograph. Tinted Lithographs by I.N. Rosenthal.

Ca, Philadelphia. The Life Of Robert Fulton. Philadelphia: C.G. Henderson, 1856. 36.

Print.

This lithograph recreates how Robert Fulton experimented with a paddleboat on the Conestoga River as a boy. I used this lithograph on the biography page.

Robert Fulton Medal. 2005. Photograph. John J. Ford Jr. Collection, New York. Stacks Rare

Coin Company. Stacks Rare Coin Company, May 2005. Web. 6 Feb. 2013.

This is a picture of a Robert Fulton memorial medal made sometime after 1815. I used this picture on the biography page.

Steamboat Whistle. 2011. Steamboats.org. Web. 8 Feb. 2013.

This is the sound of a steamboat whistle that I used on my steamboat page.

Sutcliffe, Alice Crary. Robert Fulton and the Clermont. New York: Macmillan, 1915. Print.

This author of this book is Fulton's great granddaughter. This book provided a lot of Primary Information like letters and drawings unpublished before 1915.

Thurston, Robert Henry. Robert Fulton: His Life and Its Results. New York: Dodd, Mead and,

Company, 1891. Print.

This book provided information with steamboats and Fulton. This had multiple quotes that I used in the website.

USS Missouri. Photograph. Hawaii Aloha. Hawaii New. Web. 2 Feb. 2013.

This photograph shows a modern battle ship (warship). I used this on the conclusion page to show how far warship have advanced since Fulton's Demologos.