

LILLY RESEARCH

RESEARCH TEAM

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2013



Ron Spitz Collection

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Compiled by Ron Spitz
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INTRODUCTION

For the greater part of the year 2013, Paul Davies, Matt Forte, Lyle Wilkerson and Ron Spitz, formed a research group for the purpose of doing the first serious research on what we collectors call the Lilly Irons. Corresponding with each other only by email (over 300), the search was conducted mostly with on-line information. Information was obtained from The New York Times, the Brooklyn Daily Eagle, Navy Muster Rolls, genealogy records, The National Archives, The Smithsonian, The American Medical Association, to name most sources.

The search was limited to 1855 to 1865 time period and concentrated on the Washington D. C. Naval Yard and then moved to the Brooklyn Naval Yard. Although this time period was of primary interest for the development of the irons, the records took us back to the early 1800's. The other assumptions were the name Lilly and he was in the Marines.

One thing worth mentioning that became very apparent to me during the research was that only handcuff collectors, escape artists and magicians and maybe a few other collectors know of the irons by the name Lilly. I approached the subject by talking about the shackles that the Lincoln Conspirators were wearing and then started talking about Lilly. Also, the terms irons and shackles seem to be used interchangeable.

It was a wonderful history lesson not only of the Navy and Marine Corps, but the cities of Washington, D. C. and New York City.

These results and conclusions will be for the original research in 2013. The additional research is from my visit to DC in mid July 2017.

THE LILLY STORIES PRIOR TO THIS RESEARCH

In a 1907 Bannerman catalog advertising Lilly Irons it states: "U.S. Navy leg irons, Invented by Sergeant of Marines named Lillie, who died while in irons of his own invention during an attack of delirium tremens."

In 1910 Harry Houdini wrote: "This cuff was invented by Captain Lilly, U.S. Army. He was the first man that ever put them on, and, through a strange irony of fate, he died with a pair on him. It is a regulation cuff - now obsolete in the Army - but is in use at present in the U.S. Navy." ... "Invented by Sergeant Lilly, of the United States Army, who never patented them, and strange to say, he died with a pair of them on his wrists, suffering from delirium tremens."

In 1957 Dick Norman wrote: "The inventor, a sergeant in the American Army later became violently insane and died with these cuffs on."

In 1981 Don Stewart wrote about Lilly Irons, stating: "Invented by Horace Lillie of the U.S. Marines, who as the story goes, died while in irons of his own invention during an attack of delirium tremens." Others have him under the name of John Horace Lilly.

In 2013 a new book on the Lincoln conspirators refers to Lilly as a Doctor who worked with the mentally ill at St. Elizabeth's, a government asylum across from the New York Navy Yards.

All the above stories agree that Lilly was connected with the government and that he was connected with the Army, the Navy or the Medical Corps. If the irons were made by the government or someone in the service, they would not have been patented being government property.

Checking with The American Medical Association (AMA), in Washington D. C. a search of their Deceased Physicians Master Card File had no record of anyone by the name of Lilly or other spellings of the name for the period of interest.

The various service ranks, except Captain, were held by Lilly but no reference to him being in the Army has been found. There was one Captain Lilly but the time frame and duty assignments do not lend themselves to make a good prospect. A specific search for a John Horace Lilly in the National Archives was negative for anyone with that name.

Several others with the name Lilly were found, one of them being Benjamin, but none of them fit our time line for when the irons were used.

The statements that he died wearing a pair of his irons is good theater and helps sell the irons.

EARLIER TYPE OF RESTRAINTS AND PUNISHMENT

Flogging was very harsh, painful and being in irons or double irons (hands and legs) was more of an embarrassment for the prisoner according to published accounts. The riveted style of irons were used for many years. They had to be put on and removed by a blacksmith or someone with the tools to perform the procedure. The rivet being either hot or cold, and being smashed with a hammer had to be painful in itself, even if the hammer hit its mark every time. There are many records detailing the damage the irons inflicted by rubbing against the skin causing serious wounds to the bone. They were used by both civil and military authorities.

There was one newspaper account that described the use of the riveted irons in a Civil War POW camp. All prisoners had to be in irons at all times except for the evening meal. The irons had to be removed and then replaced every night. This was quite laborious so they stopped using steel

rivets and reshaped lead bullets to be used instead. This saved a lot of time and labor and the lead was reusable.

The Navy, was looking for a type of restraint that was easier to apply, remove and eliminated the need of a rivet style securing device. Hence, the screw type iron was developed. It had limited use within the military, most likely just the Navy.

We feel very positive that the irons were developed by the Navy and the Marines, being responsible for security and prisoner control, were trained in their use.

THE SEARCH FOR LILLY

The search for Lilly started in several directions. Genealogy and census records were searched. The Washington Navy Yard, being a logical location for the production of the irons, was searched for any history, both military and civilian. The Washington search yielded no information. Any information about shackles or irons did not have any description to support that they were Lilly's. There was a lot of interesting reading about the Yard, however none applied to our subject.

Then the genealogy and census records started to have several hits on the name Lilly and spelling variations of the name. Several were checked by the National Archives. Most we were able to eliminate because of time period, occupation, and location. There was one Lilly that stood out and as we gathered more information on him we all agreed that with a high percent of confidence, this was our man and the search shifted to New York and the Brooklyn Navy Yard.

Meet **ELIAKIM LILLY** born July 17, 1808 (?) in Massachusetts. He was married in 1833 and while stationed in Brooklyn, lived with his wife Mary Ann at 23 Stanton Street, Ward 5, Brooklyn. He joined the Marines when he was 29 years old, which is quite late for a new enlistment. We could not find any information on his occupation prior to his enlistment. Note that dates may vary a few years due to the quality of handwriting of some documents.

We wanted to find out information on where he lived. Stanton Street ran parallel to Barbarin Street, from the waterfront south to near Fulton between Bridge and Gold Streets, in the early 1800's. By the middle of the 19th Century, the northern part of Stanton Street above Sands Street had been renamed Charles Street. The southern part south of Nassau Street survives today as Duffield Street. There may have been additional changes with the redevelopment of the area.

Several advertisements in the local papers of the time were found. One ad was for a young boy to do chores at a residence and there was an advertisement for a livery stable located at the end of the block of Stanton Street.

The Marine Muster Rolls shows his many enlistments and reenlistments, which occurred on the same day. He swiftly progressed through the ranks. The spelling is as it was written in the Rolls. You can see there were a lot of misspellings which unfortunately, was common.

U.S. Marine Corps Muster Rolls 1798-1958

Name	Muster Date	Enlistment Date	Rank	Station
Eliakine Lilley	Aug. 1837	Aug. 24, 1837	Private	Navy Yard Bklyn.
Eliakim Lilly	Jan 1839	Aug. 24, 1837	Corporal	Navy Yard Bklyn.
Eliakin Lilly	June 1841	Aug. 24, 1837	Sergeant	USS St. Louis
Eliakin Lilly	Mar. 1842	Aug. 24, 1837	Sergeant	USS St. Louis
Eliakin Lilly	Oct. 1842	-----	Sergeant	Brooklyn, NY
Eliakim Lilly	Sep. 1847	Sep. 30, 1846	Orderly Sgt.	USN N. Carolina
Eliakin Lilly	Aug. 1851	Sep. 30, 1850	Orderly Sgt.	USN N. Carolina
Eliakin Lilly	Feb. 1852	Sep. 30, 1850	Orderly Sgt.	USN N. Carolina
Eliakim Lilly	Mar. 1852	Sep. 30, 1850	Orderly Sgt.	USN N. Carolina
Eliakim Lilly	Feb. 1854	Sep. 30, 1850	Orderly Sgt.	USN N. Carolina
Eliakim Lilly	Mar. 1857	Sep. 29, 1854	Orderly Sgt.	North Carolina
Eliakim Lilly	Jan. 1860	Sep. 29, 1858	Orderly Sgt.	USN N. Carolina
Eliakin Lilly	June 1860	Sep. 29, 1858	Orderly Sgt.	North Carolina
Eliakim Lilly	Apr. 1862	Sep. 29, 1858	Orderly Sgt.	North Carolina

From his service records it is interesting to note that the 1850 (he was 39), the 1854 (43) and 1858 (47) reenlistments were by permission of General Archibald Henderson who was the Marine Corps Commandant. Henderson died in 1859 and Lilly's records are damaged so we do not know if any permission was granted or required. However, he was reenlisted.

Information on General Henderson can be found at:
https://en.wikipedia.org/wiki/Archibald_Henderson

The only information in Lilly's reenlistment records was his height of five feet, nine and one half inches tall and he had hazel colored eyes and was in good health. In those days personal awards, achievements and honors were not recorded.

A page from Eliakim Lilly's 1850 reenlistment from the National Archives is reproduced below. It is a good example of the handwriting and documents of the period.

I, *Eliarim Silly*

do acknowledge that I have voluntarily enlisted myself to serve four years in the Marine Corps of the UNITED STATES, unless sooner discharged, upon the terms mentioned in the act passed the 11th day of July, 1798, entitled "An act for establishing and organizing a Marine Corps;" also the act passed the 2d day of March, 1833, entitled "An act to improve the condition of the non-commissioned Officers and Privates of the Army and Marine Corps of the United States and to prevent desertion;" and also the Acts passed the 2d day of March, 1837, entitled "An act to provide for the enlistment of boys for the Naval service, and to extend the term of the enlistment of seamen;" and February 20th, 1845, entitled "An act to amend an act, entitled 'An act to provide for the enlistment of boys for the Naval service, and to extend the term of the enlistment of seamen;'" and also the 9th section of An act passed March 3d, 1845, making appropriations for the Naval service for the year ending the 30th June, 1846." And that I have had read to me the Rules and Articles of the Army and Navy against Mutiny and Desertion.

Witness my hand, this *Twenty eighth* day of *September* 18*50*
In the presence of

Philip C. C. Weston

Eliarim Silly

Wm. J. ...

I, *Eliarim Silly*

do solemnly swear or affirm, (as the case may be,) that I will bear true allegiance to the United States of America, and that I will serve them honestly and faithfully against all their enemies or opposers whatsoever, and observe and obey the orders of the President of the United States, and the orders of the officers appointed over me according to the Rules and Articles for the government of the Army and Navy of the United States. And further, that I am of the full age of twenty-one years.

Eliarim Silly

Sworn before me, at *the County of Kings City of Brooklyn*
this *Twenty eighth* day of *September* 18*50*

Edward Beard Commissioner
of Oaths for the City of Brooklyn

SIZE ROLL.

Eliarim Silly an *Ordnance*, *Sergeant* *United States*
~~private~~, born in the *United States*
State of *New York* County of *New York* Town of *Brooklyn*
Brooklyn, N.Y. enlisted *28th* *September* 18*50* at
aged *39* years, *5* feet, *9 1/2* inches high, *Hazel* eyes,
Brown hair, *Fresh* complexion, by ~~trade~~ occupation a *Soldier*

REMARKS. *Now on board U.S.S. North Carolina - re-enlisted as Dragoon Sergeant by permission of Gen. Henderson*

I certify, That the above recruit is free from bodily defects, and is qualified to perform the duty of a soldier.

J. Brinckerhoff
Surgeon U.S.A.

Eliakim was stationed at the Brooklyn Navy Yard as an Orderly Sgt. on the USN North Carolina which was a receiving ship used for training, supply storage and housing. The North Carolina has an interesting history and was the Flag Ship of the Navy. The Wikipedia link is well worth reading: [https://en.wikipedia.org/wiki/USS_North_Carolina_\(1820\)](https://en.wikipedia.org/wiki/USS_North_Carolina_(1820))

Part of his duties was to close order drill the Marines on the parade ground. Another would have been the training and handling of prisoners which would have included the proper use of applying irons.

We were able to find a few newspaper articles that mentioned Lilly by name and gave some clues as to his stature.

The **New York Times** had a column "Naval and Military Intelligence.; THE BROOKLYN NAVY YARD, published August 22, 1860, which reads in part:

"Nearly a thousand men are employed now in the Navy-yard. The stone foundation of the Western Ship-house is progressing rapidly, and the new marine barracks on Flushing-avenue will also be completed in a little while. The old garrison at the gate is manned by over fifty soldiers, who have recently donned the new uniform of the marine corps. The guard of the North Carolina is almost daily drilled, a la Zouave, on the Parade-ground. Capt. REID (of Chinstrap fame) and the Falstaffian LILLY directing their movements."

This was a regular column and also listed all ships and their condition that were in the yard and other reports on military activities.

The **Brooklyn Daily Eagle**, dated October 31, 1860 wrote, "Another experimental test was made at Coney Island yesterday by Orderly Sergeant Lilly, Mr. McCabe and other gentlemen with the United States ship North Carolina, under the direction of Capt. Ward, on the new pattern muskets lately adopted to the marine corps."

Another **New York Times** article dated May 25, 1861 stated, "The marine guard of the receiving-ship consists of 40 men, in command of Sergeant Lilly, one of the most efficient "non. coms" in Uncle Sam's employ".

These articles, along with the Commanding General's permission to reenlist suggests that Lilly was well known and respected. He had held the position from 1846 to his death.

From the **Brooklyn Daily Eagle**, August 20, 1863,
"Lilly-On the 18th inst, Eliakim Lilly, 1st Sergeant Marines U.S. ship North Carolinas, aged 55 years 3 month. The friends of the family are respectfully invited to attend his funeral without further notice from his late residence, No. 23 Stanton street, Brooklyn, at 10 A.M. Friday, 21st inst. The remains will be taken to Greenwood."

(The term in the obituary, "inst." is short for instant, meaning day of the current month.)

Certificate of Death 4403

Brooklyn, August 18 1863

This Certifies, that Eliakim Lilly who was born in U.S. died in this City,
at No 23 Stanton Street, in the ——Ward,

Aged 56 Years, 2 Months, 9 Days.

Cause of said death was Direct Congestion of the Brain

Sex Male Color White

Nativity of Parents Father _____

Mother _____

The body is to be buried at Greenwood

D.E. Smith M.D.

Research into congestion of the brain reveals that it was also called cerebral congestion and is the same as brain fever. Brain fever was then diagnosed as meningitis or viral encephalitis. Some physicians writing in the 1880's believed that congestion of the brain was a catch all phrase and could not actually be verified to really exist.

The **Brooklyn Daily Eagle**, with reference to Congestion of the Brain, suggested that half of the 467 cases references, most were alcohol related, the rest were disease, heat or accident related. Three mention Delirium Tremens.

Some of the descriptions used were as follows: Aborroration of the mind, superinduced by intemperance, superinduced by sun stroke received a week ago, caused by fatigue and exposure to the sun, characteristically alcoholic, incipient meningitis. There were also references to cholera as a cause.

The week prior to Lillys death it had been extremely hot. Drilling the guards in full uniform and full sun could have been a cause of heat stroke in mid August.

The **Brooklyn Daily Eagle** (1863) published this article the day after Lilly died “The Board of Health declares all the tanneries, soap manu. and hide and fat establishments in the 5th Ward nuisances to the public health and ordered them to be removed beyond the limits of the Ward.”

This was the area where Lilly lived. Remember what was located at the end on his block on Stanton Street—a livery stable.

There was no mention that he died with irons or any other restraint on him. If he had, the newspapers certainly would have mentioned it as it would have made good press.

There was another Orderly Sergeant working with Lilly. Even though they were the same rank, Lilly had seniority and they seemed to get along very well. He was Robert Alexander and he replaced Lilly after his death.

From the Muster Roll of the North Carolina, it clearly shows that Alexander covered for Lilly in May and June by not listing him as sick. We really do not know how long Lilly was sick in quarters.

January 1863: Alexander "on command"; roll endorsed by Lilly
February 1863: roll endorsed by Lilly
March 1863: roll endorsed by Lilly
April 1863: roll endorsed by Lilly
May 1863: roll endorsed by Alexander for Lilly
June 1863: roll endorsed by Alexander for Lilly
July 1863: Eli "sick in quarters"; roll endorsed by Alexander for Lilly
August 1863: Lilly "died" on the 18th

After Lilly died, Alexander stayed on the North Carolina as orderly sergeant until August 1864. He then transferred to Brooklyn and stayed there until he was discharged from service on 4 June 1865 after serving some 33 years in the Marines, the last 28 as a sergeant.

LILLY AND THE IRONS

We could not find any specific information about the design or manufacture of the irons with the documents available online. We strongly believe that they were designed by the Navy for the replacement of the rivet style of irons that were in use for many years. The Navy Yards were quite capable of manufacturing them, however they were quite busy with ship repair and manufacturing the new steam powered ships.

There were a lot of small businesses in the area that had the capability to manufacture the irons in both the Washington and Brooklyn areas. There is a strong possibility that the irons were made by several of these small businesses. This could account for the differences, such as flat and tapered top pieces and width of the bars that we see in many of the Lilly's today.

While reading the bios of some of the people who worked at the Brooklyn Navy Yard this statement was found, "Many private small business were formed outside the Yard and were given contracts to do various jobs. The chief blacksmith of the Yard even had his own private business supplying products. This got him into a lot of trouble being fired and reinstated. His political foes had many field days with him over the years"

The effort to connect Lilly and the irons was a parallel effort with the above searches. We were looking for the irons to be called Lilly's in official documents and public newspapers during the time period we thought they were in use. We also tried to establish the time period as to when they were manufactured, by whom, and when they were taken out of use.

We believe they were in use at the time of Lilly's death, 1863, and, of course during the confinement of the Lincoln conspirators in 1865. We do not believe they were in use for a long period of time, possibly 1858 to 1866. We found several articles that referred to the use of irons and shackles, some of which could have been Lilly's, but without the use of the name or description of the irons we can not say they were Lilly's.

We did find several references to them, by name in several books and newspaper articles after they were out of use. These articles show that the name was attached to the irons at some point of their usage. Spelling has been retained as printed in the articles.

From the **PROCEEDINGS of the UNITED STATES NAVAL INSTITUTE**
VOLUME XVII
ANNAPOLIS, MD.

Prize essay for 1891

“THE ENLISTMENT, TRAINING, AND ORGANIZATION OF CREWS FOR OUR NEW SHIPS” by ENSIGN A. P. NIBLACK, U. S. Navy, Page 11:

“The punishment of double irons is now no punishment at all. Not only do the hand and leg irons now furnished ships admit of the greatest freedom of motion, but such confinement becomes a rather welcome opportunity for the idle, lazy and shiftless to escape work for five days or so. The messmates of the prisoner do his work for him while he eats the bread of idleness, and dozes away his time. To be a punishment, confinement in irons should primarily imply retirement from the public gaze, and should be made as irksome and uninviting as possible. What is needed is the old-fashioned leg-iron with sling-rod through staples in the deck, and lilly-irons for the wrists.”

Bill Nye’s Sparks

by Edgar Wilson Nye (Bill Sparks)

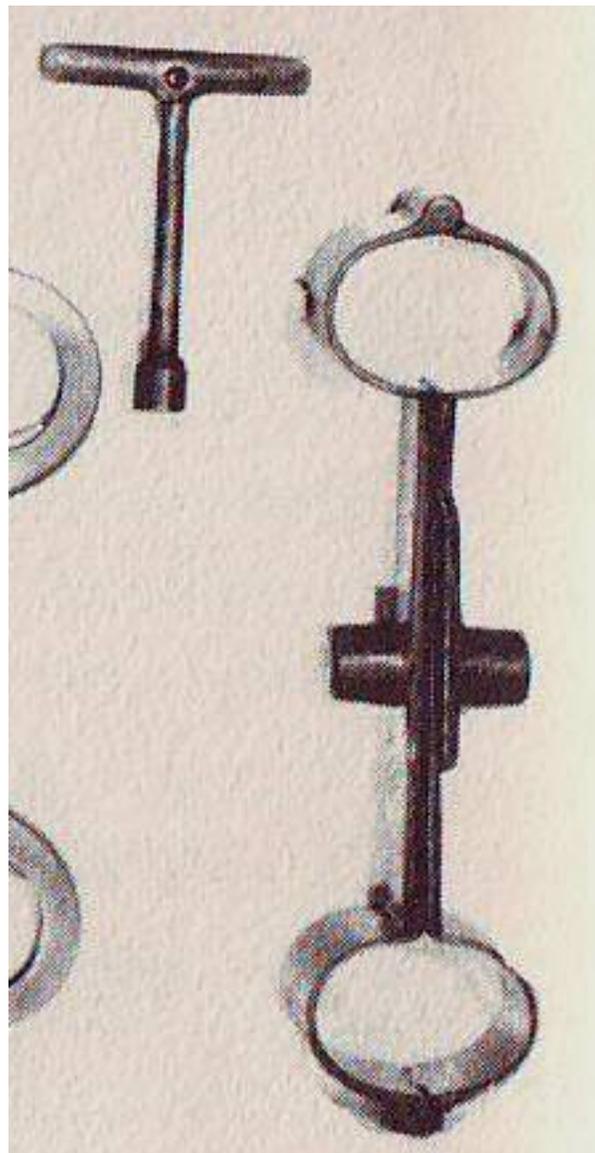
Copyright, 1891, by E.W. Nye

Edgar Wilson "Bill" Nye (August 25, 1850 – February 22, 1896) was an American humorist, postmaster and judge. He was also the founder and editor of the Laramie Boomerang.

There were some bad reports about the Navy so he decided to inspect the Brooklyn Navy Yard in the summer of 1888. In the chapter called “He sees the Navy”, on page 83 he writes:

“The guard-house contains a choice collection of manacles, handcuffs, lily irons and other rare gems. The lily irons are not now in use. They consist of two iron bands for the wrists, connected by means of a flat iron, which can be opened up to let the wrists into place; then they are both locked at one time by means of a wrench like the one used by a piano-tuner. With a pair of lily irons on the wrists and another pair on the ankles a man locked in the brig and caught out 2,000 miles at sea in a big gale, with the rudder knocked off the ship and a large litter of kittens in the steam cylinder, would feel almost helpless.”

This article contains the only description we have found of a key used for the Lilly’s. In the Dick Wresch book “The Great Houdini, Handcuffs and Legirons” (1961), page 10, there is a picture showing a Lilly iron with a T-shaped key which fits the description Nye documented. (Piano-tuner wrenches were a T-handle in that time period.)



“The Great Houdini, Handcuffs and Legirons”
Dick Wresch
Page 10

Edman Spangler, another one of the Lincoln conspirators who had been pardoned wrote an article dated June 24, 1869, published in the *New York World Newspaper*, in which he states that “on the fourth day of his imprisonment, ... I was taken to the office to see a detective who said: 'Come Spangler, I've some jewelry for you'. He handcuffed me with my arms behind my back, and guarding me to a hack, I was placed in it and driven to the navy yard where my legs were manacled and a pair of Lilly handcuffs placed on my wrists.” This is an important account since it is first hand when he was a prisoner on a Navy ship under Marine guard.

Samuel Bland Arnold, another Lincoln conspirator who had been pardoned, talks about his confinement aboard the Navy ship and publishes his memoirs in newspapers as a series and later in book form. This is another important account since it is first hand when he was a prisoner on a Navy ship under Marine guard.

From the **Richmond Dispatch.**, Richmond, Va., December 12, 1902:

(This part of Arnold's memoirs deals with the period after the trial and his transport from Washington)

“The irons had been removed temporarily from our wrists, and shackled about our feet we were compelled to ascend the ladder to the deck of the gunboat, where the entire crew of seamen stood about gazing in mute wonder. On landing upon the deck of the gunboat, Captain William H. Dutton, in charge of the guard, directed that the Lilly irons be replaced upon our wrists. They had been placed upon Spangler and I, when the order of Captain Dutton was countermanded, and the irons were removed.

CHAINS CAUSED TORTURE

No sooner were we upon the gunboat than we were ordered into the lower hold of the vessel. It required in our shackled condition, the greatest care to safely reach there, owing to the limited space, eight inches of chain being allowed between our ankles. After leaving the second deck we were forced to descend upon a ladder whose rounds were distant so far apart that the chains bruised and lacerated the flesh and even the bone of the ankles.”

It is interesting that in the notes (#16) to chapter seven of the 1995 edition of Arnold's book the editor states “Arnold's wrist restraints were of a type called “Lilly irons,” after their inventor, Sgt. Robert Lilly, U.S. Marine Corps.” The editor is the same author who in later books credits the irons to a Dr. Lilly.

We came up with two possibilities on how Eliakim Lilly's name became attached to the irons. As the Orderly Sergeant in charge of Marine training and being highly respected, they just started to call them Lilly irons during his lifetime. Or, after his death, his friend, Orderly Sergeant Alexander, started calling them Lilly irons in honor of his friend. In either case the name was used within the Marine guards and possibly the Navy, but the guards would be the most likely.

As modern commercial restraints became available, the irons and restraints were replaced. We found several newspaper postings by the Navy for companies to bid for the contract to supply irons and other materials. As the old irons were phased out we also saw postings for the sale of surplus equipment, including irons and shackles from the Brooklyn Yard.

One of the largest buyers of surplus equipment was Francis Bannerman. From Wikipedia:

“The history of army surplus dates back to the Civil War. The Civil War was the first war that required proper uniforms for many troops. Before this troops were basically a militia wearing whatever they had with them. To keep up with the demand, the military on both sides of the war mass-produced wears and arms. After the war, to recoup some money they sold the supplies in stores. Thus the military surplus store was born.”

From the web page RelicRecord

<https://relicrecord.com/blog/francis-bannerman-military-surplus/>

"Frank" Bannerman was born March 24, 1851, in Dundee, Scotland, and immigrated to the United States with his parents in 1854. The family moved to Brooklyn, NY in 1858 where his father established a business selling flags, rope and other articles that he acquired at Navy auctions. While he was still in school, Francis began to collect scrap from sailing ships in New York harbor. He was very successful at this. When his father joined the union army (or navy, there are mixed reports) during the Civil War, 13-year-old Francis began running the business.

Francis Bannerman VI founded and owned "Bannerman's surplus". His surplus company was one of the largest ever to operate. He built Bannerman's Castle, a massive storage facility on Pollepel Island in the Hudson River to store his goods.”

In his 1904 catalogue, he lists “MISCELLANEOUS ARMY AND NAVY GOODS” which included the Lilly irons with the usual story of him dying with a pair of his irons on his wrists. It shows the key and the Lilly leg irons but is not mentioned by name. Bannerman was buying and selling much earlier than 1904. This is just the catalog we could get on line.

In the late 1800’s, New York City was center for magicians and escape artists. Bannerman was a main source for surplus handcuffs and Lilly irons. It is quite possible that most, if not all of today’s Lilly irons, other than those in the possession of the Smithsonian which were obtained from the War Department in 1903, were obtained from Bannerman. It is also quite possible that Francis Bannerman made up the story of Lilly dying with a pair of his irons on his wrists in order to promote sales.

This concludes the seven month research project. We believe we are able to support and disprove various parts of the stories put forward over the years, and now submit our conclusions based on this new research. We are now certain of the identity of Lilly and assume that there must be documents describing the specifications of the irons buried in an archive somewhere.

It was a wonderful and educational experience learning about the Brooklyn and Washington Naval Yards and their surrounding cities and the Naval and Marine history going back to the 1700s. We hope this information will be useful, not only to the handcuff collector community, but also for the historical record.

Paul Davies (Australia)
Matt Forte (Massachusetts)
Lyle Wilkerson (Texas)
Ron Spitz (Arizona)

and

A handwritten signature in cursive script, reading "Elihu Lilly". The signature is written in dark ink on a light background. The name "Elihu" is written above "Lilly", and there is a decorative flourish underneath the name.

ADDITIONAL RESEARCH

In July 2017, I spent a week in Washington D.C. I would like to first thank the staff at the National Archives, the Smithsonian National Museum of American History and the Library of Congress for their interest in our story and their assistance.

The records that were not on line for the design and manufacture of the irons were as follows:

At the **National Archives**, Navy Record Group (RG) 74, Records of the Bureau of Ordnance, Records Regarding Patents and Invention, entries 143, 145, and 148, followed by RG 45, Records of the Naval Library, Naval Invention Board, Entries 361-366.

This Archive held the original documents for the design of the new iron clad warship the Monitor and many other submarine designs along with the hand written correspondence of the Secretary of War and other Navel officials. What a wealth of information and history.

The next search was Army RG 156, Entries 1018 and 1019 where I found an original one sheet sales flyer for "Rankin's Patent Hand-Cuffs and Leg-Irons. Edwin G. Stones, Sole Agent for the United States, 607 Market Street, Philadelphia." It shows a drawing of the cuff and states advantages of its use and prices. It is interesting to note that the drawing is of the round Delestadius handcuff and that the Archives received the flyer in 1864.

Finally, I searched the Department of the Treasury RG 217, Entry 345 for the years 1858-1863. This was suggested in case the contracts could have been paid directly by the Treasury. These were massive record books all hand written listing the authority to pay just about everything in Washington and all government expenses. This included payment of salary to the President, The

Cabinet, Judges, Federal Marshals, repairs of the presidents home, repairs to the Capitol building and the cleaning of the sewers along Pennsylvania Avenue, just to name a few. As the records got into the 1860's you could see the increase in spending due to the war. Nothing was found in regard to the irons.

The Smithsonian National Museum of American History had one set of wrist irons and leg irons on display. Most of the others are on loan to other museums. I was able to talk to a staff member and was invited upstairs after telling them what I was doing and our story. Like all the others I talked to, they did not know the irons by the Lilly name. I was taken into the storage area and the box relating to the Conspirators was shown to me. In the box was another pair of wrist and leg irons and three rivet style leg shackles, that would allow a ball and chain to be attached. One of them still had a half rivet in the hole. Also, two large cell keys that are very well made and had different bit cuts. The surprise was a pair of HIATT leg irons #50. All these items were turned over to the Smithsonian by the War Department in 1903.

The Library of Congress was my last stop and like the National Archives. After telling the staff the Lilly story and what I was trying to find, three specialists started searching in various areas for me. The search was expanded from our time frame and the search for "Lilly irons" was used in a data base called "America's Historical Newspapers" within the Readex system. Several newspaper articles came up which mentioned the use of the Lilly irons along with other methods to maintain order and discipline aboard ship. The articles, from various newspapers dated from 1876 to 1901, and were all after the fact recollections of their use during the war. The few I read were quite interesting and proved to me that indeed they were well known by name even though the Lilly name was not officially used.

As a personal note, it was a pleasure working with Paul, Matt and Lyle. You could not find more dedicated and interesting people to work with. We went on many side researches and this paper is only a snapshot of the information we dug up. We feel that somewhere in the vast files there are drawings and information on the irons. Like one researcher told me it's like finding a needle in a haystack and you don't know where the haystack is.

We did not come to our conclusions in a random manner, but rather, by collaboration and debate of the issues and our findings.

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