

Cape Hatteras Light Station: Engineering Letters

National Archives research by Candace Clifford for Cape Hatteras NS, 2006

Part I: First Tower (1861 - 1870)

Vol. **	Date	Engineer/ Correspondent	Recipient	Topic
354 p.121	12/07/1861	WJNewman	Mr.T.B. Grose	Civil War: Relighting of Station
<p>“I shall be happy when occasion offers to avail myself again of your assistance and expect to be very busy as the coast is opened up again to us. I have already been to Cape Hatteras with a view to relighting that Station. Body’s Island is entirely destroyed and other mischief done in every direction.”</p>				
354 p.148	2/15/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Civil War Damages
<p>“You are probably aware that I was directed to proceed to Cape Hatteras Lhouse in the early part of November last, with a view to the relighting of that light, but at that time the Coast was not, in the opinion of Genl Williams commanding at the Inlet, sufficiently secure to warrant any step being taken for the purpose, but with the recent victorys I presume a preliminary illumination, at least, might be made to determine the extent of the injuries. We know that the lens has been removed and probably most of the Lantern glass is broken. The lens itself is most likely so damaged by the hasty removal that another will have to be provided from New York. This was Capt Jenkins impression at the time.”</p>				
354 p.156	03/12/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Civil War: Inspection
354 p.157	03/26/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Civil War: Inspection of damages/lens
<p>“A Government Transport (LRSpaulding) was leaving in the evening. I took passage of her and arrived at Hatteras Inlet on the 15th. On landing I found the place in charge of Assistant Qmaster Ellis with Regt Map Vol and a few soldiers.</p> <p>I have the honor to report the Light House Tower as uninjured. The Lens has been removed, but the Pedestal, the revolving base plate of the Lens, and the supports of the box that contains the revolving machinery remain in their original positions at the summit of the tower. These are all very heavy, and their removal previous to the erection of the proposed new Lens will involve considerable labour.</p> <p>As regards the original Lens, the missing portions are generally understood to have been removed to Washington NC, and as General Burnside has, or is about to take possession of that place, it is just possible that he may regain them. He has signified his intention to do so, and</p>				

I have communicated the object of my visit to him with a request that they be deposited on one of the Government Store Ships at the Inlet, where if they can be made serviceable, the working party on its arrival then can take charge of them. I fear however that they will be found too much injured to be set up again and it will be necessary in any event to be provided as proposed with an entirely new apparatus. I also visited the structure for the Beacon Light, and found both it and the Lantern uninjured. The Lens (6th order) and Pedestal are removed but a new one can be set up ready for lighting in a day.

The Keeper's dwellings are comparatively uninjured, requiring no more than the repairs that would be bestowed upon them on the ordinary occasions of our periodical visits for that purpose. A great defect exists in the communication with the Tower from which they are removed about 250 yards, the space being frequently flooded by high tides. When I was there it was extremely difficult to reach the house, it being surrounded by water. A planked causeway should be constructed.

In the above report of the fitness of this Lt House for the purpose for which it is immediately required, I must not be understood as intending to convey the idea that it is in a perfect condition. Far from it. It is defective in many respects. The old Land Stone portion of the structure requires a general inspection of joints and several cracks are apparent that need filling up. It was once proposed to place iron bands round this portion to strengthen it. The more modern portion constructed with brick requires repointing.

The foundation has always been defective, causing much anxiety and labour in endeavors to retain the sand hill on which it stands from being blown away. It was contemplated to surround the hill with a stone wall and to pave the top as has been done at Cape Henry, and it must be done. Yet if the Tower is permanently retained, everything about is obsolete. The Stairs are broad and most inconvenient, the windows defective, etc. etc. It will become a question to be settled shortly whether a new Tower should not be the cheapest in the long run, as even if all the minor defects are remedied, there exist those of construction and form, which can never be cured."

354 p.161	03/27/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Transportation of lens & working party
354 p.162	03/31/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Oil supply
354 p.163	04/02/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Refitting light
354 p.166	04/14/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Use of USLHT <i>Spray</i>
354 p.167	04/04/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Planked causeway between keepers dwelling and tower
354 p.168	04/07/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Approval of planked causeway; vessel crew & working party
354 p.170	04/17/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Lens; oil; working party

<p>“I have the honor to acknowledge the receipt of your letter of yesterday’s date, informing me that I may expect to receive at once, a 2nd Order Lens <u>Afixed</u>”, and a 6th order lens fixed for Cape Hatteras Light Station, and also a year’s supply of oil.</p> <p>Allow me to call your attention to the word Afixed” after 2nd order lens, which I presume does not intend to intimate that an alteration has been made in the <u>character</u> of the light.</p> <p>The working party for Cape Hatteras are ready to embark at any moment. The ALens” will be taken off the Aways” this day. The crew are busy getting the rigging and sails in order and preparing her for sea.”</p>				
354 p.172	04/19/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Military Guard; relighting; location of old lens
<p>“When at Washington on my return from Cape Hatteras, among other matters discussed relating to future proceedings there, was the idea of applying to the military authorities for a guard for the Light House.</p> <p>I am of the opinion that this would, if not already done, be a most prudent step to take, and for the following reasons:</p> <p>The L.H. Tower is removed some distance from the dwelling. The Stairway to the summit is nothing more than a series of heavy ladders and landings, made of yellow pine and most inflammable. At the base of the tower a large quantity of dry brush is always placed to keep the sand from blowing away. Any evil disposed person could in a few minutes, landing in the woods on the Sound side, collect the dry stuff, fire the Stairway, and the man on watch at top of the Tower would not have a chance to escape.</p> <p>As regards the relighting of the Beacon Light, I would respectfully suggest that Mr. Smith be authorized to do so at once on his arrival. Its effect could not I think be injurious to vessels outside the Shoals, while to the large number using the Swash passage it would be of the greatest Service. I was repeatedly urged while at the Inlet to authorize the hanging up of a common Signal Lantern in the Beacon, which would have been considered a great boon.</p> <p>The last I heard of the old Lenses, was that they had been removed to the Interior (Tarborough) and if not available, the placing of the 2nd Order fixed lens, will not be a serious matter, as I anticipate that it will with the aid of a machinist to be readily adapted as a temporary expedient to the pedestal of the original lens, which as I have before stated remains in its position in the Lantern.”</p>				
354 p.174	04/21/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Accounts
354 p.175	04/23/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Oil; lenses
354 p.176	04/25/1862	WJNewman Acting Eng	Commodore WBSHubrick Chairman, USLHB	Shipment of lenses, oil, oilbutts. Notice of lighting
<p>“Have you observed in some of the newspapers a Statement that Cape Hatteras Light was reexhibited on the 7th Inst. In last night’s evening bulletin it was inserted in the Marine News.”</p>				
354	04/29/1862	WJNewman	Commodore WBSHubrick	Relighting, lens, oil

p.178		Acting Eng	Chairman, USLHB	
354 p.179	05/01/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Payroll vouchers, bills of lading, departure of working party
354 p.188	05/12/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Vouchers, departure of working party
<p>“The working party for Cape Hatteras left last Friday the 9th Inst. The delay was owing to the non arrival of the Lenses, etc. The Bills of Lading were dated April 30th & May 1st respectively. The delivery <u>here</u> was made on the 7th Inst.”</p>				
354 p.22?	06/26/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Vouchers, payroll of working party
354 p.250	08/19/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Vessel charter
354 p.275	09/30/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	1862 Annual Report
<p>“March 13th 1862: Received instructions to go to Cape Hatteras and make an inspection of the Light House, etc. On the 26th reported results to the Light House Board and was authorized to fit out a vessel and work party to make the repairs and set up Lenses in the Light House and Beacon. Mr. J.P. Smith took charge of the party on May 9th, making his reports direct to the Light House Board, and of which I have copies.”</p>				
LB 145C	04/22/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Temporary lights
LB 145C	04/24/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Illuminating apparatus
LB 145C	06/05/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	First order apparatus adjusted by July 1
LB 145C	06/10/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Keeper salaries
LB 145C	06/23/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	2 nd order lens removed and 1 st order exhibited

<p>“The light from the 2nd order was extinguished on the night of the 17th, and on the night of the 20th the light from the 1st order was exhibited. The 1st order lens has 24 Sides making a revolution in 4 minutes, showing a flash and an eclipse every ten seconds; the flash and the eclipse are about equal duration, 5 each.”</p>				
LB 145C	06/23/1863	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Appointment of keepers
<p>“I respectfully suggest that Bateman A. Williams and Wallace R. Jennett, present asst keepers of Cape Hatteras Lt. Ho., be regularly appointed by the Hon. Sec. for the following reasons: that I believe them to be truly loyal, and disposed to do their duty, and they are now conversant with the apparatus.”</p>				
LB 170A	08/16/1864	JPSmith, Acting L.H. Engineer	Ben. C. Keyser, Chief Clerk, USLHB	Broken chair for lamps
<p>“The lamps used at that station are the ‘Leparites Moderator Lamp 1st order 1855.’ (See U.S. Lt. Ho. Estab. Porfolio Plate No. 11)”</p>				
LB 170A	08/23/1864	JPSmith, Acting L.H. Engineer	Andrew H. Harwood, Secy, USLHB	Replacing broken chair holding lamps
LB 170A	10/04/1864	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Annual Report
<p>“In my last annual report attention was called to the wooden stair way in the main tower. The great height of the risers and consequent difficulty in ascending; the rough appearance, and the danger from fire.</p> <p>I would respectfully recommend that as soon as the state of the Country will warrant it, that an iron stairway be substituted for the wooden stairway, etc. As the inside wall has now the same batter [?] as the outside, the erection of an iron stairway will involve the building of a brick cylinder on the inside from the base to floor of watch room.</p> <p>An estimate of the cost of the brick cylinder, iron stairway, window frames, door and frame, at the present prices of material, labor, etc., is appended hereto (Model A), amounting to \$14,000.52.</p> <p>The dwelling house and Beacon when visited were in fair repair and will only require incidental repairs during the coming year. In November last a new stove and pipe were furnished to the Beacon.”</p>				
363 p.??	01/09/1866	WJNewman Acting Engineer	Messrs Bols & Hunt	Lens
363 p.196	01/10/1866	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Lens
363	01/10/1866	WJNewman	Capt JMBerrieu	Lens

p.197		Acting Engineer	Inspector, 5 th district	
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Part II: Second Tower Construction (1867- 1870)

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
360 p.58	05/31/1867	WJNewman Acting Engineer	General OMPoe Engineer Sec'y, USLHB	Delivery of bricks
360 p.131	09/20/1867	WJNewman Acting Engineer	General OMPoe Engineer Sec'y, USLHB	1867 Annual Report (appropriation)
AWhile the balance on hand of Special Appropriations, viz.: New tower at Cape Hatteras \$94,000.00"				
360 p.221	06/31/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec'y, USLHB	Design of
<p>"I have the honor to forward herewith, a design for a 1st Class Light House, with the focal plane 180 feet above ground level, and which I would respectfully submit for your consideration as suitable for the new Tower to be erected at Cape Hatteras, NC.</p> <p>I have some hesitation in submitting so great an innovation upon the standard designs for Towers for Light-House purposes, feeling also pretty certain that there would be no saving in cost as compared with the ordinary form of construction, although of course the first consideration is to obtain the best forms and combination of materials. I do think there may be claimed for it, greater stability, by removing all the dead weight farther from the center of gravity, and also, that the introduction of the four cast-iron curbs or bonds, one at the base of each section of the Stairway, would materially strengthen the Tower, and prevent the vertical cracks which may frequently be observed in structures, especially in the line of the window openings. A detail of the link [?] here referred to is shown alongside the section of the Tower. It is the largest one, the others being graduated to suit their respective positions.</p> <p>In lieu of the usual stairs with center newell enclosed within a cylinder 16'6" diameter, I have enlarged the latter to 18' diameter for a height of 32'8", and arranged a geometrical stairs within it 4'6" wide, which starting on the side of the entrance to the Tower and making one entire revolution, reaches a landing immediately over the entrance, where there is a window, the recess of which adds greatly to the size and convenience.</p> <p>Hence starting again, a cylinder 16'4" diameter, another revolution attains a landing immediately above the first one, and so on to the top, except where the diameter of the cylinder is so much reduced as to require more than one revolution of the stairs to gain the height of 32'8". This causes irregularity and if the design was adopted, I would improve the arrangement by making each section just the requisite height to admit of one revolution of the stairs and no more, thus bringing all the landings immediately over each other. The sections would then all differ in height, instead of being equal as I have drawn them, and another cast-iron curb would be required. I think the arrangement would be greatly improved by this change.</p> <p>The widths of the respective flights of stairs as drawn are 4'6" - 4'2" - 4'0" - 3'9" & 3'6", the total number of steps 245 to the deck plate.</p> <p>I do not propose to build the steps into the wall but to provide a cast-iron stringer or carriage in lengths of 6 or 7 feet to be attached to stone</p>				

blocks built into it and with dove-tailed bolts let into the blocks and run with lead. Each step would be fastened to the carriage by three tap bolts, and all of them united by bolts at the opposite end.

I would also propose to complete the Tower above the stone belt course entirely with wrought- and cast-iron. You are in favor of making the cylinder under the lantern of iron, and I think it may be extended with advantage to the stonework below the main [lines missing ???] propose to have fixed sashes filled in with 3/4 inch rough cast glass, leaving a sufficient number of windows at the landings to be opened for ventilation. I would also fill the alternate panels between brackets under the main gallery with thick rough-cut glass. The effect when seen from below would be much improved, because although the stairs appear in the section to occupy a large portion of the area, it would in execution appear little more than a narrow band and considerable light would be required.

The tracing is no more than a preliminary sketch as till you have had an opportunity to consider whether the idea would be sanctioned, it would be a waste of time to enter into further detail. I am satisfied however that the cost would come within the amount available, \$88,700.”

360 p.283	06/12/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Transportation of bricks
Athe 300,000 I propose to land this year, would be about 5 schooner loads.”				
360 p.292	07/03/1868	WJNewman Acting Engineer	Mr. Scarborough, Cape Hatteras, NC	Conveyance of bricks
<p>“These bricks will be conveyed from Baltimore to Philadelphia to the anchorage in Pamlico Sound, at the entrance of what is called the “<u>Cape Channel</u>” about 4 miles from the beach at the back of the present Light house. From this point it is proposed to land them on decked scows, or if suitable small vessels can be obtained in your neighborhood, the owners being willing to undertake their safe transportation from the Schooners on the beach, to include the careful landing and stacking of them for a fixed sum per thousand. This made would be preferred.</p> <p>It in intended to land 300,000 bricks by the end of next November, the balance, or 700,000, are to be delivered by the contractor by the 31st of July 1869.”</p>				
360 p.329	08/31/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Bricks – contract
360 p.331	09/07/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Employment of W.J. Humes
360 p.338	09/12/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Foundation
360 p.341	09/15/1868	WJNewman Acting Engineer	General OMPoe Engineer Sec’y, USLHB	Ad for transport of materials
360	09/21/1868	WJNewman	General OMPoe	Bricks contract

p.344		Acting Eng	Engineer Sec'y, USLHB	
360 p.348	09/30/'868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Tramway
360 p.353	10/08/1868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Special appropriations
"For a new Tower at Cape Hatteras \$75,000.00."				
360 p.362	10/13/1868	WJNewman Acting Eng	Messrs Horton Black & Co.	Contract for wood planks
360 p.372	10/15/1868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Costs
360 p.377	10/24/1868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Departure of working party
"The working party for Cape Hatteras has been organized, and left here on the 19 th Inst. with a complete outfit for carrying on operations."				
360 p.379	10/24/1868	WJNewman Acting Eng	Messrs Lennox & Burgess, Philadelphia	Contract awarded for transport of materials
"I am in receipt from the Light House Board, of a copy of the contract made with you, for the transportation from Baltimore to Cape Hatteras, of the materials required for the erection of a Light Tower there, and beg to notify you that there 300,000 bricks now awaiting transportation."				
360 p.38?	10/21/1868	WJNewman Acting Eng	Messrs Lennox & Burgess, Philadelphia	Transportation of material
360 p.383	11/02/1868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Stonework estimate
360 p.384	11/02/1868	WJNewman Acting Eng	General OMPoe Engineer Sec'y, USLHB	Stonework estimate
360 p.385	11/04/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Tracing of stonework
360	11/05/1868	RWPreece,	General OMPoe	Brick delivery

p.386		draughtsman	Engineer Sec'y, USLHB	
360 p.387	11/09/1868	RWPreece, draughtsman	Joseph Lederle, Acting engineer, 3 rd District	Delivery of materials to Dexter Stetson
A. . . please consign the articles to Mr. Dexter Stetson, forman in charge of new Tower at Cape Hatteras NC, and to direct the vessel to come to anchor at the Inlet and report from there for instruction.”				
360 p.389	11/??/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Arrival of working party
“I have the honor to inform you that the working party for Cape Hatteras arrived there on the 4 th of November and have succeeded in landing all the material. They are now living on the Beach in a house they have rented, untill they get the Barracks built.”				
360 p.290	11/10/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Brick, transport of
360 p.393	11/16/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Stone work tracings
360 p.396	11/24/1868	RWPreece, draughtsman	Messrs Lennox & Burgess	Shipment of brick
“The delay in the shipment of brick by you to Cape Hatteras is causing me considerable anxiety, as the Lt House Establishment have quite a large number of men engaged at Cape Hatteras who will soon have nothing to do but eat the rations furnished by the Government, which will be attended by considerable expense, unless you send vessels to carry the brick now ready for shipment, to keep them in operation.”				
360 p.403	12/05/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Stone contract
360 p.404	12/05/1868	RWPreece, draughtsman	Messrs McClanahan & Bro.	Stone contract
360 p.407	12/14/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Brick shipment
“I have the honor to inform you that I have been on board of the Schooner <i>L.Sturtevant's</i> this morning, and find that she will be ready to load brick for Cape Hatteras by Wednesday.”				
360	12/15/1868	RWPreece,	General OMPoe	Shipment of materials

p.408		draughtsman	Engineer Sec'y, USLHB	
<p>"I have the honor to report to you the arrival of the Schooner <i>Joel Vangant</i>, Bennett Master. I will commence loading her with material for Cape Hatteras today, as the Schooner <i>L. Sturtevant</i> has not completed the discharge of her inward cargo. Mr. Lennox has just arrived to superintend the loading of his vessel."</p>				
360 p.409	12/16/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Shipment of supplies
360 p.413	12/28/1868	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Shipment of materials
360 p.423	01/25/1869	RWPreece, draughtsman	General OMPoe Engineer Sec'y, USLHB	Shipment of brick
360 p.428	01/29/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Shipment of stone
360 p.430	01/29/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Shipment of stone
360 p.449	02/17/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of pump
360 p.459				Driving of piles
360 p.460	02/27/1869	RWPreece, draughtsman		Supply list
<p>"The following list of Main Forage and Materiel, lost with the Schooner <i>Ida Nicholson</i> off Cape Hatteras NC February the 19th 1869:</p> <ul style="list-style-type: none"> 6 Bbls of Flour 6 Bbls of Potatoes 1 Bbl of Beans 1 Bbl of Molasses 1 Sack of fine Salt 2 Hlf Boxes of Raisins 100 lbs of Brown Sugar 50 lbs of Coffee 				

50 lbs of Rice 5 lbs of Pepper 4 lbs of Tea 200 feet 5-in Manile Rope 18 Bales of Hay 20 Bushels of Oats 20 Bushels of Corn One hundred and one thousand six hundred (100,600) hard red Brick				
360 p.461	03/03/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Shipment of brick; Wreck of <i>Ida Nicholson</i>
“I suppose you have one this (?) heard that the <i>Ida Nicholson</i> was wrecked about 8 miles from Cape Hatteras Light on the morning of the 19 th ??? and all her cargo lost. . . . The loss of the cargo of the <i>Ida Nicholson</i> makes it the more necessary to be prompt in the sailing of the next vessel.”				
360 p.463	03/06/1869	JHSimpson LH Engineer		Request for additional funds
360 p.465	03/06/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Request for provisions
360 p.466	03/08/1869	JHSimpson LH Engineer	Joseph Lodcale, Acting Eng Staten Island	Request for wheels for railroad
360 p.467	03/10/1869	JHSimpson LH Engineer	NWSmith, Baltimore	Dexter Stetson, Supt of construction
360 p.468	03/??/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Transport of bricks
360 p.471	03/16/1869	JHSimpson LH Engineer	Messrs CSParsons & Son New York	Shingles for barracks
360 p.472	03/16/1869	JHSimpson LH Engineer	FAArthrin, Washington NC	Shingles
360 p.473	03/17/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Brick contractors

360 p.475	03/18/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Inspection
360 p.476	03/18/1869	JHSimpson LH Engineer	Joseph Lederle, Acting LH Engineer, Staten Island	Rail car wheels
360 p.478	03/20/1869	RWPreece, draughtsman	Dexter Stetson, Supt of construction	Bill of lading for shipment of materials
360 p.481	03/27/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Progress report
<p>“I have the honor to report my return from Cape Hatteras Light House where I found everything going on very well, under Mr. Dexter Stetson, the Supt of Work.</p> <p>Suitable buildings have been put up near the site of the proposed new Light House Tower, for the accommodation of the employees and Superintendent of Work; also a blacksmith shop; a building for the storage of cement and other material, and a crane derrick and coffer dam, composed of sheet piles properly braced, had been constructed around the site of the Tower and excavation made to an average depth of about three (3) feet. Now that a steam engine, boiler and pump have been sent down from this place, it is presumed that the work will go on with still greater dispatch. A wharf has been built on the Sound side of the Island about 1/4 miles from the Light House, the nearest point accessible to the scow lighters; also two decked scows and one open for lighterage; one small rowboat and a crane derrick for unloading heavy stones. A portable railroad has also been laid down from the wharf to the Light House, on which all the bricks received as well as a large portion of the stone, have been transported to the Light House.”</p>				
360 p.487	03/29/1869	JHSimpson LH Engineer	Joseph Lederle, Acting LH Engineer, Staten Island	Receipt of rail car wheels
360 p.488	03/30/1869	JHSimpson LH Engineer	Master of the Schooner <i>Trenton</i>	Cargo
360 p.490	04/05/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Damaged materials
360 p.497	04/08/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Damaged materials
360 p.498	04/08/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Additional appropriation
360	04/10/1869	JHSimpson	Dexter Stetson, Supt of	Timber for piling

p.501		LH Engineer	construction	
360 p.506	04/15/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Foundation
360 p.508	04/15/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Delays in transport of materials
360 p.529	04/21/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Payment for stone
360 p.533	04/21/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Foundation borings; piling; grillage
<p>“Pursuant to said instructions a bottom sounding iron rod, 1'4" in diameter susceptible of a length of 30 feet and provided with a proper head and sharp point at its lower end was furnished Mr. Stetson, the Supt of Construction; but with all the battering possible it seems he could not make it penetrate the sand at the site of the Tower more than 9 feet.</p> <p>He also drove some piles which he could not get down deeper than 6 feet. Indeed, he found when he reached the proper depth of excavation, the bottom so hard and compacted as to require no piling, and therefore mailing me, under date of the 4th Inst., that he intended to place a double grillage platform immediately on the bottom.”</p>				
360 p.540	04/24/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Location of light tower
<p>“I will say in regard to the site selected by Mr. Newman, that it is in my judgment after a personal examination, the best which could have been made. It is as near the old tower as it well could be, and therefore will affect the sailing directions but slightly; is on the general level of the beach, and therefore will not, like the knoll on which the old structure stood, be liable to degradation from rain and winds, and being above the highest level of the Sea and far removed from the shore line, it will not be subject to an encroachment from that quarter.”</p>				
360 p.546	04/24/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Cargo
360 p.548	04/26/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Stone transport capsized; recovery of stone
360 p.554	04/26/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Stone recovery
360	04/27/1869	JHSimpson	Dexter Stetson, Supt of	Stone for base

p.553		LH Engineer	construction	
360 p.556	04/28/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Stone bill of lading
360 p.562	04/29/1869	JHSimpson LH Engineer	NWSmith, Baltimore	Face bricks
360 p.572	05/03/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	USLHB visit
360 p.590	05/08/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	USLHB visit
360 p.591	05/11/1869	WKLivermore LH Engineer	NWSmith	Cement; damage to transport
360 p.593	05/15/1869	JHSimpson LH Engineer	Clement Anster, Caisfield, MD	Payroll
360 p.599	05/17/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Broken stone
360 p.604	05/19/1869	JHSimpson LH Engineer	1st Lieut. WmRLivermore, Corps of Engineers	Evaluate cement
360 p.606	05/20/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Cement
360 p.608	05/21/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Mortar & cement
360 p.611	05/27/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Plans & specs
360 p.621	05/27/1869	JHSimpson LH Engineer	Messrs Hazlemast & ?	Drainage
360 p.623	05/28/1869	JHSimpson LH Engineer	NWSmith, Baltimore	Bricks

360 p.623	05/28/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Photos
360 p.626	05/28/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Bricks
360 p.628	05/29/1869	JHSimpson LH Engineer	Commordore Ludlow A. Chase, Inspector	Brick shipment
360 p.630	05/29/1869	JHSimpson LH Engineer	NWSmith, Baltimore	Brick shipment
360 p.635	05/31/1869	JHSimpson LH Engineer	Joseph Lederle, Acting LH Engineer, Staten Island	Rail car wheels
360 p.638	06/02/1869	JHSimpson LH Engineer	Genl OMPoe, Engineer Sec'y, LHBoard	Granite fore base
360 p.641	06/02/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Face brick
360 p.642	06/04/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Rubble granite
360 p.646	06/05/1869	JHSimpson LH Engineer	Capt ? WMitchell, Master Tender <i>N.Lymond</i>	Stone shipment
360 p.648	06/05/1869	JHSimpson LH Engineer	HWPauce	Rough granite
"You will repair immediately to Port Deposit MD for the purpose of loading, with the greatest dispatch, the Schooner <i>Trenton</i> with Rough Granite from the quarry of McClellahan & Bros."				
360 p.649	06/05/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Photo
360 p.650	06/05/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Drainage
360		JHSimpson	Adm WBShubrick	

p.653	06/09/1869	LH Engineer	Chairman, USLHB	Photo
360 p.657	06/09/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Rough granite shipment
360 p.661	06/10/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Rough granite shipment; bricks; mortar; cement, etc.
360 p.667	06/10/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Stone shipment
360 p.668	06/11/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Brickwork courses
360 p.670	06/11/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Shipment of bricks & stone
360 p.671	06/10/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Mortar preparation
360 p.673	06/14/1869	JHSimpson LH Engineer	RWPreece, McClellahan & Bros.	Granite shipment
360 p.676	06/14/1869	SSHutchins	RWPreece, McClellahan & Bros.	Granite shipment
360 p.677		JHSimpson LH Engineer	Receipt	Rail car wheels
360 p.678	06/15/1869	JHSimpson LH Engineer	Joseph Lederle, Acting LH Engineer, Staten Island	Car wheels
360 p.680	06/15/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Photo
360 p.681	06/16/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Foundation
<p>"I have had an examination of the foundation of the old Light Tower at Cape Hatteras made by Mr. Stetson, Supt of construction of the new Light House, and under date of the 29th ultimo he reported as follows:</p>				

<p>>Foundation of Old Light House 9 feet deep from top of base of tower; built of slate stone varying in thickness from 2 to 6 inches; put up with lime mortar and only one foot larger at bottom of foundation than at base of tower. Diameter at base of tower 26'6". Wall 5'6" thick. >The lime mortar very soft and stones of foundation laid on the sand, with no timber under them.”</p>				
360 p.???	06/18/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Repairs to keepers; drainage
<p>“Measurements have also been made for the drain required to empty the pond on which the Light Keepers dwelling stands. . . . Mr. Stetson, Supt of Construction of new Light House, under date of the 29th Instant, writing on this subject: >I would most respectfully urge upon you the importance of doing something of this kind. Otherwise the Keepers dwelling as well as my own quarters will scarcely be habitable during the sickly season which will soon set in. The water already becoming stagnant, stands 12 in. deep under the keepers dwelling, and the ???? from the kitchen and the offal generally of the premises has been known in here for many years, that it already begins to smell offensive, and will (when the water dries up) as it will during the day weather of June & July, become an insufferable nuisance. I would therefore respectfully suggest the draining of the pond and the fitting in around and under the fence with sand, as a remedy for the above ???? I can easily fill in with sand under and around the dwelling if instructed by you to do so.”</p>				
360 p.???	06/18/1869	???? LH Engineer	McClananhan & Bros. Port Deposit, MD	Granite shipment
360 p.???	06/21/1869	JHSimpson LH Engineer	RWPreece, McClanahan & Bros.	Bill of lading
362 p.2	06/21/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Brick shipments
362 p.3	06/22/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Castings of iron work
362 p.8	06/24/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Castings
362 p.15	07/01/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Request for plates
362 p.20	07/01/1869	JHSimpson LH Engineer	J.A.J. Criswell Post Master General	Need for post office at
362	07/07/1869	JHSimpson	McClananhan & Bros.	Vouchers for rough granite

p.28		LH Engineer	Port Deposit, MD	
362 p.29	07/04/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Post office
362 p.31	07/09/1869	JHSimpson LH Engineer	Capt Thomas A. Mitchell Master, <i>J.N. Seymore</i>	Supplies
362 p.33	07/09/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Plates of brickwork
362 p.34	07/09/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Plates; repairs to beacon & keepers, drainage
362 p.37	07/09/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Brick delivery
362 p.39	07/09/1869	JHSimpson LH Engineer	McClananhan & Bros. Port Deposit, MD	Vouchers for rough granite
362 p.40	07/09/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Contract for supplies & drainage
362 p.43	07/15/1869	JHSimpson LH Engineer	Messrs Murray Francis & Co., New York	Post office
362 p.45	07/14/1869	JHSimpson LH Engineer	Chas D Parker	Shipment of face bricks
362 p.46	07/14/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Vouchers for granite
362 p.47	07/15/1869	JHSimpson LH Engineer	Joseph Lederle, Acting LH Engineer, Staten Island	Car wheels
362 p.48	07/15/1869	JHSimpson LH Engineer	Marshall Parks, Albermarle & Chesapeake Canal Co.	Steamer tolls
362 p.52	07/16/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Freight for granite

362 p.53	07/16/1869	JHSimpson LH Engineer	Messrs Hazelhurst & Co. Baltimore	Metal work castings
362 p.56	07/16/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Pointing, plastering & whitewashing
362 p.57	07/17/1869	JHSimpson LH Engineer	Capt George C Lewis, Master, <i>Jas Parker</i>	Brick cargo
362 p.59	07/17/1869	JHSimpson LH Engineer	Chas Parker, Lazaretto Warehouse	Face brick shipment
362 p.67	07/21/1869	JHSimpson LH Engineer	Adm WBShubrick Chairman, USLHB	Damage to cornerstone
362 p.75	07/23/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Payment for freight for granite
362 p.77	07/26/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Brick bill of lading
362 p.78	07/26/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Brick shipment bill of lading
362 p.79	07/26/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Loading of bricks
362 p.81	07/26/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Payment for freight of granite
362 p.83	07/27/1869	JHSimpson LH Engineer	Messrs Hazelhurst & Co. Baltimore	Metal castings
362 p.89	07/21/1869	JHSimpson LH Engineer	Chas Parker, Lazaretto Warehouse	Brick transport
362 p.95	07/30/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Brick shipment
362		JHSimpson	Dexter Stetson, Supt of	

p.103	08/04/1869	LH Engineer	construction	Vouchers
362 p.109	08/11/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Face brick shipment
362 p.117	08/13/1869	JHSimpson LH Engineer	Adm WBSHubrick Chairman, USLHB	Progress report
<p>“The structure at Hatteras has reached a height averaging 18 courses of brick above the last plinth course and already, with its massive groins, begins to assume a very handsome, solid and imposing appearance. At present the laying of the groins and brick work can go no further, until the door frame and other castings for the base are received, which will not be probably until 30 days from the 27th of July according to the agreement with Messrs Hazelhurst & Co. Meantime, however, a party will be engaged in receiving supplies and building the stoop. I regret to say that some 5 or 6 of the employees have been obliged to leave on account of sickness.</p> <p>. . . In view of the probable completion of the base of the Light House at Cape Hatteras by the 10th of October, it is very desirable that the castings which are to built in the wall of the Tower should be there at that date. I therefore respectfully suggest that they may be ordered at the earliest possible moment.”</p>				
362 p.122	08/16/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Granite/brick cargoes
362 p.127	08/16/1869	JHSimpson LH Engineer	Adm WBSHubrick Chairman, USLHB	Face brick shipment
362 p.132	08/17/1869	JHSimpson LH Engineer	Adm WBSHubrick Chairman, USLHB	Plates showing iron work
362 p.134	08/17/1869	JHSimpson LH Engineer	Adm WBSHubrick Chairman, USLHB	Sickness at
<p>“Learning from Mr. Stetson, Supt of Construction of new Light House at Cape Hatteras that there was considerable sickness among his men, Surgeon James Simon ???? Col USA, kindly consented to accompany me on my last inspection of that work.</p> <p>Enclosed is a letter from the Colonel recommending as a preventive of intermittent and remittent fevers at that locality the daily issue of 1 2 oz. Whiskey and 5 grains Quinine to each man.</p> <p>I will also add, that Mr. Stetson from past experience in malarious districts at the South, is decidedly of opinion that Whiskey, dealt out judiciously, should be resorted to as a prevention to fever.</p> <p>The purpose of this letter, is to ask if the L.H. Board will approve of the purchase of whiskey for the above specified object.”</p>				
362 p.136	08/18/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Brick shipment

362 p.144	08/19/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Vouchers for freight
362 p.149	08/21/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Bricks - bill of lading
362 p.151	08/07/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Broken cornice stone
362 p.154	08/24/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Vouchers for brick
362 p.168	08/28/1869	JHSimpson LH Engineer	Capt Thomas A. Mitchell Master, <i>J.N. Seymore</i>	Instructions to Master of <i>Seymore</i>
362 p.173	08/28/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of provisions & bricks
<p>“The question of the issue of Whiskey and Quinine to prevent fevers which have prevailed among them recently was submitted to the Light House Board, under date of 17th instant, and on the following day I was informed by the Engineer Secretary that the issue cannot be authorized without the sanction of the Board, which will not be in session before the first Monday in September.”</p>				
362 p.177	08/30/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Brick cargo
362 p.181	09/??/1869	JHSimpson LH Engineer	Chas. D Parker	Shipment of bricks
362 p.183	09/03/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of face
362 p.185	09/06/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Face or sand bricks
362 p.186	09/06/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Brick shipment
362 p.188	09/07/1869	JHSimpson LH Engineer	Adm WBSHubrick Chairman, USLHB	Progress report

“At the close of the month this structure had attained to an average height of eighteen courses of brick above the upper plinth course, and the stoop laid. Some little delay has been occasioned by the sickness of the men and the tardiness of the foundry in getting out the castings for the base of the Tower. These castings went down in Steamer *J.N. Seymore* on the 28th of August 1869, and as the sick and others who have temporarily left the work on account of the unhealthy location will return on the 15th of September instant, it is expected that the work will go on with renewed diligence. This work already with its massive granite plinth corners and groins, begins to assume quite an imposing appearance.”

362 p.198	09/11/1869	JHSimpson LH Engineer	Messrs Hazelhurst & Co. Baltimore	Wrought iron stair guards
362 p.203	09/15/1869	JHSimpson LH Engineer	JFPierce, Master, <i>J.R. Clements</i>	Bill of lading for granite cargo
362 p.204	09/15/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Stair guards
362 p.206	09/16/1869	JHSimpson LH Engineer	Messrs Hazlehurst & Co	Wall castings for stairway
362 p.207	09/17/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Plates
362 p.208	09/17/1869	JHSimpson LH Engineer	Capt Thomas W Mitchell, Master, <i>Seymour</i>	Instruction to ship master
362 p.210	09/20/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Bricks
362 p.213	09/22/1869	JHSimpson LH Engineer	Chas D. Parker	Face bricks
362 p.213	09/23/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Face bricks
362 p.216	09/27/1869	JHSimpson LH Engineer	Genl OMPoe, Eng. Secy, USLHB	Face brick wrong dimensions
362 p.218	09/27/1869	JHSimpson LH Engineer	Capt JTPrice, Master, <i>Clements</i>	Granite cargo

362 p.221	09/29/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Face bricks
362 p.221	09/29/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Red bricks & face bricks
362 p.223	09/29/1869	JHSimpson LH Engineer	Wm. Flenson. Philadelphia	Brick transport
362 p.224	09/30/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Monthly report
362 p.268	10/02/1869	JHSimpson LH Engineer	Genl OMPoe, Eng. Secy, USLHB	Bricks
362 p.274	10/06/1869	JHSimpson LH Engineer	Genl OMPoe, Eng. Secy, USLHB	List of metalwork required
362 p.280	10/07/1869	JHSimpson LH Engineer	Mssrs Lennox & Burgess, Philadelphia	Cost or labor for loading bricks
362 p.284	10/08/1869	JHSimpson LH Engineer	NMSmith, Baltimore	Bricks
362 p.291	10/12/1869	JHSimpson LH Engineer	Nicholas M. Smith	Bricks
362 p.296	10/12/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Petition for establishment of post office
362 p.299	10/13/1869	JHSimpson LH Engineer	Beattie Dawson & Co, Neantic, CT	Inquiry as to status of shipment of crowning courses of stone
361 p.2	10/15/1869	JHSimpson LH Engineer	Chas. D. Parker Lazaretto Point	Bricks
361 p.9	10/21/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	\$30,000 available toward rebuilding
361	10/24/1869	JHSimpson	Dexter Stetson, Supt of	Bill of lading for bricks

p.10		LH Engineer	construction	
361 p.37	10/09/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Contract for ironwork awarded to Messrs. Bartlette Robbins & Co.
361 p.48	11/??/1869	JHSimpson LH Engineer	Messrs. Bartlette Robbins & Co., Baltimore	Ironwork contract
361 p.49	11/13/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Instructions
361 p.??	11/25/1869	JHSimpson LH Engineer	Messrs. Bartlette Robbins & Co., Baltimore	Oil tanks
361 p.65	11/24/1869	OMPoe, Eng. Secy	JHSimpson LH Engineer	Oil tank specifications
361 p.69	11/29/1869	JHSimpson LH Engineer	Chas. D. Parker Lazaretto Point	Bricks shipment
361 p.81	12/04/1869	JHSimpson LH Engineer	Capt Thomas W. Mitchell Master, <i>Tulip</i>	Instructions to ship master
361 p.96	12/08/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bricks bill of lading
361 p.98	12/06/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Balances remaining
361 p.102	12/08/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Change to plate #17
361 p.105	12/10/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Brick transport
361 p.109	12/11/1869	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Monthly report
<p>“Mr. Dexter Stetson arrived from Cape Hatteras at the close of the month to receive instructions in relation to the further progress of the work at that point and obtain the requisite supplies. On the 4th instant he returned to his work at Hatteras on the <i>Tulip</i>. Mr. Stetson reported the base of</p>				

the new tower, on 30 th November, including brick and stone work so far finished as to enable him to commence the brick work of the tower.”				
361 p.121	12/15/1869	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Window Frame castings
361 p.166	01/06,1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Progress report
<p>“Mr. Stetson, Supt. at Cape Hatteras Light House, Dec. 30th, reports, >I am now levelled up even with cornice and have laid three courses of brick in the shaft.</p> <p>The castings for the first window in the shaft were forwarded by Steamboat and rail to Newbern Dec. 17 and Mr. Stetson sent for them on the 30th.”</p>				
361 p.175	01/07/1870	JHSimpson LH Engineer	Capt Thomas W. Mitchell Master, <i>Tulip</i>	Instructions to ship master
361 p.186	01/15/1870	JHSimpson LH Engineer	Chas. D. Parker Lazaretto Point	Bricks
361 p.189	01/15/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Bricks
361 p.203	01/21/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bricks
361 p.263	01/31/1870	JHSimpson LH Engineer	Nicholas M. Smith	Bills of lading for cement
361 p.264	02/02/1870	JHSimpson LH Engineer	Chas. D. Parker Lazaretto Point	Bricks
361 p.286	02/08/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bricks
361 p.299	02/18/1870	Geo. P. Nicholson	Genl JASimpson, USA %Commodore S. Champlin, USN, Buffalo	Window frames
361 p.300	02/21/1870	Geo BNicholson Asst Eng	Capt Thomas W. Mitchell Master, <i>Tulip</i>	Shipment of bricks & window frame castings

361 p.302	02/21/1870	Geo BNicholson Asst Eng	Dexter Stetson, Supt of construction	Shipments
361 p.307	03/03/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report
<p>“The schooner <i>Hattie Lou</i> sailed for Cape Hatteras on the 8th, with 45,000 Hard Red and 15,000 ???? Bricks at \$6 per thousand upon safe delivery on board of Schooner Lighters.</p> <p>The Steamship <i>Tulip</i> started for Cape Hatteras with a quantity of stores and window frame casting No. 4. She returned to this port on the 2nd instant.</p> <p>Mr. Stetson, Superintendent of Construction, has arrived and reports that the tower had attained , on the 26th, a height of 50 feet from the first floor.”</p>				
361 p.326	03/10/1870	JHSimpson LH Engineer	Capt Thomas W. Mitchell Master, <i>Tulip</i>	Instructions to master of <i>Tulip</i> .
361 p.328	03/10/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Brick delivery
361 p.330	03/10/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Cover letter for funds estimate
361 p.331	03/10/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Cover letter for ironwork estimates
361 p.353	03/23/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Funds for iron stairways
361 p.355	03/29/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bill of lading for brick shipment
361 p.357	03/29/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Oil tanks
361 p.366	04/04/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	List of accounts
361 p.368	04/04/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report

“The Schooner *A.J. Williams*, O.L. Minton, Master, having been chartered for the purpose, sailed on the 29th for Cape Hatteras with a cargo of bricks and the 1st and 2nd flights of Iron Stairways for the new light house at that point.

Mr. Stetson, under date of the 26th, reports that he will put in the third set of beams the following week, and was then ready for the 2 first flights of stairways and would put them up as soon as they arrive.”

361 p.372	04/06/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Tools
361 p.375	04/06/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Fence
361 p.379	04/09/1870	JHSimpson LH Engineer	Genl F. Elliot, Eng. Sec’y, USLHB	Appropriations & expenditures for labor & stairway
361 p.391	04/15/1870	JHSimpson LH Engineer	NWSmith, Baltimore	Cement
361 p.393	04/15/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of window frame castings & supplies for stairway
361 p.415	04/22/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Shipment of window frame castings & 2 flights of iron stairway
361 p.427	04/28/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of window frame castings, etc.
361 p.429	04/28/1870	Unsigned LH Engineer	Articles shipped par <i>Tulip</i> to Dexter Stetson	Shipping list of materials & supplies
361 p.431	04/28/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Engineer to inspect new lighthouse
361 P 438	05/05/1870	JHSimpson LH Engineer	Messrs Bartlette Robbins & Co., Baltimore	Articles needed
361 p.441	05/05/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Funds required
361	05/05/1870	JHSimpson	RearAdm WBSHubrick,	Monthly progress report

p.442		LH Engineer	Chairman, USLHB	
<p>“On the 30th ultimo the tower had attained a height of 103 feet above the ground, making it 97 feet above the main floor. The first two flights of stairway are in position as also the oil tanks. It is expected that the tower will be ready for the Lantern by the 1st of July. It gives me pleasure to state that the work is progressing finely, the structure, as far as built, having been constructed with the greatest care and precision and the prospect being the same, when completed, will conform in every respect, to the drawings, and anticipations of the Light House Board.”</p>				
361 p.459	05/13/1870	JHSimpson LH Engineer	Geo. ? Nicholson, Asst Engineer	Lens column, copper rod for stairway
361 p.461	05/13/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Delivery of castings, stores, etc.
361 p.463	05/13/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Payroll & other accounts; iron pieces
361 p.470	05/13/1870	JHSimpson LH Engineer	Articles shipped par <i>Tulip</i> to Dexter Stetson	Articles shipped
361 p.477	05/19/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Lens column
361 p.483	05/21/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Request for lens
361 p.487	05/23/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Shipment of stores
361 p.490	05/23/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Instructions to ship master
361 p.493	05/28/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bill of lading for brick
361 p.499	05/30/1870	JHSimpson LH Engineer	Com. Chas S. Bogge, Inspector	Lens shipment
356 p.42	06/06/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Monthly operations progress report

<p>“On the 28th of May the tower had attained a height of 147 feet from the ground and four flights of stairway had been placed in position. My Assistant visited the work on the 16th of May and reports the batten (?) and rotundity of the tower to have been admirably preserved. Sighting down from the top he could not discover a brick out of line an eighth of an inch.”</p>				
356 p.26	06/??/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Lens & its effect on ironwork; stairways
356 p.29	06/11/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Stairway; suspension of operations
356 p.31	06/??1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Iron work shipped
356 p.39	06/16/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Copy of deed & plot
356 p.42	06/22/1870	JHSimpson LH Engineer	Joshua Jones Baltimore	Charges against employees
356 p. 49	06/22/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Receipt of deed
356 p.51	06/22/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Tracing for base of lens
356 p.55	06/23,1870	S.S. Hentchins	Dexter Stetson, Supt of construction	Employee time discrepancies
356 p.58	06/25/1870	JHSimpson LH Engineer	Brig Gen JCWoodruff Engineer, 3/4 Districts	Cement was for tower
356 p.60	07/05/1879	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Tracings of metal used at Point Reyes
356 p.61	07/05/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Charges made against Stetson by Joshua Jones, bricklayer
356 p.62	07/05/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report

<p>“On the 16th the tower had attained a height of 153 2 feet; but owing to some modifications of the iron work rendered necessary by the new lens, operations were temporarily suspended on that day, and all of the mechanics and laborers discharged except six who were retained to protect and care for the property. As soon as the alterations of the iron work referred to are advanced sufficiently to justify the resumption of operations to advantage, the work will be resumed and prosecuted with dispatch.”</p>				
356 p.93	07/16/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Funds needed
356 p.96	07/19/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Funds needed
356 p.101	07/21/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Doors and other items needed not specified in contract
LB 274A	07/23/1870	JHSimpson LH Engineer	Major Geo. H. Elliott	Funds expended
LB 274A	07/26/1870	JHSimpson LH Engineer	Major Geo. H. Elliott	Paid vouchers
356 p.116	07/26/1870	JHSimpson LH Engineer	Messrs Bartlett, Robbins & Co	Directions to contractor to furnish wooden doors, & glass for doors, window sashes & service room windows
356 p.118	07/29/1870	JHSimpson LH Engineer	N. Sargent, Commissioner of Customs, Washington	Account discrepancies
356 p.128	08/02/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report
<p>“No work has been carried on during July at Hatteras. The modifications of the iron work rendered necessary by the new lens, are being effected as rapidly as possible and will probably be completed in three weeks.”</p>				
356 p.166	08/17/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Payroll & payment for iron stairs
356 p.189	08/27/1870	JHSimpson LH Engineer	RearAdm WBShubrick, Chairman, USLHB	Windows for lantern B modification requested
356	09/06/1870	JHSimpson	RearAdm WBShubrick,	Report of operations

p.206		LH Engineer	Chairman, USLHB	
"Nothing has been done at this station during the month of August. The iron work of the capital is nearly ready for shipment and active operations will soon be commenced."				
LB 274A	09/06/1870	JHSimpson LH Engineer	Major Geo. H. Elliott	Windows in service room
356 p.221	09/10/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Construction stairway
356 p.226	09/09/1870	Capt Thos W. Mitchell, Master, <i>Tulip</i>		Iron work shipped
356 p.236	09/17/1870	JHSimpson LH Engineer	Geo. Black, Lazaretto Workshop	Shipment of brick
356 p.237	09/17/1870	JHSimpson LH Engineer	NMSmith	Shipment of brick via <i>Florence</i>
356 p.238	09/17.1870	Agreement between Clement W Hudson, master <i>Florence</i> and	RNPreece, acting for Brig Gen JHSimpson	Route & Delivery of supplies by <i>Florence</i>
356 p.241	09/20/1870	JHSimpson LH Engineer	Major Geo. N. Elliot, Eng Secretary, USLHB	Anticipation of <i>Tulip's</i> arrival
356 p.242	09/20/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Instructions to mast of <i>Tulip</i> not to delay
356 p.243	09/20/1870	JHSimpson LH Engineer	Major Geo. N. Elliot, Eng Secretary, USLHB	Receipt of specifications
356 p.247	09/22/1870	JHSimpson LH Engineer	Horton Black & Co Linwood, PA	Lumber accounts
356 p.252	09/24/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Bill of lading for iron work & lens; instructions for cleaning & finishing
"To darken and polish the black tiling, rub the planed surface with a rag dipped in Linseed, Lamp or any kind of waste (?) oil; using care that it				

does not touch the white tiles as it injures their appearance.
 For the purpose of removing stains from granite, one gallon of sulphuric acid is sent you.
 Dip a rag tied to the end of a stick in the acid and rub it on the granite and immediately wash the acidulated surface with clean water.”

356 p.256	09/27/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Inspections to master of <i>Tulip</i>
356 p.262	09/30/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Annual report of operations

“Cape Hatteras New Light Tower: The operations on this edifice progressed rapidly and satisfactorily from the date of the last annual report until the 16th of June. By then the entire portion of the brick work of the tower beneath the iron capital which carries the lantern was completed. All the window frames were set and four flights of iron stairway in position and their landings arched.

The work thus far has been of the most thorough character; the iron work furnished by the contractors, Messrs Bartlett, Robbins & Co of this city excellent, and the brick work laid in the most substantial manner, each brick being completely embedded in the best kind of cement mortar, and each course as it was laid, brought truly to the batter and levelled. The cement and brick used were of unexceptional quality. The structure thus far gives the assurance that it will meet in every respect the anticipations of the L.H. Board.

The tower having attained the above height of 153 2 feet, a delay occurred in procuring the iron work of the capital, and as nothing more could be done without it, I ordered on the 16th of June, Mr. Dexter Stetson to suspend operations and withdraw his force until such time as the casting would be ready, and leave a few men for the necessary care of the tower and materials.

The lens sent to me by the Light House Board rendering necessary some modifications in the iron work for the new tower, also helped to delay matters.

The capital finally advancing toward completion at the workshop, I dispatched to Hatteras the steamer *Tulip* on the 10th Sept with Mr. Stetson and a few men in order that he might make preparations for the reception and setting up on the iron work. Two vessels subsequently chartered for the purpose of carrying the iron work of the capital, supplies, etc., and on the 27th they left under tow of the steam tender *Tulip* via the Albemarle and Chesapeake Canal for the work.

The following is a brief summary of each months operations till temporary suspension:

On the 25th of Sept 1869 the 9th course of granite quoins was set up and backed with brick, as was also a portion of the 10th course.

During November extensive repairs were made to the keeper’s dwelling and a large quantity of filling in of sand and soil was done to a slough surrounding the house.

Dec 30 Tower leveled up even with cornice and 3 courses of brick laid in shaft.

Jan 30 Brick work reached a height of 32 feet above the main floor.

Feb 20 Brick work had attained a height of 50 feet above main floor.

April 30 The tower had reached a height of 103 feet above ground, making it 97 feet above the main floor. The first two flights of iron stairway were also placed in position as were also the wrought-iron oil tanks.

May 23 A height of 147 feet above the ground or 141 feet above main floor was reached.

June 16 The brick work was leveled up to a height of 153 2 feet from the ground to the lower edge of the necking or belt course of the capital. Four flights of iron stairway were in position in the cylinder. At this date the work was temporarily halted, as above related.

Expenditures: New L.H. at Cape Hatteras		\$47,875.55		
<p>May 28th A height of 147 feet from the ground or 141 feet above the main floor was reached.</p> <p>June 16th The brick work was leveled up to a height of 153 2 feet from the ground to the lower edge of the necking or belt course of the capital. Four flights of iron stairway were in position in the cylinder. At this date the work was temporarily suspended.”</p> <p>Expenditures: New L.H. at Cape Hatteras \$47,875.55.</p>				
356 p.293	10/05/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Operations resumed; workmen to return Sept 10
356 p.302	10/07/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Construction; instructions to master of <i>Tulip</i>
356 p.314	10/??/1870	JHSimpson LH Engineer	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Instructions to master of <i>Tulip</i>
356 p.317	10/18/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Accounts
356 p.323	10/19/1870	Paullette Robbins Co.	JHSimpson LH Engineer	Wrought iron railing & posts
356 p.332	10/22/1879	Chief Clerk Hutchins	JHSimpson LH Engineer	Transmission of tracing of old lens & pedestal
356 p.333	10/22/1870	Chief Clerk Hutchins	Mahor Geo. H. Elliot, Engineer Secy, USLHB	Transmission of tracing of old lens & pedestal
356 p.337	10/31/1870	JHSimpson LH Engineer	Messrs Bartlett, Robbins & Co	Status of lantern
356 p.38?	10/31/1870	JHSimpson LH Engineer	Noel Sannel & Antoine, NY	Order for French plate glass
356 p.341	11/01/1870	JHSimpson LH Engineer	Messrs Bartlett, Robbins & Co	Dismay that lantern is not ready
356 p.352	11/01/1870	JHSimpson LH Engineer	Messrs A. Peteler & Co, Staten Island	Request for car wheel boxes

356 p.356	11/04/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Progress report
<p>“I am grateful in being able to say that the Tower at Hatteras progresses finely, all the heavy iron work of the capital having already been placed in position, except two short flights of stairs. Indeed I am informed by the Superintendent Mr. Stetson, under date of 31st ultimo, since I left that he will be able to set the lantern as soon as it arrives. By working day and night, Messrs Bartlett, Robbins & Co promise me that the lantern will be ready for shipment by Thursday next week.”</p>				
LB 274A	11/05/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Transmits tracing of old tower
<p>AlIt will be seen that the watch room floor is of iron overlaid by wood, into which the base of the lens column is set as represented.”</p>				
356 p.365	11/??/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Construction (progress report)
<p>“The shipment of the various parts of the iron capital, the lens, etc., was effected without an accident. The capital is already in position and ready for the lantern. The stairways are all fixed to their places and the landings arched. The main work of building being completed, there yet remains besides the setting up of the lantern and lens, considerable work to be done in the way of finishing, laying tiling, fitting doors and sashes, glazing, cement and whitewashing, etc. The iron fence and its granite base authorized by the Light House Board for this tower, is being made in this city.”</p>				
LB 274A	11/05/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Transmits tracing of old tower
<p>“It will be seen that the watch room floor is of iron overlaid by wood, into which the base of the lens column is set as represented.”</p>				
356 p.381	11/07/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Construction; proposal for 3 rd keeper’s dwelling
<p>“In view of the fact that the light keeper’s dwelling at Cape Hatteras is only intended for two keepers’ families, and that a surplus of 50,000 brick yet remains after completing the tower, as well as a quantity of good lumber used in the temporary buildings and scaffolding, I would respectfully suggest that before the working party is removed from the locality, I be authorized to build a dwelling for the third keeper, similar to that at Leading Point . . . a dwelling of four rooms and a kitchen may be built for \$3600.”</p>				
356 p.385	11/08/1870	JHSimpson LH Engineer	J.C. Thompson, NY	Bill for boxes
356	11/09/1870	JHSimpson	RearAdm WBSHubrick,	Re: sketch of old tower

p.387		LH Engineer	Chairman, USLHB	
356 p.388	11/10/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	USLHB authorization of 3 rd keeper's dwelling
"The LHBoard has authorized the erection of a building for the third light keeper at Hatteras, to be built of brick and similar to that at Leading Point, the plans and estimates of material for which will be provided you as soon as possible."				
356 p.389	11/11/1870	JHSimpson LH Engineer	J.C. Thompson, NY	Payment for shaft boxes
356 p.392	11/11/1870	JHSimpson LH Engineer	Noel Sannel & Antoine, NY	Vouchers for glass
356 p.395	11/14/1870	JHSimpson LH Engineer	Noel Sannel & Antoine, NY	Payment for glass
356 p.396	11/14//1870	Peter Hains, Capt of Engineers	RearAdm WBSHubrick, Chairman, USLHB	Estimates/payments
356 p.400	11/15/1870	JHSimpson LH Engineer	RearAdm WBSHubrick, Chairman, USLHB	Accounts
356 p.402	11/17/1870	JHSimpson LH Engineer	Dexter Stetson, Supt of construction	Payroll
353 p.3	11/19/1870	Peter C. Hains, Capt. of Engineers	Geo. J. Crossman, Lampist	Construction: instruction to lampist regarding lens
". . . for the purpose of putting up the lens apparatus at Cape Hatteras Light Station. You will proceed with the Steamer <i>Tulip</i> to that place for that purpose. After placing the lens and apparatus in position and the new light exhibited, you will take down the old lens and apparatus and pack up the same in the boxes which now contain the new lens. The old lens thus packed will be placed by Mr. Stetson on board a schooner which will convey it to the Inlet or Newberne, as may be found expedient, for shipment to the L.H. Depot at Tompkinsville, NY."				
353 p.5	11/19/1870	Peter C. Hains, Capt. of Engineers	Capt Thos W. Mitchell, Master, <i>Tulip</i>	Instructions to master of the <i>Tulip</i>
353 p.6	11/19/1870	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	Instructions re: coppersmith; marble slab; lens; fence; plans for keepers dwelling; request for requisition of needed materials

353 p.60	12/08/1870	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	Material for fence & other supplies
353 p.62	12/08/1870	Peter C. Hains, Capt. of Engineers	RearAdm WBShubrick, Chairman, USLHB	\$11,000 remaining in appropriation
353 p.149	12/31/1870	Peter C. Hains, Capt. of Engineers	Capt AJFenton, Master <i>Spray</i>	Instructions to master of <i>Spray</i> re delivery to stone & stores
353 p.151	12/31/1870	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	List of provisions
353 p.191	01/10/1871	Peter C. Hains, Capt. of Engineers	RearAdm WBShubrick, Chairman, USLHB	Delays in hearing from Stetson
353 p.204	01/12/1871	Peter C. Hains, Capt. of Engineers	RearAdm WBShubrick, Chairman, USLHB	Progress report
<p>“During the month the new lantern & illuminating apparatus was put up in the new tower & the light exhibited Dec 16th, 1870. Since that date it has been continually in operation & the light in the old tower extinguished. The character of the new light, together with its location & the characteristics of the new tower were such that the usual notice to mariners was rendered unnecessary.</p> <p>The illuminating apparatus including the revolving machinery is all in good working order. As soon as it was found that the new light worked well in every respect, the removal of the lens & lantern on the old tower was commenced; this was accomplished about the last of the month. It was then carefully packed in the boxes used for transporting the new lens to Hatteras & on Jan 2nd this year was shipped to Newberne, NC. From thence to go by steamer to the Light-House Depot Tomkinsville, NY, Mr. Crossman, Lampist, being ordered to accompany it all the way & see that it was properly handled in transshipment.</p> <p>Nearly all the iron work in the new tower has been painted (finishing coat). The inside has been white-washed & the cement washing of the outside carried down about one third of the way from the top. The staging around the tower has been removed for about the same distance. This work has been very much delayed by the continuous stormy weather during the latter part of the month.</p> <p>The brickwork of the keeper’s dwelling was commenced & carried up to a height of about five feet; joists for the first floor laid & doors & window-frames for first story set. The brickwork ought to be finished in about two weeks, provided we are favored by good weather.</p> <p>The foundation for the iron fence around the tower has been laid & is now ready to receive the granite sill.</p> <p>In the old tower a portion of the iron work has been removed preparatory to the demolition of the old structure. The old iron or such of it as is worth it & not needed elsewhere, will be sent to Lazaretto to be sold at auction.</p>				
353 p.254	01/24/1871	Peter C. Hains, Capt. of Engineers	S.S. Hutchins, Detroit	Voucher for stairway
353		Peter C. Hains, Capt. of	RearAdm WBShubrick,	

p.261	01/26/1871	Engineers	Chairman, USLHB	Inquiry as to amount left in appropriation
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Part III: Repairs & Maintenance (1871 - 1904)

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
353 p.327	02/15/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Report of operations; scaffolding removed, fence erected, keepers dwelling brickwork finished
353 p.332	02/16/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Old tower blown up & totally destroyed
353 p.340	02/16/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Determining focal plane of new tower
<p>“Taking the stage of the water at the time the levels were seen as ‘mean low,’ (it was this at the time as nearly as could be ascertained), the height of the focal plane is 190.89 feet above the mean low water of the sea; in round numbers 191 feet; the bottom of the grillage foundation being 3.89 feet above mean low water, or about one & a half feet above high water.”</p>				
353 p.453	03/13/1871	Peter C. Hains, Capt. of Engineers	Capt Thos W. Mitchell, Master, <i>Spray</i>	Instructions to transport Stetson to Hatteras
353 p.459	03/13/1871	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	Instructions to Stetson
353 p.461	03/13/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Transmittal of copy of specs for weights of various details
353 p.478	03/18/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report
<p>“At Cape Hatteras the fence around the new tower was finished, the keeper’s dwelling shingled, lathed and plastered and the floors laid; a new board walk has been commenced and partially completed from the keeper’s dwelling to the tower. The old tower was blown up with powder and totally destroyed on the 11th of the month; a lot of old iron from the lantern etc. was shipped to Lazaretto and will be sold with the other old iron and material at that place.”</p>				
353 p.583	04/11/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Monthly progress report
<p>AThe keeper’s dwelling, which was at the end of last month well advanced, was completed and made ready for occupation; a board fence</p>				

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
<p>similar to that around the other dwelling was practically constructed, a building heretofore used as quarters & office being in the way which it is proposed to remove to Bodie's Island, as soon as operations are commenced at that place; when this is taken away, the fence will be completed. The board walk from the keeper's dwelling to the tower which was commenced at date of last report has also been completed. All the work at this place may be said to be finished. The whitewashing of the lower portion of the tower has been delayed to enable it to dry more thoroughly; the same has been done in regard to the painting of the interior of the upper portion of the tower. A temporary building was erected at the wharf for storing cement and other materials not used.</p> <p>It is proposed to take the buildings and material left over from Hatteras to Bodies Island as soon as the work at that place is authorized to be commenced.</p> <p>All the lumber, brick, cement and other property left at Hatteras on the completion of the work has been placed in charge of a watchman."</p>				
353 p.588	04/??/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Quarterly accounts
LB 274C	04/24/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Drawing transmittal with height of various details
355 p.438	06/28/1871	Peter C. Hains L.H. Engineer	F. Stanley, L.H. Inspector	Articles taken to Baltimore
355 p.687	undated	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	Annual report of operations
<p>"This important light-house was well advanced toward completion at the date of last annual report. During the month of December, the new lens was received and set up and on the 16th of the same month the light from the new tower was exhibited. The lens on the old tower was then removed and sent to the depot at New York. The new tower has been covered with a cement wash to protect it from the effects of the weather, the upper part (projected against the sky) colored red, and lower part (projected against the foliage in the rear) colored white, all the ironwork of stairs, lantern, etc., painted and the tower enclosed in a neat iron fence.</p> <p>During the month of February the old tower, being no longer of any use and in danger of falling during some heavy storm, was blown up and totally destroyed. In addition to the finishing of the new tower, a brick dwelling for the principal keeper of the light-station was built and enclosed in a neat picket fence. The above completed the work at this station."</p>				
355 p.828	08/12/1871	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	Late bill for lumber furnished by Horton & Co.
355 p.872	08/17/1871	Peter C. Hains, Capt of Engineers	RearAdm WBShubrick, Chairman, USLHB	List of articles sent to Baltimore

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
355 p.896	08/18/1871	Peter C. Hains, Capt. of Engineers	Dexter Stetson, Supt of construction	Delay of lumber bill
355 p.915	08/21/1871	Peter C. Hains, Capt of Engineers	RearAdm WBSHubrick, Chairman, USLH	Delay of payment of lumber bill
367 p.23	02/??/1873	Peter C. Hains, Capt of Engineers	Major Gorge H. Elliot, Engineering Secy, USLHB	Painting
367 p.131	03/22/1873	Peter C. Hains, L.H. Engineer	Major George H. Elliot, Engineer Secy, USLHB	Notice to Mariners: Daymark of spiral stripes
<p>“Referring to your letter of the 19th ultimo relative to painting the tower at Cape Hatteras Lt. House in spiral stripes, I beg to submit herewith a set of views showing the appearance of the tower when colored in as four spiral stripes B two white and two black, the width of each stripe increasing as it approaches the base in proportion to the diameter of the tower. The base of the tower should be colored white between the groins.”</p>				
LB 327B	04/??/1873	Peter C. Hains, L.H. Engineer	Major George H. Elliot, Engineer Secy, USLHB	Notice to Mariners: new daymark
<p>“ . . the three successive Sea-coast towers on the coast of North Carolina, viz.: Body’s Island, Cape Hatteras and Cape Lookout will be as follows: Body’s Island black & white horizontal bands, Cape Hatteras black & white spirals, and Cape Lookout will have black and white checkers.”</p>				
367 p.212	04/02/1873	Peter C. Hains, Capt of Engineers	Major Gorge H. Elliot, Engineering Secy, USLHB	Spiral daymark
370 p.444	04/22/1874	Peter C. Hains, L.H. Engineer	Keeper W.R. Jennett	Replacement of tablet
370 p.523	05/07/1874	Peter C. Hains, L.H. Engineer		Title papers
370 p.533	05/15/1874	Peter C. Hains, L.H. Engineer	Keeper W.R. Jennett	Information on tablet

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
373 p.163	12/12/1874	FTHarwood L.H. Engineer	Capt John E. Wyatt, Master, tender <i>Tulip</i>	General repairs: Build store house, repair brick walk around dwelling, and fence around premises
LB 341C	07/01/1874	Peter C. Hains, L.H. Engineer	Professor Joseph Henry, Chairman, USLHB	Monthly progress report: New tablet with name of station, date of erection, etc., placed in tower
Most of the letters in Volume 373 are illegible.				
374 p.65	03/31/1875	FTHarwood L.H. Engineer	Dexter Stetson, Currituck Beach, NC	Erection of cistern
374	undated	FTHarwood L.H. Engineer	Keeper	Circular
374 p.167	04/01/1875	FTHarwood L.H. Engineer	Keeper	Circular
375 p.315	11/02/1875	[page missing; assume to be from Harwood]	[page missing; assume to be to captain of light house tender]	Instructions for building cistern
<p>“After taking on board the brick layer and carpenter sent you from this office, you will please proceed without delay to Cape Hatteras light-station, where you will build adjoining, or in, the principal Keeper’s dwelling a brick cistern, cement lined, of dimensions and construction to be hereafter described more particularly. You will also please ??? the painting of the exterior iron work of the tower with the mixture furnished you for that purpose. Any other minor repairs within your resources and necessary to the station you are authorized and instructed to make. No repairs will be made on Cape Hatteras beacon.”</p>				
375 p.352	11/??/1875	Peter C. Hains, L.H. Engineer	FTHarwood L.H. Engineer	Voucher for hauling material
375 p.437	12/18/1875	F. Harwood, L.H. Engineer	Keeper W.R. Jennett	Payment of \$22.75 for hauling material
376 p.350	05/14/1876	F. Harwood, L.H. Engineer	Keeper W.R. Jennett	Check in payment for hauling material from the landing
378 p.58	03/20/1878	OEBabcock L.H. Engineer	Josph Henry, Chairman, USLHB	AFor new tin roof to house and lantern, lumber, nails and necessary carpenter work, and painting,

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
				two coats, outside and in . . . \$150
378 p.59	03/19/1878	OEBabcock L.H. Engineer	E.H. Holway, Provincetown, MA	Planting beach grass (procuring roots for)
378 p.110	04/13/1878	OEBabcock L.H. Engineer	Keeper Oscar F. Rice	Instructions for planting beach grass
379 p.471	09/05/1879	illegible	RearAdm John Rodgers, Chairman, USLHB	Lamp oil; substitution of mineral oil for lard oil
380 p.210	09/16/1879	??	RearAdm John Rodgers, Chairman, USLHB	Lamp oil: Printed instructions for use of mineral oil lamps
380 p.78	10/13/1879	OEBabcock L.H. Engineer	Jean Funch, tender <i>Heliotrope</i>	Lens: Request for lampist to fix malfunctioning lens
380 p.281	02/02/1880	OEBabcock L.H. Engineer	RearAdm John Rodgers, Chairman, USLHB	Lightning strike
<p>“The tower was struck during a severe thunder storm about 4:00 PM [April 17]. The keeper was at his dwelling but feeling sure after the vivid flash that the tower had been hit; went to examine it. He found the marble tiling on the first floor between the base of the baluster and the weight well shattered and the pieces scattered about the floor. No other damage was found on the 17th. On the next morning two cracks were found in the masonry on the inside, running from the first to the third landing. The cracks are on the north and south sides of the tower, the general direction being vertical. They are quite small B exactly in appearance like those in the Body Island tower, though not as numerous or as wide as some of the latter.</p> <p>At the time of the storm on the 17th the Second Assistant Keeper was in his quarters several hundred feet from the tower, engaged in adjusting the bell wire, leading from the landing of the tower to his quarters and used to call him to his tour of duty B and was struck, thrown halfway across the room and severely stunned, though he received no permanent injury.”</p>				
380 p.316	02/18/1880	OEBabcock L.H. Engineer	RearAdm John Rodgers, Chairman, USLHB	Equipment: Request for set of rollers for the revolving machinery
380 p.378	03/25/1880	OEBabcock L.H. Engineer	RearAdm John Rodgers, Chairman, USLHB	Transporting materials: Vouchers for Mrs. Midgett for transporting materials
380		OEBabcock		Monthly reports: Forms and instructions for

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
p.438	04/24/1880	L.H. Engineer	Keepers	completing monthly reports
380 p.107	06/29/1880	OEBabcock L.H. Engineer	RearAdm John Rodgers, Chairman, USLHB	Estimated expenditures for coming year
“New fencing; repairing roof and gutter; rebuilding chimney; scraping and scaling tower and repainting with coral-oil paint and whitewashing \$1,000.”				
382 p.410	06/13/1881	OEBabcock L.H. Engineer	RearAdm John Rodgers, Chairman, USLHB	Replacement of the lamps
“I have the honor to make requisition for two set of first order hydraulic float lamps to replace the old mechanical lamps at Cape Hatteras The description of Cape Hatteras illuminating apparatus is as follows: Maker of lens, Lepaute. Height of lamp with burner and bottom, 36 2 inches. Distance between the 3 pillars on which the lamp rests, 15 3/4 inches. Height of focal plane of the lens and top of the ring, 5 feet 4 1/4 inches. Diameter of top ring of the lens outside 13 inches. Inside diameter of cylinder around which lens revolves, 6 1/4 in.”				
385 p.45	10/23/1882	L.H. Engineer	Rear Adm RHHyman, Chairman, USLHB	Request to place electric call bells
“I have the honor to request authority to place electric call bells on the keepers’ dwellings, connecting the same with the lighthouse towers”				
386 p.177	01/15/1883	Levi P. Luckey	A. Johnson, Portsmouth Buoy Depot	Shipment of 12 electric batteries for call bell system
386 p.340	03/09/1883	OEBabcock L.H. Engineer	J.D. Franzoni, Washington, DC	Order for sal ammoniac for call bells
388 p.120	10/02/1883	OEBabcock L.H. Engineer	Circular	Circular for cleaning smoke stack to avoid fire
388 p.281	03/10/1883	OEBabcock L.H. Engineer	Miguel Aleo, New York	Order for lantern glass
388 p.381	12/17/1883	USLHB	OEBabcock L.H. Engineer	A.J. Simpson appointed 3 rd Asst keeper

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
388 p.399	12/20/1883	OEBabcock L.H. Engineer	Vice Adm L.C. Rowan, Chairman USLHB	Description of illuminating apparatus
LB 59	12/26/1883	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Lens apparatus
<p>“Lepaute lens; flashing white, 360°; Mechanical lamp now in use; height of lamp, with burner, to focal plane, 2 feet 11 3/4 inches; distance between the center of the three pillars, 15 3/4 inches; height from focal plane to the low edge of the cylinder 5 feet 2 inches; diameter of the iron cylinder inside, 6 1/4 inches.”</p>				
390 p.370	09/30/1884	OEBabcock L.H. Engineer	Vice Adm L.C. Rowan, Chairman USLHB	Value of telegraphic signals
391 p.76	11/15/1884	USLHB	Jared A. Smith L.H. Engineer	Authorization for construction of coal bin
391 p.87	12/02/1884	Jared A. Smith L.H. Engineer	Chairman, USLHB	Estimate for repairs to cistern, electric call bell and constructing coal bin and oil house
391 p.404	03/11/1885	Char. M. Lewis, Clerk	Keeper Aug. C. Thompson	Shipment of keys
Vol 50	07/13/1886	USLHB Engineer Secretary	L.H. Engineer	Repairs to windows, lantern, and asst. keeper’s dwelling authorized; estimated cost \$300
397 p.149	01/12/1887	USLHB	James F. Gregory, L.H. Engineer	Appointment of Dillman Smith as Acting Keeper
397 p.227	02/03/1887	USLHB	James F. Gregory, L.H. Engineer	Appointment of Christopher Miller as 2 nd Asst Keeper
398 p.30	04/18/1887	Keeper D.V. Smith	James F. Gregory, L.H. Engineer	Request to purchase lumber, shingles and rails for repairs and 100 gallons of Indian red paint and barrel of lime
Vol 51	04/26/1887	DPHeap, USLHB Engineer Secretary	James F. Gregory, L.H. Engineer	Authorization for labor and materials for repair of porches, cistern top, fences, etc.

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
398 p.56	04/30/1887	James F. Gregory, L.H. Engineer	Chairman, USLHB	Request for and authorization to purchase brass hooks and eyes and rim locks
398 p.66	05/03/1887	James F. Gregory, L.H. Engineer	Chairman, USLHB	Request and authorization to purchase weather strip
Vol.51	05/23/1887	DPHeap, USLHB Engineer Secretary	James F. Gregory, L.H. Engineer	Inspector's recommendation for additional keepers' quarters and oil house
<p>"I would earnestly recommend that additional quarters be provided at this station for the assistant keepers. There are three, including the one in charge at the Beacon, occupying quarters intended for two families. As each of these men has a family ranging from three to seven persons, it will be seen that they are much too crowded for either health or comfort. In order that the assistant in charge of the Beacon might live nearer his light, I would suggest in case additional quarters should be built that the house be located near the present Life Saving Station.</p> <p>A suitable oil room for stowing the oil is very much needed, with the exception of about 1,000 gallons, 200 boxes, the oil is stowed in recesses at the base of the tower."</p>				
398 p.14	06/08/1887	James F. Gregory, L.H. Engineer	Chairman, USLHB	Engineer concurs with Inspector's recommendation for additional keeper's dwelling and oil house
Vol 51	07/08/1887	DPHeap, USLHB Engineer Secretary	James F. Gregory, L.H. Engineer	Board concurs with recommendation for additional keeper's dwelling and oil house
398 p.364	08/10/1887	JCMallery, L.H. Engineer	Lampist Jean Funck, Staten Island Depot	Repairs to revolving machinery of lens
398 p.508	10/05/1887	USLHB	JCMallery, L.H. Engineer	Appointment of Christopher Miller as 1 st Asst Keeper
738 p.42	07/09/1887	JCMallery, L.H. Engineer	Chairman, USLHB	Change in engineer
738 p.254	10/08/1887	JCMallery, L.H. Engineer	Chairman, USLHB	Repairs to bell wire
399	10/08/1887	Chairman, USLHB	JCMallery,	Request for insulated wire to repair bell wire

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
p.7			L.H. Engineer	
399 p.26	10/14/1887	JCMallery, L.H. Engineer	Keeper Tillman F. Smith	Shipment of 300 feet of insulated wire
399 p.39	10/19/1887	USLHB	JCMallery, L.H. Engineer	Appointment of A. Salter as 2 nd Asst Keeper
399 p.74	11/22,1887	JCMallery, L.H. Engineer	Chairman, USLHB	Request and authorization to pay for shingles, fencing and posts
399 p.97	11/23/1887	JCMallery, L.H. Engineer	Chairman, USLHB	Request and authorization for payment for 7 squares of fabric roofing
399 p.98	11/23/1887	JCMallery, L.H. Engineer	DPHeap, USLHB Engineer Secretary	Cost of call bell system components
399 p.161	12/17/1887	JCMallery, L.H. Engineer	Chairman, USLHB	Request for sheet-iron cylinder chimneys with pipes and damers
738 p.442	12/19/1887	JCMallery, L.H. Engineer	Chairman, USLHB	Request for new sheet-iron cylinder chimney pipes and dampers
398 p.173	1887 Estimate of expenses for 6 months ending Dec 30, 1887	JCMallery, L.H. Engineer	Chairman, USLHB	Estimate for repairs to dwellings, porches, cistern roof \$500; oil house \$150; 2 small store rooms \$150; cistern cover \$50; fences \$300
399 p.188	01/09/1888	John Murdock, Asst Engineer	John W. Lewis, Superintendent of Construction	Authorization to purchase shingles
399 p.230	01/28/1888	John Murdock, Asst Engineer	Keeper Tillman F. Smith	Locks repaired
399	06/30/1888	Keeper Tillman F.	JCMallery,	Coal house and portion of oil house destroyed by

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
p.232		Smith	L.H. Engineer	fire
400 p.15	06/15/1888	USLHB	JCMallery, L.H. Engineer	Appointment of Louis G. Daniels as 2 nd Asst Keeper
400	07/02/1888	USLHB	JCMallery, L.H. Engineer	Appointment of A.J. Simpson as Keeper
400 p.118	08/12/1888	John Murdock, Asst Engineer	Keeper Tillman F. Smith	Repairing leaks in roof with refined coal tar
401	01/17/1889	USLHB	JCMallery, L.H. Engineer	Appointment of Wesley Austin as 2 nd Asst Keeper
401	01/23/1889	USLHB	JCMallery, L.H. Engineer	Appointment of Ephraim Riggs as 3 rd Asst Keeper
401 p.239	04/16/1889	JCMallery, L.H. Engineer	Keeper T.F. Smith	Instructions to send alarm apparatus damaged by lightning for repairs
LB 789	06/30/1889	JCMallery, L.H. Engineer	Chairman, USLHB	1889 Annual Report
"No improvements made. Slight repairs are needed to plastering, floors, etc., in dwellings. The tower is in good condition."				
401 p.378	06/30/1890	JCMallery, L.H. Engineer	Estimate of expendi-tures for fiscal year ending June 30, 1890	Estimate for repairs to dwelling and fences \$500
419 p.31?	01/14/1891	JCMallery, L.H. Engineer	Chairman, USLHB	Proposed 2-story addition to keeper's dwelling
419 p.320	01/14/1891	JCMallery, L.H. Engineer	Chairman, USLHB	Request for labor and material for addition , sash and shutters for keeper's dwelling and roof and gutters to beacon \$2,000.00
Vol 55	01/16/1891	James F. Gregory, USLHB Eng Secy	JCMallery, L.H. Engineer	Appropriation for new dwelling and oil house

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
<p>“Referring to your letter of Jan 14, 1891, with enclosed estimate, etc., and tracings showing plans of proposed addition to Assistant Keeper’s dwelling at Cape Hatteras light-station, and asking authority to at once proceed with the work, the Board calls your attention to the fact that there is now an estimate before Congress for a new Assistant Keeper’s dwelling and oil-house, at a cost of \$5,000. At the present writing there is every reason to believe that Congress will appropriate the sum asked for, as it is included in the list of estimates among the items stated by the Board to be indispensable.</p> <p>This amount if appropriated, is understood to be for the erection of a dwelling for the Assistant Keeper who has charge of Hatteras Beacon and for the erection of an oil-house for the Cape Hatteras light-station. The Board therefore deems it best to postpone any action looking to the enlargement of the present Assistant Keeper’s quarters until it is known what Congress will do in the matter. No action will therefore be taken upon your request for authority to purchase materials, etc. . . . A</p>				
419 p.477	05/12/1891	JCMallery L.H. Engineer	USLHB	Replacement of telegraph line
419 p.78	1891 appro- priations for repairs			Estimate for repair of cistern, walks, etc. \$500
420 p.257	10/24/1891	JCMallery L.H. Engineer	USLHB	Request to start repairs and dwelling addition
420 p.321	12/11/1891	Eric Bergland, L.H. Engineer	USLHB	Recommendations for addition to keeper’s dwelling
420	1892 appro- priation for repairs			Estimate for addition to and repairs of Asst Keeper’s dwelling and repair to roof of cistern \$2,500
Vol 56	01/05/1892	FAMahan, USLHB Eng Secretary	Secretary of the Treasury	Proposal for additional quarters
<p>“The quarters for light-keepers at Cape Hatteras light are entirely insufficient, and authority is requested to construct there an addition to the present quarters, at a cost not to exceed \$3,000.</p> <p>It is proposed to do this work by day’s labor, as being most economical considering the exceedingly out of the way position of the station, it being impossible to find workmen at the place, and the crew and workmen which accompany the light-house tender <i>Jessamine</i> on her regular repair trips through that district are sufficient to insure what is intended being properly done. All the materials needed for the work can be purchased under existing contracts with the exception of the mill work required, which will not cost to exceed \$250, and which it is requested</p>				

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
<p>may be purchased in open market. Authority is, therefore, asked to construct this addition, not to exceed \$3,000, by hired labor, by the purchase of the mill work in open market, and of all other materials under existing contracts.”</p>				
Vol 56	01/07/1892	USLHB Engineer Secretary	Eric Bergland, L.H. Engineer	Authority granted to construct additional quarters
<p>“In the letter of which the enclosed are copies, request is made that the Board be authorized to construct the additional keepers’ quarters necessary at a cost not to exceed \$3,000. By hired labor, by the purchase of the mill work in open market, and of all other materials under existing contracts.”</p>				
420 p.480	04/18/1892	USLHB	Eric Bergland, L.H. Engineer	Appointment of Ephraim R. Riggs to 2 nd Asst Keeper
420 p.484	04/20/1892	USLHB	John Murdock, Assistant Engineer	Appointment of Joseph Daniel to 3 rd Asst Keeper
421 p.153	08/04/1892	L.H. Engineer	Light-House Board	Appointment of Sanders B. Smith as 3 rd Asst Keeper. Also in Vol 422, p.379.
422 p.162	07/25/1893	Eric Bergland, L.H. Engineer	Light-House Board	Transmittal of Bamber survey
422 p.461	01/18/1894	USLHB	John Murdock, Asst L.H. Engineer	Appointment of Alpheus Simpson as 3 rd Asst Keeper
423 p.229	1895			Estimate for repairs to outhouses \$300
424 p.254	02/13/1895	Eric Bergland, L.H. Engineer	Light-House Board	Inspection
<p>“Tower, lens and oil-house in excellent condition. The lock of the tower door needs repairs which will be made. The call-bell apparatus is out of order. The keeper’s dwelling needs a new roof and a lightning rod. The front sill of the keeper’s dwelling is partly decayed. The chimney of the west kitchen will be raised to increase the draught. The pickets of the iron fence around the tower are badly rusted. Some of the hinges of the blinds are broken and also several panes of window glass. A new outside cistern pump is needed. The dwellings are in want of paint outside and</p>				

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
inside.”				
LB 1055	03/09/1895	Eric Bergland, L.H. Engineer	Light House Board	Monthly Progress Report
“The chimney of the west kitchen was raised in the month of January to increase the draught. 6 pairs of brass butts with screws, one key and a repaired lock have been forwarded to the station.”				
LB 1055	06/30/1895	Eric Bergland, L.H. Engineer	Light House Board	1895 Annual Report
“In January the chimney of one of the kitchens was built up higher in order to improve the draught, and slight repairs were made to some of the doors in the keepers’ dwellings. In May a cistern pump and a box of window glass were furnished, to be put in place by the keepers. The porch and tower railings need repairs; the keeper’s dwelling, kitchen and cistern should be reshingled, and new floors are required in the assistant keeper’s dwelling.”				
Vol 67	10/19/1897	USLHB Engineer Secretary	Lt Col WAJones L.H. Engineer	Marking of ship wreck of <i>Hesperides</i>
428 p.350	11/12/1897	Lt Col WAJones L.H. Engineer	Lighthouse Board	Tower inspection and <i>Hesperides</i> wreck
<p>“Tower is in excellent order. Painted outside. The painting is somewhat worn, but not to such extent as to affect its distinctive visibility in the distance. No renewal will be needed for some time. The interior is whitewashed and is in very fine condition. The same may be said of the painting of the stairway and in watchroom and lantern. The lantern, lantern gallery, watchroom and gallery are in good order. Railing to the latter is badly rusted. It should be replaced with galvanized iron, painted first with red lead and then a coat of black. Lens in excellent order. Also lamp and spare lamp, except the wick raisers. These work badly. Clock work of lens and lamp in good order. Call bells not in good order. The carpenter from the tender remedied the difficulty. As soon as it can reasonably be done, I would like to equip all of the high towers with telephone having metallic circuit. . .</p> <p>I located the wreck of the steamer <i>Hesperides</i> by having intersecting transit lines laid upon it from the tower and the Life Saving station 3 2 miles down the beach. It lies, as shown on the chart herewith, on the inner side of the southern point of Outer Diamond Shoal. The hull has gone down out of sight, and is broken amidships. From her pilots, and the Keeper who wrote out the statement of the Master of the schooner, I gathered the following:</p> <p>The steamer was so far ahead of her reckonings that soundings had not been made for Hatteras until the cast showed her to be on the shoals. It was in thick, but fairly quiet, weather in the morning about 9 o’clock, and they saw nothing, heard nothing. Course was at once shaped to the eastward to get out to sea, and she quickly brought up on the shoal, groundings amidships in 10 feet of water. The lightship was plainly visible</p>				

from the tower, but below the horizon from the life-saving station, and is, perhaps, 10 miles a little north of east from the wreck.

The question of aiding mariners in this locality is, practically, one of the projection of sound. In clear weather the Hatteras light is always visible, but there is an unusual amount of thick weather over and near the shoals. It is in this sort of weather when no light is visible that the real trouble arises. From various causes, principally the fluctuation in location and intensity of the Gulf stream, vessels coming to the northward are blown off their reckoning both the northward and eastward. Sometimes they will be ahead of their reckoning, sometimes behind it. In either event they are apt to get on the shoals. Perhaps, if every ship coming along here would, or could, use her lead sufficiently, there would be no wrecks, but the record shows a great many wrecks, and I think every Captain feels much easier after he gets around these shoals, and I think also, that it ought to be presumed that a man with so grave a danger and responsibility upon him is doing the best he can. If we except the wrecks of vessels in a disabled condition, about all of those going on these shoals come up from southward, and hence this is the side which needs the most attention. Now, since the projection of sound for a distance of even a few miles is a matter of great uncertainty, it seems to me that more sound signals, in addition to those from the light-ship, which could hardly be brought closer in and safely moored, would be of great advantage . . ." point."

429 p.62	02/07/1898	WAJones, L.H. Engineer	Light House Board	Inspection
429 p.340	05/30/1898	WAJones, L.H. Engineer	Light House Board	Telephone connection with telegraphic stations
“. . . the following stations in Fifth District are now in telephonic connection with telegraph stations and are equipped for service as Coast Signal Stations to operate in conjunction with US Life-saving Stations in their immediate neighborhood: Hog Island, Currituck Beach, Bodie Island, Cape Hatteras, Cape Lookout.”				
429 p.366	06/04/1898	WAJones, L.H. Engineer	Light House Board	Telephone connection with telegraph station
429 p.3876	06/13/1898	WAJones, L.H. Engineer	Light House Board	Telephone connection with telegraph station
“Cape Hatteras has telephonic connection with line of Life-Saving Service about a 1 1/8 miles distant, which line has connections as in No. 3, and also with Hatteras Inlet Weather Bureau station, 9 3/4 miles distant. Has no facilities for exchanging signals with vessels. It is understood a Naval Coast Signal station has been established at this place.”				
429	07/27/1898	WAJones, L.H. Engineer	Light House Board	Operation of Coast Signal Station
LB 1255	08/01/1898	WAJones, L.H. Engineer	Light House Board	1898 Annual Report

"A lamp burner has been repaired and a new damper and key furnished for use at this station."				
LB 1255	09/01/1898	WAJones, L.H. Engineer	Light House Board	Monthly progress report
"A sheave of the revolving machinery and a lamp burner were required, and two oil carrier strainers and one lamp strainer were furnished."				
430 p.55	09/08/1898	WAJones, L.H. Engineer	Light House Board	Supplies for 1 st order lamps
LB 1255	10/01/1898	WAJones, L.H. Engineer	Light House Board	Monthly progress report
<p>"The old sills, joist, floor, columns and railing of the front porch have been taken out and replaced by new materials; the old shingles taken from the porch and the east side of the dwelling and new shingles put on. New 10" x 10" sills put under the front and rear of the old kitchen, and new base boards put on four sides of the building; new weather-boarding put under the windows and the battens pieced. A new lock has been put on the outside door.</p> <p>The chimney of keeper's dwelling has been raised two feet six inches. The fences have been repaired by putting in ten new posts and fifty-four 1" x 6" boards, 18 feet long. The old wooden walks have been taken up and relaid with sixty new bearing pieces, 4A x 4", and 2800 feet of new planking. Thirty-six pair of new hinges and thirty-six new shutter fasteners have been put on the window blinds.</p> <p>A new copper smoke pipe has been put on the lantern, and insect screens fitted in the windows of the keeper's dwelling."</p>				
LB 12555	11/01/1898	WAJones, L.H. Engineer	Light House Board	Monthly progress report
<p>"Keeper's Dwelling: Two sections of new railing have been put up on the porch, on the east side of the house; a shelf with brackets put up in the kitchen; new sash cords supplied; one set of shutter fastenings put on and the door, sashes and blinds eased. Six screen doors have been fitted, hung and fastenings put on. The plastering in two rooms and one hall has been repaired.</p> <p>The flashing on roof of front porch has been repaired and new tin flashing put on roof of side porch. One gate has been made, hung and fastenings put on, and one coat of paint put on all new work.</p> <p>Asst Keeper's Dwelling: Screens for six doors and thirty-five windows have been fitted and hung; one new door fitted, hung and fastenings put on. A new floor has been laid in the kitchen, and a shelf with brackets put up. Two new locks and knobs have been put on doors, and all of the doors and blinds eased. The plastering in four rooms has been repaired; a new platform constructed between the cistern and dwelling, and one section of railing on front of porch renewed."</p>				
LB 1256	01/31/1899	John Murdock, Asst Engineer	Lighthouse Board	Transmittal of site surveys
LB	02/01/1899	WAJones,	Light House Board	Monthly progress report

1256		L.H. Engineer		
"A governor for the lens apparatus has been repaired and returned to the station."				
LB 1256	06/01/1899	WAJones, L.H. Engineer	Light House Board	Monthly progress report
"An arch has been turned over the kitchen chimney. Two lamp burners and two strainers have been repaired and returned to the station."				
	06/04/1899	MRS Mackensie	Capt Perry, USLHB	Enclosure
"At 1:45 a.m. June 1 st Hatteras was showing a fixed white light. We had not made it before although we should have and I am pretty confident it was not revolving for at least twenty minutes. At 1:53 a.m. it began revolving again. Unless there is some record in the journal of an accident the keeper on watch was asleep."				
	06/28/1899	Inspector EPWood	Lighthouse Board	Enclosure
	08/24/1899	Inspector EPWood	Lighthouse Board	Inspector's report of examination of lens
Vol 70	08/04/1899	USLHB Engineer Secretary	Lt Col WAJones, L.H. Engineer	Stoppage of light
	09/11/1899	1 st Asst Keeper F.E. Simpson	Inspector	Stoppage of light
<p>" . . . your questions concerning the stopping of the lens on the morning of June 1.</p> <p>1st. The weights have slipped off the rod several times since I have been at the station.</p> <p>2nd. There was no precaution taken to prevent the weights from falling off the rod the nut on the end of the rod was alright, but the bolt or rivet that holds the rod together that caught on the beam of the landing.</p> <p>3d. Did not delay winding the machinery until it had run down, but wound it up a few minutes before the accident occurred.</p> <p>4th. There is no precaution we can take to prevent this nut on the end of this bolt that holds the rod together from hanging some times it does not happen all the time but once and a while but the weights does not fall off every time the rod hangs. I hope you will not be too hard on me this time it is the first I will try and not let it happen again."</p>				
	07/12/1899	Keeper JWGillikin	Inspector	Stoppage of light
	08/01/1899	Inspector EPWood	Light-House Board	Stoppage of light
" . . . inclose herewith copies of letters received from the keeper of the station and from the first assistant keeper, who was on watch at the time the light stopped, from which it will be seen that it occurred from the catching of a rivet on the rod, which threw off the weights, that no				

precautions have been taken by the keepers to prevent the weights from falling off, that the machinery had been wound up a few minutes before the accident, and that there appears to be no precaution the keepers can take to prevent the weights from falling off, as the trouble appears to be a defect in construction.

In my opinion, the keepers should not be dismissed, they being very efficient and the general condition of the station is very good condition in every respect. At my next inspection of the station an examination will be made to see what can be done to remedy this defect in construction.”

431 p.69	08/24/1899	WAJones, L.H. Engineer	Light House Board	Storm of August 15-18, 1899
Vol 70	08/28/1899	USLHB Engineer Secretary	WAJones, L.H. Engineer	Stoppage of lens
431 p.268	09/05/1899	WAJones, L.H. Engineer	Light House Board	Stoppage of lens
Vol 70	09/13/1899	USLHB Engineer Secretary	WAJones, L.H. Engineer	Stoppage of lens
431	11/27/1899	WAJones, L.H. Engineer	Light House Board	Inspection: lens and storm effects, loss of beacon

“Station was in excellent order. Special attention was given to the suspension of the weights for the clockwork of the revolving machinery, and also to the effects of the great hurricane of August 17, 18, and 19, 1899.

The only trouble with the rod suspending the weights was, the pin bolts at the joints were turned so as to engage the landing platform in case of the oscillation of the weights. They should have been disposed at right angles to this position. Nothing is necessary to be done, however, as the keepers had remedied the matter by a very simple contrivance. In the great storm the tower behaved very well indeed, and the rotation of the lens was perfectly satisfactory throughout. The keepers had to wade in water to their waists to get from the dwellings to the tower. The former leaked very badly, but no shingle roof can be made to resist the driving effect of water before such a wind. The tower windows also leaked badly, and large quantities of water came into the lantern through the cowl. The oscillation of the tower broke off considerable plaster at the junction of the beams which support the landing platforms of the stairway. The air was filled with Aspoon drift” from the ocean waves to such an extent that the foliage on many of the trees all over the island was blighted and killed.

The lens, lamp and outfit from the Hatteras beacon tower, whose site has been washed away, were taken on board the *Jessamine*.

The station was inspected by Dr. H.S. Pritchett, Member, and Captain Thomas Perry, USN, Naval /secretary of the Lighthouse Board.”

431 p.445	12/12/1899	WAJones, L.H. Engineer	Light House Board	Appointment of Martin L. Fulcher as 2 nd Asst Keeper
413	03/30/1900	WAJones,	Lt Col DPHeap, 3 rd District L.H.	Lens table

		L.H. Engineer	Engineer, Tompkinsville, NY	
432	03/31/1900	L.H. Inspector and L.H. Engineer	Lighthouse Board	Lens problems remedied by keeper
413	03/31/1900	John Murdock, Asst L.H. Engineer	Keeper J. Wilson Gillikin	Shipment of hinges for window shutters
LB 1327	04/02/1900	WAJones, L.H. Engineer	Lighthouse Board	Monthly report: Apparatus for call-bell system
432 p.197	04/20/1900	WAJones, L.H. Engineer	Lighthouse Board	Cost of improvements \$165
413	04/21/1900	John Murdock, Asst L.H. Engineer	Keeper J. Wilson Gillikin	Shipment of hinges for window blinds
432	05/23/1900	WAJones, L.H. Engineer	Lighthouse Board	Appointment of E. Meekins as Keeper
LB 1327	06/01/1900	WAJones, L.H. Engineer	Lighthouse Board	Monthly report: Installation of telephone
"Telephones have been installed at this station for communication between the keepers, to replace the old magneto call-bell which had become unserviceable."				
432 p.440	08/16/1900	WAJones, L.H. Engineer	Lighthouse Board	Trip to General Depot to confer on repair of lens
432 p.449	08/18/1900	WAJones, L.H. Engineer	Lighthouse Board	Request to examine lens
Vol 72	08/17/1900	USLHB Engineer Secretary	WAJones, L.H. Engineer	Instructions regarding repair of lens
LB 1377	09/01/1900	WAJones, L.H. Engineer	Lighthouse Board	Lens table not level
"The principal and one assistant keeper are newly appointed to this station and have had no experience with revolving machinery. The principal keeper who preceded this one had no previous experience with first-order revolving machinery. The first assistant keeper has been here many				

years, but even he is not sufficiently instructed in the use of this machinery. He does not recall that the lens has been leveled up for a long time. Had no idea in fact that it was out of level. . . .

There is no necessity for changing the characteristic of this lens, nor for changing the machinery. As soon as possible I will level up the lens table and place ball-bearing washers against the outer hub faces of the chariot wheels, and I think that the machinery will then work with satisfaction.

The pitting of the face of the steel plates on which the chariot wheels run may, in time, make it necessary to substitute new plates. . . .

I would suggest that at all stations where first-order lenses are revolved, keepers should be selected who have either had experience with revolving machinery or who have sufficient practical mechanical ability to enable them to thoroughly understand this simple machinery and its operation and adjustment, and I would further suggest that in all cases where new keepers are appointed to such stations, they be instructed in the use of this machinery by the Engineer upon request of the Inspector.”

Vol 72	08/18/1900	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Approval for trip to General Depot at Tompkinsville, NY
432 p.461	09/01/1900	Lt. Col. WAJones, L.H. Engineer	Lighthouse Board	Report on examination of lens
413 p.248	09/05/1900	John Murdock Assistant Engineer	Keeper Ephraim Meekins, Jr.	Shipment of brass hinges
432 p.469	09/08/1900	Lt. Col. WAJones, L.H. Engineer	Lighthouse Board	Inspection and needed repairs
LB 1377	09/08/1900	WAJones, L.H. Engineer	Lighthouse Board	Inspection
<p>“Station was in good order, with some exceptions. The cistern leaks, the kitchen of assistants’ quarters needs a new roof, and the lantern roof leaks. A section of about 20’ length of gutter is gone from the assistants’ dwelling, but there is no necessity for renewing it at this time. . . . The necessary paint was furnished the keeper for painting the inside of the two abandoned lard oil tanks so they may be used as water cisterns at the south end of the assistant keeper’s dwelling, thus giving them an increased water supply.”</p>				
LB 1377	10/01/1900	WAJones, L.H. Engineer	Light House Board	Monthly report
<p>“Two pitcher pumps have been set in the assistant keeper’s dwelling. . . . Cistern has been fully repaired. Gutter and spouting on assistant’s dwelling have been replaced and repaired. New tin roof placed on kitchen of this set quarters. Two large lard oil tanks from the tower have been converted into water tanks and placed as cisterns for same set quarters. All of the joints of the metal covering of the roof of the lantern have been brazed and made tight; also, the smoke pipe of lantern has been straightened and leak stopped.”</p>				

LB 1377	10/15/1900	WAJones, L.H. Engineer	Light House Board	Lens overhauled [Also in 436, p. 47]
"Overhauled lens machinery thoroughly and set it up again. Same is now in good order, excepting two new roller cog wheel plates and new chariot wheels necessary. Same will be supplied as soon as possible."				
LB 1377	10/22/1900	WAJones, L.H. Engineer	Light House Board	Requisition for chariot wheels
436 p.56	10/22/1900	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Request for chariot wheels
Vol 72	10/23/1900	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Chariot wheels required
413 p.368	11/10/1900	Lt. Col. WAJones, L.H. Engineer	Keeper Ephraim Meekins, Jr.	Shipment of spare governor for revolving machinery
413 p.387	11/28/1900	Lt. Col. WAJones, L.H. Engineer	Keeper Ephraim Meekins, Jr.	Return of wire reel
413 p.396	12/01/1900	Lt. Col. WAJones, L.H. Engineer	Lt Gen DPHeap, 3 rd District L.H. Engineer	Chariot wheels
LB 1377	12/01/1900	WAJones, L.H. Engineer	Light House Board	Monthly report: a spare governor for the revolving mechanism has been repaired and returned to the station
413 p.135	12/10/1900	Lt. Col. WAJones, L.H. Engineer	Keeper Ephraim Meekins, Jr.	Lost package containing governor
413 p.427	12/21/1900	Lt. Col. WAJones, L.H. Engineer	Lt Gen DPHeap, 3 rd District L.H. Engineer	Receipt of chariot wheels
414	02/21/1901	Lt. Col. WAJones, L.H. Engineer	Keeper Ephraim Meekins, Jr.	Shipment of tools
Vol 73	05/11/1901	Keeper PHEtheridge	General Superintendent, USLHB	Unsanitary conditions
"I respectfully call your attention to the fact that Mr. Fouchy, the Asst Supt of Construction, made a survey and recommended that a ditch be				

cut between this station and the back landing creek for the purpose of draining the stagnant water from around this station. I respectfully state that it is not only disagreeable, but it is very unhealthy and is causing lots of malaria and rheumatism and is also taking the drilled men from the station and putting undrilled men in their places.”				
414 p.372	09/18/1901	Lt. Col. WAJones, L.H. Engineer	Commander Ross	Filling up marsh
437 p.109	09/21/1901	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Inspection of revolving machinery, drainage and water supply
<p>“A careful examination was made of the question of draining the pools around the station and the Life Saving Station. They are a very small part of a great mass of marsh on the island, where the malarial mosquito breeds freely. A joint report on the matter will be made with the Inspector of the district.</p> <p>An examination of the water supply showed that not enough of the water from the assistant keepers’ dwelling was put into the main cistern. Also, that the inside of the two small iron tanks which had been set up to increase the supply had been painted with mineral brown paint of very poor quality, and so much iron oxide got into the water from it that it cannot be used for any purpose on account of its staining everything. I will furnish a suitable paint, and also some extra guttering and downspouts.”</p>				
437 p.180	10/02/1901	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Drainage of stagnant water
<p>“ . . . in relation to the drainage of stagnant water around Cape Hatteras Light-Station, we have the honor to state that the condition at this station from stagnant water in the marsh, is very bad, and, in its present state, imperils the health of the keepers of Cape Hatteras Light-House and their families, - and, also, the keepers of the life-saving station. Recommendation is therefore made that an open ditch be cut from the marsh to the back-landing creek, and that shoal spots in the creek be opened up so as to not only drain the stagnant water from the marsh, but to allow tidal water to pass from the ocean into the march at high water; and to fill up a portion of the marsh next adjoining the houses, if funds for the same could be provided.</p> <p>Inasmuch as this question of draining the marsh was first raised by the Life-Saving Service, - and will be of as much benefit to the life-saving station as to the light-station - it is further recommended that the cooperation of the Life-Saving Service in this matter be obtained, and that the expense of draining and filling the marsh be met by both services.”</p>				
Vol 74	10/15/1901	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Board request for estimate on drainage work
414	11/01/1901	John Murdock, Asst Engineer	Keeper Ephraim Meekins, Jr.	Shipment of repaired float chamber
414	11/16/1901	Lt. Col. WAJones,	Keeper Ephraim Meekins, Jr.	Request for estimate for drainage work

p.463		L.H. Engineer		
414	11/20/1901	John Murdock, Asst Engineer	Keeper Ephraim Meekins, Jr.	Shipment of plunger valves for lamps
415 p.233	05/14/1902	Lt. Col. WAJones, L.H. Engineer	Keeper Ephraim Meekins, Jr.	Supplies for telephone battery
437	06/09/1902	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Estimate for repairing cistern
415 p.288	06/18/1902	John Murdock, Asst Engineer	John Hubert, Baltimore	Galvanized kerosene oil tanks
415 p.328	07/07/1902	John Murdock, Asst Engineer	Keeper Ephraim Meekins, Jr.	Shipment of repaired float chamber for lamp
433 p.38	07/08/1902	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Estimate for repairing cisterns and drainage work
415	09/15/1902	Lt. Col. WAJones, L.H. Engineer	Keepers	Perennial flower seeds. Annual flower seeds sent 02/28/1903. Query re flower seeds 04/01/1903.
Vol 75	01/09/1903	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Purchase of stone from old tower ruins by De Forest Wireless Telegraph Company
Vol 75	01/23/1903	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Same as above
416	01/30/1903	Lt. Col. WAJones, L.H. Engineer	Keepers	Circular for care of chimney flues and stovepipes
Vol 76	02/11/1903	USLHB Engineer Secretary	Lt. Col. WAJones, L.H. Engineer	Stone from old tower
<p>“ . . . the Board authorizes you to consider that the De Forest wireless Telegraph Co. of Washington, DC, want stone for the foundation of their tower for the wireless telegraph station near Cape Hatteras, NC, to make one hundred cubic yards of concrete.”</p>				
433 p.317	02/27/1903	Lt. Col. WAJones, L.H. Engineer	Light-House Board	Use of stone from old tower ruins

“ . . . in order to dispose of this property, it will be necessary to have a public auction. About 60 cubic yards of stone will be required. While I do not approve of disposing of this stone, which will, sooner or later, be required in repairs and improvements at this station and which can only be replaced at considerable expense, it might, perhaps, in the interest of science, be well to grant this request under lawful restrictions.”

Vol 76	04/13/1903	Capt CHHutchins, USLHB Eng Secy Secretary	Lt. Col. WAJones, L.H. Engineer	Beacons to mark harbor behind Cape Hatteras
Vol 76	04/18/1903	Capt CHHutchins, USLHB Eng Secy Secretary	Lt. Col. WAJones, L.H. Engineer	Beacons to mark harbor behind Cape Hatteras
434	09/10/1903	L.H. Engineer and Inspector	Light-House Board	Signaling systems
417 p.162	02/02/1904	John Murdock, Asst Engineer	Keeper Ephraim Meekins, Jr.	Shipment of telephone supplies
417 p.326	05/09/1904	John Murdock, Asst Engineer	Keeper Ephraim Meekins, Jr.	Repair of insect screens
417 p.412	06/15/1904	Lt. Col. WAJones, L.H. Engineer	Keeper E. Meekins, Jr.	Bill for boarding workmen

Part IV: Cape Hatteras Beacon Light (1862 - 1900)

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
354 p.157	03/26/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Civil War: Inspection of damages
“. . . I have the honor to report the Light House Tower as uninjured. . . I also visited the structure for the Beacon Light, and found both it and the Lantern uninjured. The Lens (6 th order) and Pedestal are removed but a new one can be set up ready for lighting in a day.				
354 p.172	04/19/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	Military Guard; relighting; location of old lens
“. . . As regards the relighting of the Beacon Light, I would respectfully suggest that Mr. Smith be authorized to do so at once on his arrival. Its effect could not I think be injurious to vessels outside the Shoals, while to the large number using the Swash passage it would be of the greatest Service. I was repeatedly urged while at the Inlet to authorize the hanging up of a common Signal Lantern in the Beacon, which would have been considered a great boon.”				
354 p.275	09/30/1862	WJNewman Acting Eng	Commodore WBShubrick Chairman, USLHB	1862 Annual Report
“March 13 th 1862: Received instructions to go to Cape Hatteras and make an inspection of the Light House, etc. On the 26 th reported results to the Light House Board and was authorized to fit out a vessel and work party to make the repairs and set up Lenses in the Light House and Beacon.”				
LB 170A	10/04/1864	JPSmith, Acting L.H. Engineer	Rear Adm WBShubrick, Chairman, USLHB	Annual Report
“. . . The dwelling house and Beacon when visited were in fair repair and will only require incidental repairs during the coming year. In November last a new stove and pipe were furnished to the Beacon.”				
LB 432C	03/04/1878	OEBabcock L.H. Engineer	Prof. Joseph Henry, Chairman, USLHB	Report of Keeper on Beacon
“I have the honor to report that the lighthouse properly under my charge is in good order excepting the beacon light. It leaks awful bad on account of the tin being off of the roof of it. The property in it is damaging very much on account of being wet so much. . . . If no repairs are made at the station, it must be abandoned as uninhabitable in a short term.”				

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
LB 432C	03/20/1878	OEBabcock L.H. Engineer	Prof. Joseph Henry, Chairman, USLHB	Estimate for repairing Beacon
382	03/03/1881	OEBabcock L.H. Engineer	F.J. Higginson, Inspector	Use of <i>Violet</i> to transport Engineer and materials to re-establish the Beacon
LB 592	07/06/1883	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Necessity of restoring
<p>A . . . while examining the Hatteras Shoal, my attention was invited by the pilot and others to the importance of the Hatteras Beacon Light, which was extinguished by order of the Board June 30, 1879.</p> <p>When this light was lit, coasting vessels going north or south passed generally at night through the slough channel, the beacon affording them a certain and safe point of departure. Now, all have at night either to anchor or go around both shoals, often times attended with great danger.</p> <p>The old beacon is standing; an expenditure of \$1200 to \$1500 would restore the light. There are ample quarters at Cape Hatteras for the additional keeper. The light can be superintended, as before, by the Keeper at Cape Hatteras Light Station.</p> <p>I respectfully urge the re-establishment of this light in furtherance of the coasting trade and security of human life.”</p>				
LB 592	07/06/1883	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Recommendations, etc., for re-establishment
<p>“ . . . we [proceeded to sea at 5 a.m., reached the shoal at 7 a.m., and passed in between the AInner” and AOuter Diamond.” We sounded up to within (not to exceed) 200 yards of the breaker on the NW side of the Outer Diamond. We found no sounding less than 17 feet and to appearance this depth was carried almost to the reef itself.</p> <p>I had taken with me six wooden piles and hose for pumping them down, had we found a depth of water and state of sea that would warrant the attempt, its object being to test the possibility of putting a beacon or light on the shoal. . . .</p> <p>I am, therefore, of the opinion that placing a beacon or a lighthouse on the AOuter Diamond” itself is practicable, and though its construction will be expensive and attended with danger, I think the importance to commerce so great that the work should be done. . . . I think a lighthouse not less than 80 or 100 feet high should be built, to be attended and lit nights like other lighthouses.</p> <p>In my opinion a pier, built on the same principle as the ocean pier at Coney Island, Long Branch, and other plans, can be constructed from a point on the inside of the shoal on to the very shoal itself. This pier built, it could be enlarged on the shoal to such size as necessary, to form a platform from which to put down the foundation of a lighthouse, built after the same principle. . . . The greater items of expense in construction would be the use of a steamer, . . . the loss of time waiting for suitable weather, and the loss of material while at work. As soon as a sufficient portion of the pier has been constructed, the engine derrick and working outfit can be transferred to it and the work be prosecuted</p>				

without the annoyance and difficulty attending the rolling of the vessel.”				
LB 592	10/12/1883	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Estimate of \$12 - 1500 for relighting by Dec 15.
LB 592	11/15/1883	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Relighting
<p>“I have the honor to inform the Board that the Hatteras Beacon, NC, will, provided the lens and outfit are sent in time, be ready for lighting on Dec 15, `883. The tender <i>Jessamine</i> has left for NC with the necessary material to make the repairs.</p> <p>The characteristics will be the same as when extinguished and I enclose form of Notice to Mariners made up from former description.”</p>				
LB 592				Notice to Mariners
<p>“Notice is hereby given that, on or after December 15, 1883, a light will be shown from the old Cape Hatteras Beacon. The light will be Fixed White. The illuminating apparatus is catadioptric, of the 6th order, and 25 feet above mean low water. The light should be seen in clear weather, from the deck of a vessel 15 feet above the water 9 miles. The structure is a wooden frame surmounted by a lantern, the whole painted red.”</p>				
LB 592	01/01/1884	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Monthly report of operations
<p>“Cape Hatteras Beacon: The weatherboarding of the old structure was restored, new steps were supplied, a new door was fitted in, a new tin roof put on, window sash repaired, and the entire structure painted. The light was re-exhibited for the benefit of mariners on the 15th of the month, in accordance with the published notice to mariners.”</p>				
LB 592	07/01/1884	OEBabcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Annual Report
<p>“Cape Hatteras Beacon, one-fourth of a mile from the southern extremity of Cape Hatteras point, North Carolina: The necessary steps for the re-establishment of this light in accordance with the instructions of the Board were taken in December. The weatherboarding of the old structure, which had received no attention since the discontinuance of the light in 1879, was restored, new steps were supplied, a new door was fitted in, a new tin roof put on, the window sashes were repaired, and the entire structure was painted. The light was re-exhibited for the benefit of mariners on the 15th of December.”</p>				
391	02/2/1885	Jared Smith L.H. Engineer	Chairman, USLHB	Report on beacon
<p>“I have to submit the following regarding the necessity for a more substantial structure for a new beacon at Cape Hatteras. . . . The beacon now standing is old and insecure besides being very inconvenient and much out of repair. . . . The location is distant about one mile from the main</p>				

light and dwellings at Cape Hatteras, where the Keeper and three assistants are quartered. . . . It is probable that with some repairs the iron work to be removed from the present station at Croatan may be made to serve an excellent purpose for the foundation upon which to build a new house surmounted with the lantern. There are no suitable facilities for moving the dwelling at Croatan entire and it can hardly be utilized in any other way, so that a new dwelling and lantern will be required. . . . It will probably require an expenditure of eight thousand dollars (\$8,000).				
392	06/25/1885	Jared Smith L.H. Engineer	Chairman, USLHB	Estimate for cheaper beacon - \$2,500
Vol 49	03/11/1886	DPHeap, USLHB Engineer Secretary	Capt JFGregory, L.H. Engineer	Transmittal of specifications
Vol 50	08/20/1886	DPHeap, USLHB Engineer Secretary	Capt JFGregory, L.H. Engineer	Authorization for 12 panes of plate glass
396	10/13/1886	James Gregory L.H. Engineer	Wm. Kemp, Cape Hatteras Beacon	Taking over superintendence of the work; instructions for painting and lantern doors
396	10/14/1886	James Gregory L.H. Engineer	Ramsey & Co., Laurel Point, MD	Account cannot be paid on incomplete contract
396	12/1/1886	James Gregory L.H. Engineer	Chairman, USLHB	Notice to Mariners
"I have the honor to report that the light of Cape Hatteras Beacon was transferred from the old to the new structure on the 22 nd of November 1886. No new >Notice to Mariners' or description is required as the new occupies, to all intents and purposes, the position of the old structure."				
396	12/1/1886	James Gregory L.H. Engineer	Chairman, USLHB	Delays in completion of the new beacon
LB 789	06/25/1889	JCMallery, L.H. Engineer	Chairman, USLHB	Inspection Report
"This beacon is in excellent order. The ocean has advanced twenty feet upon this beacon in the past year and the high water line is now about 80 feet distant."				
LB 789	06/30/1889	JCMallery, L.H. Engineer	Chairman, USLHB	1889 Annual Report
"No repairs made. The beacon is in excellent order."				

<p>The following recommendations made in the annual Report for 1887 are renewed: >The third assistant light-keeper at this station is in charge, under the principal keeper, of the Cape Hatteras Beacon. There is no room for him in the keepers' dwelling. His duties pertain entirely to the beacon, and as it is desirable to have him as near it as possible, it is deemed necessary to put up a cottage for him in that immediate vicinity. This can be built for \$3,500'."</p>				
403	1/25/1890	JCMallery L.H. Engineer	Light-House Board	Notice to Mariners
<p>"Change in position of Cape Hatteras Beacon: Notice is hereby given that the position of Cape Hatteras Beacon, North Carolina, has been changed to a position two hundred yards nearer the main light on the same range."</p>				
425	11/18/1895	E.H. Ruffner L.H. Engineer	Light-House Board	Encroachment of the sea
<p>"I have the honor to report that a telegram, dated November 15, 1895, has been received from the keeper of the Cape Hatteras, N.C., beacon, stating that the beach has been cut away 35 feet in 24 hours, that the eastward piling the beacon is in the water, and that it should be moved at once; also that the keeper of Cape Hatteras Life Saving station has the key to the structure and will save the apparatus in case of emergency, if possible. This beacon was re-established December 1, 1888, on what was thought at the time to be a secure site. On January 25, 1890, it was moved 200 yards nearer the lighthouse, because of the threatening advance of the high-water line of the ocean. It would probably cost as much to save and remove the structure as to erect a new one. I respectfully recommend that nothing be done in the matter at present. It is possible the sea may recede, as its rapid advance was not doubt due to a severe storm which is now over. The light is not a very important one, and in the event of the destruction of the present structure, if the further continuance of the light is considered necessary, a post could be set up on the beach and provided with a lens lantern, which would answer every requirement. The keeper has instructions to maintain a light on the beacon as long as possible and to report and further damage at the site."</p>				
Vol 63	11/20/1895	Engineer Secretary	E. H. Ruffner, L.H. Engineer	Approved Ruffner's recommendations in previous letter
427	12/11/1896	E.H. Ruffner L.H. Engineer	Light-House Board	Beacon rendered useless and replaced with a post; language for Notice to Mariners issued 12/15/1896
<p>"Notice is hereby given that, on November 25, 1896, the beacon near the point of Cape Hatteras, N.C., having been submerged during a recent storm, a light was shown (and will be continued until further notice) from a post painted brown erected about 275 feet nearer the first-order light and about 25 feet westward of a straight line joining the beacon with the main light. The new light is fixed white, shown from a lens lantern. Its focal plane is 35 feet above mean high water."</p>				
427	12/31/1896	E.H. Ruffner L.H. Engineer	Light-House Board	Summary of changes in beacon

429	1/19/1898	WA Jones L.H. Engineer	Lighthouse Board	Change lamp to a 5 th -order bottom draft lamp
429	2/7/1898	E.H. Ruffner L.H. Engineer	Light-House Board	Inspection report for January 28, 1898 visit
<p>“The structure is in very good order in ass respects, except that it needs painting. The pole and lantern for use in case the beacon is washed away is also in good order. If this lens lantern is to be used to replace permanently the beacon, I would recommend that the change be made at once. The beacon structure has a good lantern and valuable lens which are liable to loss or serious damage in case the structure should be carried away by the seas. This is liable to happen at any time. I think the beacon structure can be maintained in its present position by raising the house until its floor will be too high for a storm wave to lift it from below, but since the site itself may wash away, or the shore line move inland so as to render it inaccessible, it will probably be best to abandon it.</p> <p>It is to be noted that the description of this light in the >List of Lights, etc., 1897,’ covers the post and lens lantern, and not the structure in actual use.”</p>				
LB 1256	05/27/1899	WAJones, L.H. Engineer	Light-House Board	Encroachment of the sea
<p>“Accompanied Dr. Henry B. Pritchett, Member, and Major B.L. Hoxie, Engineer Secretary of the Board, in an inspection of this station. Sea has wholly encroached on the site of this beacon, and the structure is now in the water and inaccessible except by boat. The lens has been removed to a place of safety, and the light is now exhibited from a lantern on a post that can be moved by the keepers in case of further encroachment of the sea.”</p>				
LB 1256	06/01/1899	WAJones, L.H. Engineer	Light House Board	Monthly progress report: The beacon light pole has been moved to a safe position above tide water
Vol 70	07/06/1899	Engineer Secretary	William A. Jones, L.H. Engineer	Requesting details of new position of pole
431	07/11/1899	WAJones, L.H. Engineer	Light House Board	Position of beacon pole
<p>“ . . . the position of the beacon light pole at Cape Hatteras, N.C., was changed by the keepers, with the assistance of the Life Saving Service employees, on February 24, 1899. It was moved 145 yards to the northward of its former position, and it stands at present about 4,750 feet (somewhat more than three-fourths of a nautical mile) N. 2 E. from Cape Hatteras light-tower.”</p>				
431	08/24/1899	WAJones, L.H. Engineer	Light House Board	Beacon destroyed in storm of August 15 th - 19 th
431	09/02/1899	WAJones,	Light House Board	Beacon reerected on the same site on August 24 th

		L.H. Engineer		and the light reestablished
431	11/27/1899	WAJones, L.H. Engineer	Light House Board	Inspection report
“The lens, lamp and outfit from the Hatteras beacon tower, whose site has been washed away, were taken on board the <i>Jessamine</i> .”				
432	2/27/1900	L.H. Engineer & L.H. Inspector	Light-House Board	Report on proposed H.R. Bill 893 to establish new light beacon
“A fixed white light is now maintained near the southern extremity of the point of Cape Hatteras, about 3/4 of a mile from the main light, being a fixed white lens lantern light, shown 36 feet above the beach, from a post; which in our opinion fully covers all requirements of navigation in that vicinity, as this light in range with Cape Hatteras light indicates the general position of the shoals off the Cape. We would, however, recommend considerable improvement in this light, by the erection of a new post fitted with guide-rods to prevent the lantern from swinging, and an improved method of raising and lowering the lantern.”				
LB 1327	03/06/1900	WAJones, L.H. Engineer	Light House Board	\$30,000 is sufficient for establishment of the beacon
LB 1327	04/20/1900	WAJones, L.H. Engineer	Light House Board	No funds available for improvement
LB 1327	06/30/1900	WAJones, L.H. Engineer	Light House Board	1900 Annual Report
“The light-post was overthrown by the severe storm of August 15-16. It was reerected and the light reestablished on August 24.”				

Part V: Attempts to light the Outer & Inner Diamond Shoals (1883)

(Needs to be completed - See red binder with originals)

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
LB 592	07/06/1883	OE Babcock L.H. Engineer	Vice Adm Stephen C. Rowen, Chairman, USLHB	Recommendations, etc.
<p>“ . . . we [proceeded to sea at 5 a.m., reached the shoal at 7 a.m., and passed in between the AInner” and AOuter Diamond.” We sounded up to within (not to exceed) 200 yards of the breaker on the NW side of the Outer Diamond. We found no sounding less than 17 feet and to appearance this depth was carried almost to the reef itself.</p> <p>I had taken with me six wooden piles and hose for pumping them down, had we found a depth of water and state of sea that would warrant the attempt, its object being to test the possibility of putting a beacon or light on the shoal. . . .</p> <p>I am, therefore, of the opinion that placing of a beacon or a lighthouse on the AOuter Diamond” itself is practicable, and though its construction will be expensive and attended with danger, I think the importance to commerce so great that the work should be done. . . . I think a lighthouse not less than 80 or 100 feet high should be built, to be attended and lit nights like other lighthouses.</p> <p>In my opinion a pier, built on the same principle as the ocean pier at Coney Island, Long Branch, and other plans, can be constructed from a point on the inside of the shoal on to the very shoal itself. This pier built, it could be enlarged on the shoal to such size as necessary, to form a platform from which to put down the foundation of a lighthouse, built after the same principle. . . . The greater items of expense in construction would be the use of a steamer, . . . the loss of time waiting for suitable weather, and the loss of material while at work.</p> <p>As soon as a sufficient portion of the pier has been constructed, the engine derrick and working outfit can be transferred to it and the work be prosecuted without the annoyance and difficulty attending the rolling of the vessel.”</p>				
LB 789	06/25/1889	JCMallery, L.H. Engineer	Chairman, USLHB	Inspection Report
<p>“I visited Diamond Shoals off Cape Hatteras and went alongside the outside of the Outer Shoal. There were no breakers at this time, altho the wind had been very high from the north on the previous night and there was quite a ground swell running. The pilot said it was very unusual and accounted for it by saying that there was no current at the time, the wind having counteracted the current which had been produced by the southeasterly winds which had prevailed for several days previously. I saw breakers on this shoal from the Cape Hatteras tower when the wind was from the southwest and not strong. I doubt whether there is a shoal water on the Outer Shoal as is given on the chart (five feet) because there were breakers on the Inner Shoal and the least depth on it according to the chart is 4 feet. There was a wreck on the south point of the Outer Shoal. The foremast was standing. The vessel, a three-masted schooner was wrecked in January last and the foremast has stood through all the gales of the winter and spring.”</p>				
LB		JCMallery,		

Vol.	Date	Engineer/ Correspondent	Recipient	Topic
789	06/30/1889	L.H. Engineer	Chairman, USLHB	1889 Annual Report
<p>“Outer Diamond Shoal: AAn appropriation of \$200,000 with the privilege of contract at not to exceed \$500,000, has been granted by Congressional Act (approved March 2, 1880), and it is hoped with the means provided and in prospect, that the difficult problem of safely and effectively lighting this most dangerous locality, will be solved in the near future.”</p>				
Vol 62	05/04/1895	USLHB Engineer Secretary	Capt Eric Bergland, L.H. Engineer	Request for abstracts of references to beacon or boring frame on Diamond Shoal
LB 1055	05/07/1895	Eric Bergland, L.H. Engineer	Light-House Board	Keeper reports on experimental structure on Diamond Shoal
LB 1055	05/08/1895	Eric Bergland, L.H. Engineer	Light-House Board	Keeper reports on experimental structure on Diamond Shoal
LB 1055	05/11/1895	Eric Bergland, L.H. Engineer	Light-House Board	Tender <i>Jessamine</i> unsuitable for use on Diamond Shoal
LB 1055	05/10/1895	Henry Corban	Eric Bergland, L.H. Engineer	Tender <i>Jessamine</i> unsuitable for use on Diamond Shoal
LB 1055	06/07/1895	Eric Bergland, L.H. Engineer	Light-House Board	Keeper reports on experimental structure on Diamond Shoal
LB 1256	04/27/1899	WAJones, L.H. Engineer		Need for hydrographic survey of Diamond Shoals
LB 1256	04/27/1899	WAJones, L.H. Engineer	Light-House Board	Blanchard proposal
LB 1256	05/31/1899	WAJones, L.H. Engineer	Light-House Board	Inspection
<p>“Accompanied Dr. Henry B. Pritchett, Member, and Major B.L. Hoxie, Engineer Secretary of the Board, in an inspection of this station. Same is in excellent order. Accompanied Major Hoxie in a trip in the life boat of the US Life Saving Service to the Outer Diamond Shoals. No trace of the steel beacon placed there in October last could be found.”</p>				

** Unless noted these are volumes from National Archives Record Group 26 Entry 3 (NC-63) "Records of the Fifth Light-House District (Baltimore), 1851 – 1912. 'LB' stands for Letterbooks found in RG 26 Entry 24.