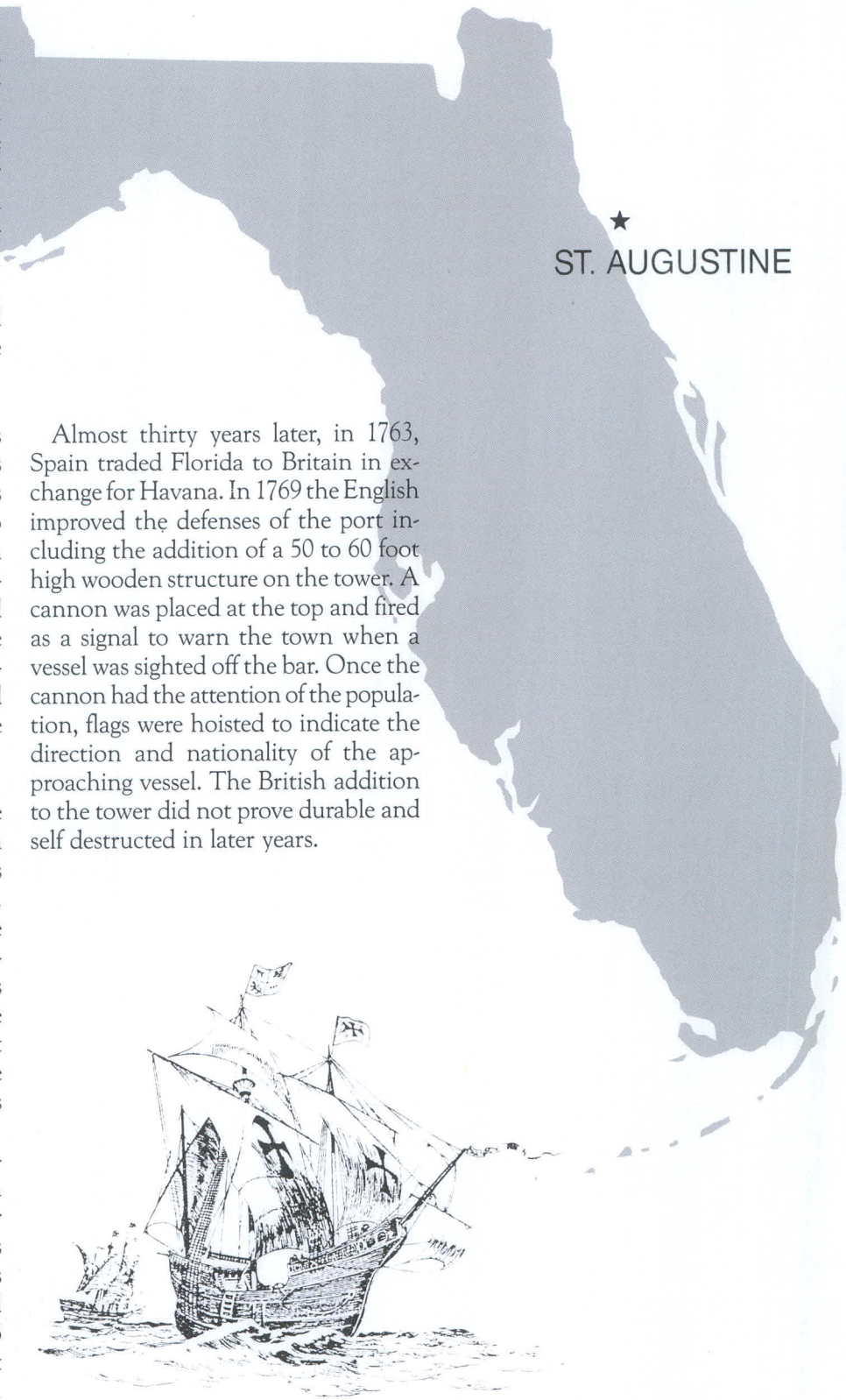
St. Augustine Lighthouse

by Theresa J. Spinella



Inspired by West Indian tales of gold and a fountain giving perpetual youth, Juan Ponce de Leon, Spanish Governor of Puerto Rico, reached Florida's eastern shore on April 2, 1513. He landed between (what are now called) the St. Augustine Inlet and the St. John's River. He claimed the land for Spain and named it "La Florida", land of the flowers.



In 1564 when French Huguenots established Fort Caroline, five miles from the mouth of the St. John's River, King Philip of Spain sent Pedro Menendez de Aviles with an expedition against the colony. Mendendez conquered the French the next year and erected a fort at St. Augustine. Thus he is credited with founding the first permanent European settlement in the United States and St. Augustine is called "The Nation's Oldest City."

Part of the defense of St. Augustine was a series of wooden watch towers from which soldiers scanned the horizon for signs of ships. The tower on Anastasia Island, near the current lighthouse, was the most important of these. The possibility that this tower might have displayed a lamp at the top is interesting to contemplate, for that would make it the first lighthouse in the New World. However, this theory has never been proved.

In 1737 the wooden tower was replaced by an unconsecrated chapel with a stone tower, taller than the old tower to increase visibility. The structure was made of coquina which is a soft, porous limestone material composed of shell and coral fragments. It is soft enough to be quarried with a pick or axe but hardens when exposed to the elements.

Almost thirty years later, in 1763, Spain traded Florida to Britain in exchange for Havana. In 1769 the English improved the defenses of the port including the addition of a 50 to 60 foot high wooden structure on the tower. A cannon was placed at the top and fired as a signal to warn the town when a vessel was sighted off the bar. Once the cannon had the attention of the population, flags were hoisted to indicate the direction and nationality of the approaching vessel. The British addition to the tower did not prove durable and self destructed in later years.

A 1783 treaty, part of the settlement of the American Revolution, returned Florida to Spain. In 1784 the structure was described as "a solid stone building, in the manner of an ancient Moorish castle, with ports and battlements. But of the tower, the upper part is merely of wood, and so decayed that it shakes with the slightest wind." Engineering reports during the second Spanish occupation state that repairs were frequent, the building was whitewashed and that a storehouse for powder and a kitchen had been constructed. Toward the end of the second Spanish period the tower again fell into disrepair. During the ensuing years neglect and the elements took their toll. By the time the territory of Florida was ceded to the United States in 1821, only the stone work remained.

Within a few months of the exchange of flags it became apparent that there was a need to establish a lighthouse near the entrance to St. Augustine, Florida's busiest port. The bar channel was treacherous and the shifting sands, called "Crazy Banks", was the dread of all mariners who sailed into the port.

The old Spanish tower was examined and described as a 44 foot high, three story stone structure in a good location, "but a great proportion of it, nearly one half, was not sufficiently strong to bear any greater elevation of either wood or stone work." Also noted was the fact that the tower was near "a valuable quarry of calcareous stone, which has, for a long time, furnished materials for the public and private buildings of St. Augustine." The 1/4 tower compound was surrounded by a ten foot high, 16 inch thick stone wall and included an additional small building.

After Florida became part of the United States in 1821, $5,000 was appropriated to repair and enlarge the old building and put it into service as a lighthouse. The man in charge was St. Augustine's controversial, often embroiled, Collector of Customs, John Rodman. He wrote to Washington in April of 1823:

"It appears that there has been a great mistake, in the representation made to Congress in regard to this structure. It never was built for a lighthouse, or used as one, but merely a look-out house. The location is well suited however, for a light-house, but a great proportion of the tower, nearly one half, is not sufficiently strong to bear any greater elevation either of wood or stone work...I take the liberty to suggest that the whole of the work may be erected by persons now living here , either by contract or daily hire." He was suggesting that a new structure be built.

On July 7, 1823 Rodman reported to Washington:

"I have made a contract with Mr. Elias Wallen, of this city, for the building of the Light House at the entrance of this harbor. It is to be completed by the first day of November next...the terms agreed upon are $5,000 for the whole of the work, to be paid when entirely finished, according to my satisfaction."

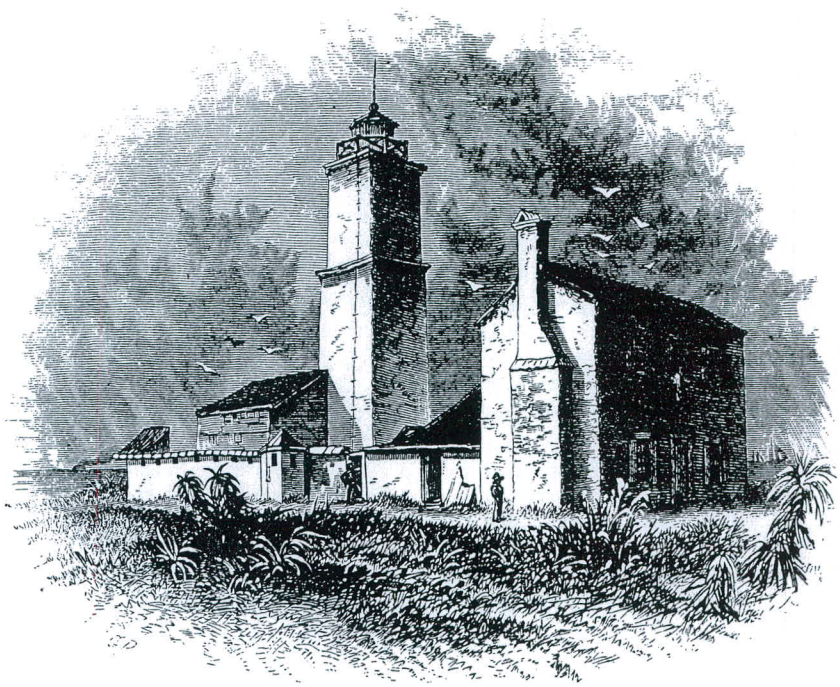
There was protest over letting the contract. Dirk Fleishman complained to Washington that his bid to build the lighthouse had not been fairly considered. Rodman replied in August:

"I beg leave to state, that this Mr. D. Fleishman is a man of no respectability or standing in this community—a miserable botch carpenter..." And went on to praise Elias Wallen as "A man of respectability and fair character here, resident in the place with his family...he is from Savannah in Georgia, where for the last six years he has built upward of twenty large houses...and I am well persuaded that he knows more about the business than Mr. Fleichman...I was told some days ago, that this person with two or three of his stamp [ilk], the lowest and most abandoned men in this place, had got up a protest on account of my having made a contract with Mr. Wallen."

On January 6, 1824 Collector Rodman wrote:

"I have the honor to inform you that the light house, with exception of mounting the lantern, has been, for some time past, completed in the most satisfactory manner."

On March 16 of the following year, oil and the $1,000 Winslow Lewis illuminating apparatus of "ten patent lamps with 14 inch reflectors, oil butts and every other article necessary" had arrived and was installed. Several weeks later keeper Andreau was appointed by the President of the United States and on April 3, 1824 the lamps were lighted for the first time. After nearly 250 years St. Augustine boasted the first official lighthouse in Florida.



Old Spanish Tower

During the ensuing years improvements were made, the tower was gradually raised from 30 to 52 feet and in 1855 a more efficient 4th order Fresnel lens replaced the outdated reflector system.

In 1859 tragedy struck when Keeper Joseph Andreau fell to his death when the scaffolding gave way as he was whitewashing the tower. His widow was named to succeed him and became the first female keeper of the St. Augustine lighthouse.

At the beginning of the Civil War Confederate Captain George Gibbs ordered the light extinguished to deny its use to the blockading Union Navy. A raiding party dismantled the lens and moved down the Florida coast extinguished other lighthouses as well. Some thought that the action taken by the Confederates hindered local shipping more than the Union forces. In 1862 the area was seized by the Union and the lens reinstalled, but it was not lighted until the war was over.

In the Fall of 1866 preparations were made for relighting the lighthouse. Extensive repairs were made and a new lens was installed. On the night of June 1, 1867 the light was relighted and the following "Notice to Mariners" was published:

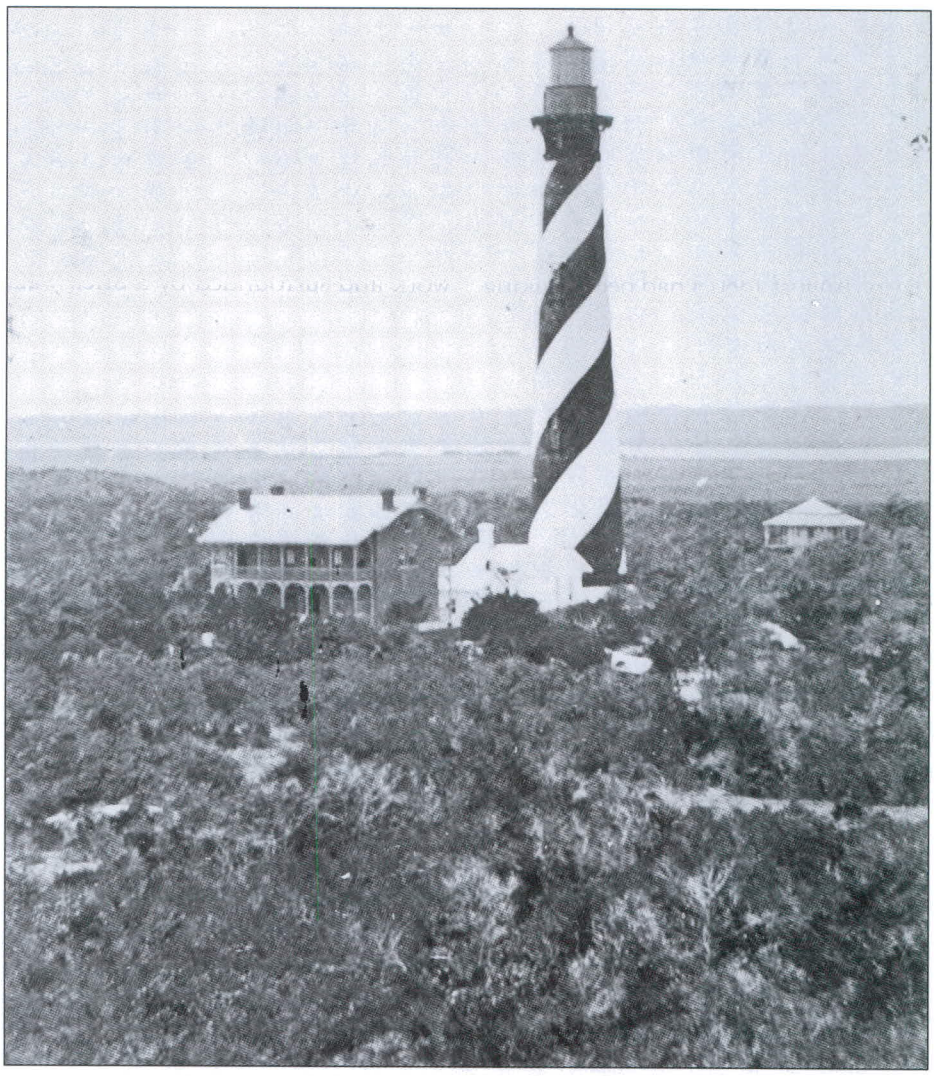
"Notice is hereby given that on and after June 1, 1867 the light at St. Augustine, Florida will be re-exhibited. The light is on the north end of Anastasia Island, south side of the entrance to St. Augustine. The focal plane is 57 feet from the sea level and should be seen a distance of 13 nautical miles. The lens is of a 4th Order, white , fixed varied by flashes with intervals of 20 seconds and illuminating an arc of 360 degrees. The tower is white surmounted by a lantern painted black. The keeper's dwelling in front of the tower, seaward, is two stories high and painted white."

However, it soon became apparent that the lighthouse was threatened by erosion from the sea. An 1870 survey of the situation stated that the dwelling would be damaged or destroyed within a year. Various methods of protecting the station were discussed and all dismissed in favor of constucting a new tower. The decision was also made because of the height of the tower. The nearest major light was at Mosquito Inlet [Ed.—now called Ponce Inlet] some 60 miles south. The Lighthouse Board reasoned that constructing a new tower of at least 150 feet, and installing a 1st Order Fresnel lens, would greatly increase the range of the light and, coupled with that of Mosquito Inlet, would provide ample illumination for that stretch of the coast.

A site was selected near the old one, but farther back from the water and on higher ground. And as there had been controversy about the contract for the old lighthouse, there was intrigue involved in the purchase of land for the new structure.

Dr. Charles W. Ballard of Albert Lea, MN, owned the land and had arranged with local authorities to sell either 5 acres for $500, or his whole tract for $2,000. But things dragged on and on September 18, 1871 Dr. Ballard wrote:

"...some outside parties' politicans had made a claim upon continguous lands, hoping to sell them to the department for a high price...and I have suspected that my sale has hung fire in consequence of some underhanded action of their's...I have heard indirectly that the parties interested in having the location changed to their own lands as they...would endeavor to make my title appear defective. This they cannot do except by fraud, but the present stripe of Florida Politicians will be anything for a chance to make money." Strong words indeed!



The present St. Augustine Lighthouse as seen from the top of the old Spanish lighthouse circa 1876. Photo courtesy of the Lighthouse Museum of St. Augustine.

Ballard's land was finally purchased on May 16, 1872 and the government got on with the construction of the new, present, tower. The man in charge of the project was Hezekiah Pittee (1826-1918). A native of Maine, Pittee was for many years superintendent of lighthouse construction along the Atlantic Coast.

In March of 1872 Congress approved the Lighthouse Board request for $60,000 for the new structure. By July the foundation and base of the tower was completed but work was suspended for lack of funds. An additional $20,000 was appropriated and work resumed. By this time the sea had reached to within 35' of the old tower. An additional appropriation to finish construction was granted in 1873 and that October 15 the new tower sporting a 1st Order lens was completed at a total cost of $100,000. None too soon, as the sea had crept to within 10 feet of the old tower.

Miss Ruby Harn, daughter of the lighthouse keeper, had this recollection of the fall of the old tower, a few years after its replacement was completed:

"One Sunday afternoon, on the 22nd day of August 1880, I had been walking on the beach with my friend, Eugenia Jones. As we came to the old light house, she said 'lets go up in the tower.' We went up and wrote our names on the old whitewashed walls [Ed. graffiti goes a long way back!], among many others. We had just come down and walked a short distance up the road when the old tower came down with a crash. The family at the keepers house heard the crash and rushed out to see what it was, and the old Tower was gone." By 1914 all remains were completely submerged at low tide.

The new tower, constructed of brick and iron, is the fustrum of a cone and rests on the fustrom of an octagonal pyramid. There are five windows at various levels and eight flights of spiral stairs. The first order Fresnel lens provides a fixed characteristic with a flash every 30 seconds, the focal plane 161 feet above the water.

The light is visible for 19 miles. The tower, like that at Cape Hatteras, is painted with distinctive white and black spirals. However, the lantern of St. Augustine is red, while the Cape Hatteras lantern is black.

In 1875 work began on the conquina and brick duplex for the three keepers of the station and their families. The handsome two story structure, with verandas front and rear, was trimmed with white Victorian gingerbread woodwork and surrounded by a brick wall. Two large patterned Victorian brickwork chimneys served the dwelling's eight fireplaces. Today the keeper's dwelling and tower are the oldest surviving brick structures in St. Augustine. Brick was generally not available for local buildings, but because this station was contracted by the government bricks were used.

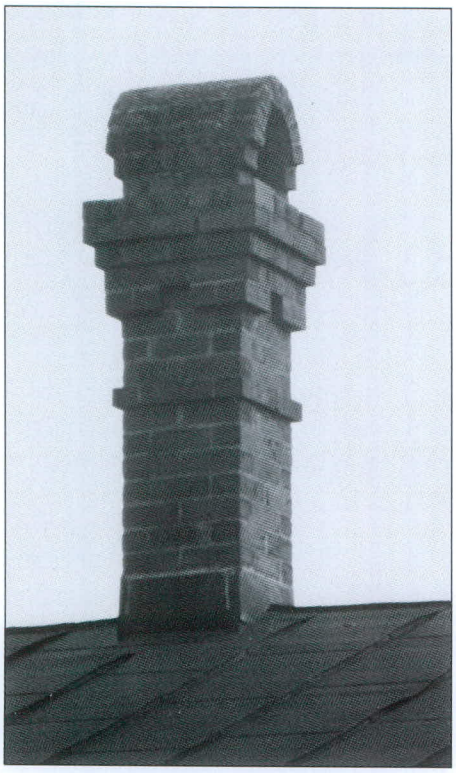
One of the first keepers of the new station was W.A. Harn and after his death his wife was appointed keeper. The family was well thought of for their graciousness to tourists who came to the lighthouse which became a tourist attraction the day it was finished. A local newspaper article stated: "Every habitue of St. Augustine the past years will recall Mrs. Harn and her family of interesting daughters who contributed so much to the pleasure of their visits to the lighthouse...by her gentle courtesy."

In 1886 a pioneer beach development of homes and resorts was constructed that surrounded the station. Long time residents of that complex recall the keepers being known for their hospitality. Newspaper articles of the day recount the keepers serving roasted oysters, clam chowder and turtle stews to visitors and neighbors. Organized festivities on national holidays were held on the spacious gounds and the public often picnicked within the walls of the station.

The keeper's duplex was enlarged in 1888 with the addition of two substantial 14 by 16 foot brick kitchen wings



Ruins of the old Spanish Lighthouse circa 1887.
Photo courtesy of the Lighthouse Museum of St. Augustine.



with copper plated roofs and matching chimneys; they replaced the original wooden kitchens. The next improvement occured in 1907 with the installation of baths and plumbing and a windmill to pump water. The grounds once contained a formal garden and the flora of the area matured and was described by an 1914 report as "dense live oak, magnolia, cedar, holly and palmetto scrub."

As a defensive measure a telephone was installed during the Spanish American War between the station and the City of St. Augustine, however a private telephone wasn't installed until 1914. A signal tower was also constructed and the keepers were supplied with international signal flags, a code book and binoculars. Local politicans feared that a Spanish attack was imminent and felt sure that the Spanish Navy, remembering their old colony of St. Augustine, would come sailing into the harbor with guns blazing. During World War I the station was off limits to the public.

In 1936 the station was electrified. The *Florida Times-Union* reported:

"Effective tomorrow night, March 1, the final step in the progression from the lard oil lamp of 1871 to the use of the more modern electric current will be completed at Asastasia [St. Angustine] Lighthouse, one of the largest and best known of the lighthouses along the coast...Originally lard oil lamps were used in the tower. Then the march of progress brought the wick burning kerosen lamp. The lamp of the mantel type [I.O.V.] was the next step...and now an electric bulb of 1,000 watt power, is in place."

With the coming of electricity the 2nd Assistant position was abolished. It was no longer necessary for a keeper to remain on watch in the lantern room winding the clock weights and tending the fuel oil fired lamp. Prior to this the clockworks had to be rewound every two hours and the wicks periodically trimmed. The old oil lamp burned 2 gallons of kerosene a night and that had to be carried up the 222 steps of the tower. The original lamps used lard oil. This was supplanted by kerosene in the 1880's and then IOV (Incandescent Oil Vapor) lamps were installed around the turn of the century. On March 1, 1936 the miracle of electricity provided a beam of light of 450,000 candlepower, visible over 19 miles at sea.

During the second World War many navigation lights were extinguished, however St. Augustine remained in operation but at a reduced intensity. German submarines would lie on the surface just east of the shipping lanes and destroy ships which, while running dark, would be illuminated by the light from a lighthouse. Thus, the candlepower of the St. Augustine light was reduced from 450,000 to 20,000 and reports indicated that the loss of shipping was "materially reduced by this important action."

In 1955 daylight control apparatus was installed to turn the lamp off during daylight hours, a lamp changer added to replace a burned out lamp and an engine-generator set installed to provide electricity should commercial power fail. These advancements fully automated the lighthouse and the last keeper, James L. Pippin, retired in July of that year. Because the quarters were no longer needed they were rented to a private individual and then ordered vacated. That action was to prove a costly mistake.



Top—A close up of one of the kitchen chimneys and the copper clad roof. Photo by Dan Spinella.

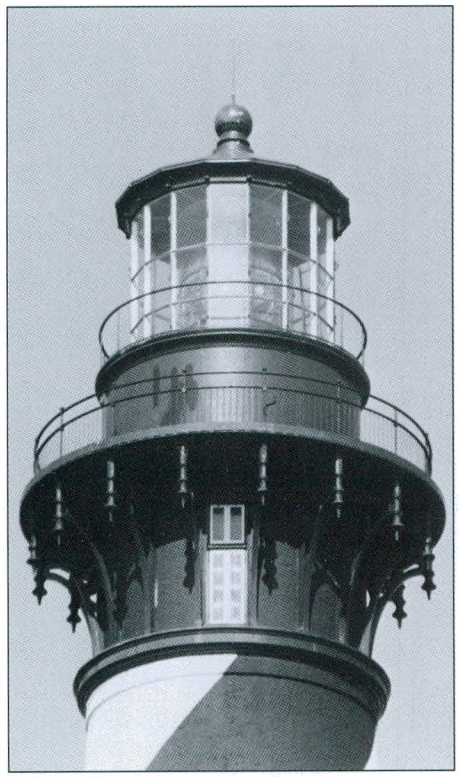
Bottom—The keeper's quarters after the vandalism and fire. Photographer unknown.

In 1969 the quarters and much of the property was declared surplus to the needs of the Coast Guard and transferred to the Government Services Administration. It was offered to the city of St. Augustine which declined for lack of funds. Then the county showed interest and in July of 1970, while negotiations were being conducted, vandals started a fire that gutted the keepers house. On April 15, 1971 St. Johns County acquired the property for $29,000 but for a decade the burned out quarters remained in ruins. Some thought that the building presented an 'attractive nuisance' and should be razed, but others felt strongly that it should be saved.

In 1981 the tower and keeper's quarters were placed on the National Register of Historical Places and the next year the Junior Service League of St. Augustine took the restoration project under their wing. They signed a 99-year lease with the county and formulated plans for the restoration of the quarters to be used as a community meeting place, cultural facility and maritime museum.

The initial estimate of $165,000 for restoration soon grew to $300,000. The first phase reconstructed the roof to guard the interior from the elements and further vandalism. Phase II provided renovation of the interior and exterior detailing. Funding was provided by individuals, civic organizations and a grant from the state. Finally the eight year project was completed on April 16, 1988 at a cost of just under $500,000. The structure houses a coastal museum, exhibits, a period room dedicated to the lighthouse service and a video theatre which tells the story of the lighthouse and its keepers.

The present St. Augustine tower was designed by Paul J. Pelz who served as chief draftsman of the Lighthouse Board from 1872 to 1877. Shortly after he produced the St. Augustine style of lighthouse tower he won the competition to design the Library of Congress in Washington, DC which became his most famous building. Other tall brick towers of the St. Augustine (Pelz) design can be seen at Cape Hatteras, Currituck Beach and Bodie Island (NC), Morris Island (SC), Sand Island (AL), Piedras Blancas, Pigeon Point (CA), and Yaquina Head, OR to name but a few.



Above—A close up of the top of the beautiful St. Augustine tower. The black and white striped tower is a dead ringer for Cape Hatteras, the all red lantern room topping this tower making the difference. The 1st Order Fresnel lens is still in the lantern and operational. Photo by Dan Spinella.



The restored duplex keeper's quarters. The low additions at left & right are the kitchens. Note the elaborate veranda. Photo by Dan Spinella.



A room interpreting the keeper's life. Photo by Dan Spinella.