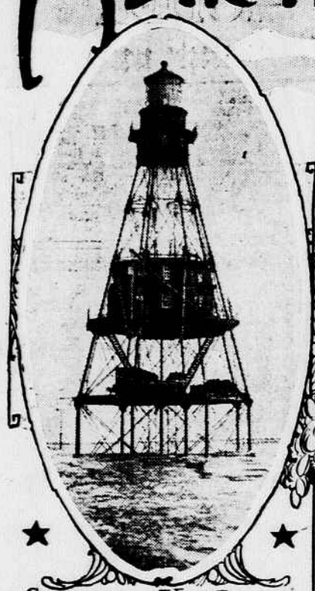
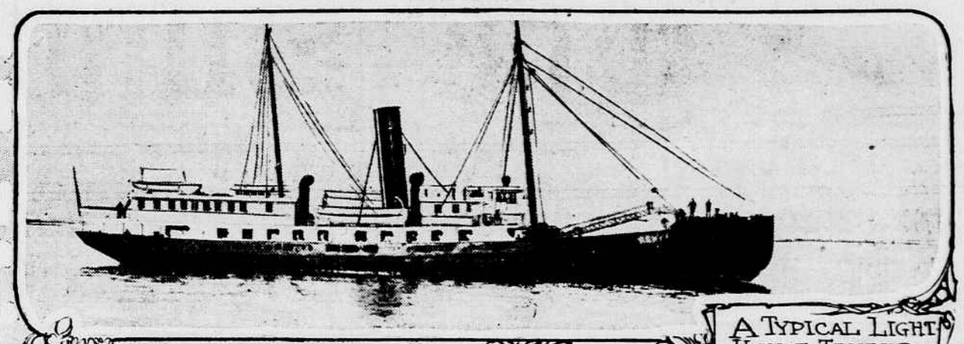
SAFEGUARDING UNCLE SAM'S MARINERS

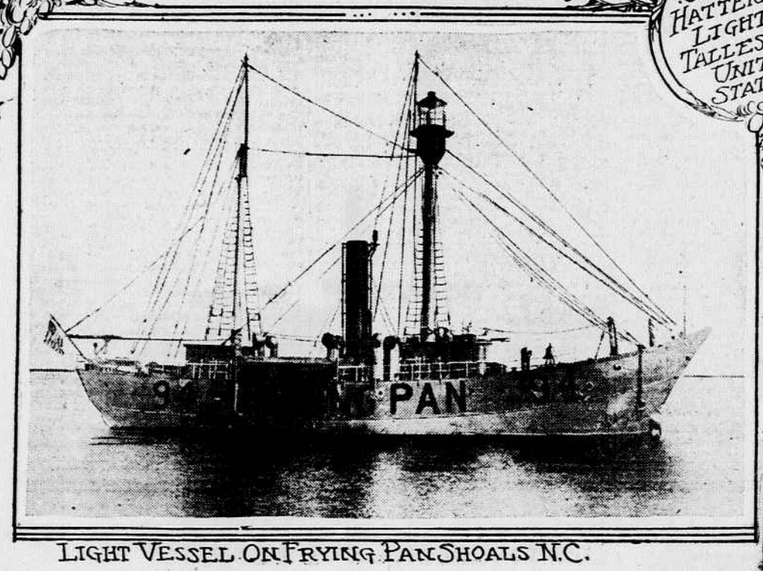
His Lighthouse Service the Most Elaborate in the World—Beacons Maintained Would Throw a Beam Around the World—Stories of Tragedy and Heroism by the Men Who Keep the Lights Ever Burning—Their Employment Full of Pe[illegible]d Risk.



SOMBRERO KEY LIGHT ON A CORAL REEF

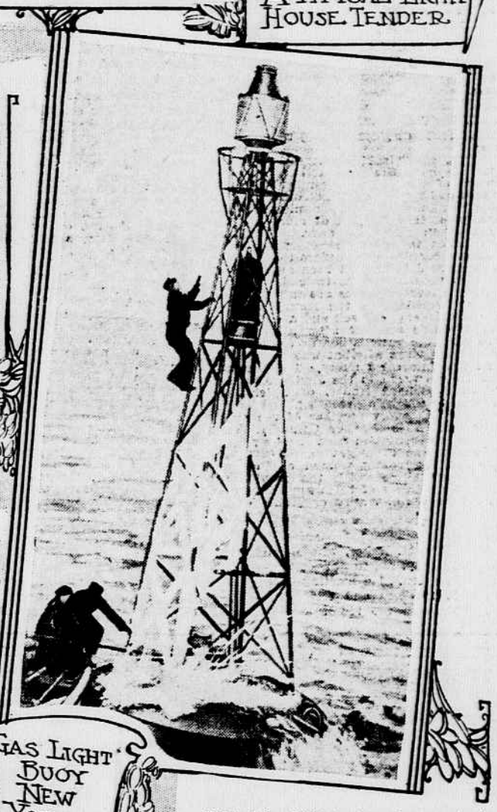


A TYPICAL LIGHT HOUSE TENDER.



LIGHT VESSEL ON FRYING PAN SHOALS N.C.

CAPE HATTERAS LIGHT TALLEST IN UNITED STATES



GAS LIGHT BUOY NEW YORK HARBOR

SPIRE OF ST. PHILIP'S CHURCH, CHARLESTON S.C. USED AS A LIGHTHOUSE.

WHEN Uncle Sam to string at regular intervals along the line of the equator all of his lighthouses, lightships, beacons and other aids to navigation, the resulting illumination would send a brilliant band of light completely around the world.

No other government on earth maintains such an elaborate lighthouse service as the United States. Consider that the coast line of the United States and its possessions is nearly 49,000 miles long—almost twice the circumference of the earth—and you will understand why. And still Uncle Sam does not do full justice to those who go down to the sea in ships. The cry comes from the Florida reefs and from the tortuous channels of Alaska for more lights that lives may be saved; it comes from every quarter of the country where there are navigable waters, the use of which is increasing.

* * *

The government of the Philippine Islands maintains its own lighthouse establishment, the Panama Canal Zone has its aids to navigation as a part of canal administration, but all the remainder of the coast line of the possessions of the United States is protected by the bureau of lighthouses of the Department of Commerce.

This remaining coast line is 46,828 miles long. There is included in this mileage the 4,626 miles of American shore on the great lakes and 5,478 miles of interior and coastal rivers that need protection. Nearly 5,000 lighthouses, lightships, fixed lighted beacons, gas buoys and float lights are maintained on this water frontage. In addition there are more than 8,600 unlighted aids, such as fog signals, submarine signals, buoys and daymarks kept up by the bureau.

A smart little navy of forty-five vessels, called lighthouse tenders, is supported to look after these. And the total cost of the whole service to Uncle Sam heretofore has not exceeded $6,000,000 a year, the construction of new tenders, lighthouses, works of various sort, included. This year the bureau is asking Congress to appropriate about $1,000,000 more, about $2,000,000 of the total amount to be expended in new work. At $6,000,000 a year the per capita cost to the people of the United States, estimating the present population at 100,000,000, is 6 cents. Only an actuary of powerful imagination can calculate the return in lives and property saved.

Five thousand five hundred men and women—for there are a few woman life keepers—make up the personnel of this picturesque and highly efficient lighthouse service. Most of these are actually with the lights and beacons; only 211 are in the executive, engineering and clerical forces. It isn't a service topheavy with directing heads. Of light keepers there are 1,733; 1,570 care for the little post lights one finds on rivers, lakes and bays; 1,516 are on the lightships and lighthouse tenders, and 489 are in the construction and repair force.

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At the head of the bureau of lighthouses is George R. Putnam, long trained in the work, who is known as commissioner, with George S. Conway as assistant commissioner. Both are distinguished civil engineers, members of the American Society of Civil Engineers.

Just now the bureau is making up the record of the winter's work along its farflung beacon line. It is a record of tragedy, heroism, heart-wrenching tales of suffering and devotion to duty. Every winter it is the same, the only variation being names and localities and minor details. Uncle Sam's lighthouse and lightship men are those who, to save life, court death in many forms. Arduous, lonely, strenuous lives they live, but lives lighted frequently by opportunity to do great service to humanity.

The winter that closed so recently was not a particularly disastrous one, as winters go, but it had its meed of woe, death and suffering.

The greatest tragedy was that which befell light vessel No. 82, the station of which is thirteen miles southwest from Buffalo harbor, north entrance, N. Y. During the severe storm of November 8, 9 and 10 last the ship was sunk and the six men on board drowned. Their names, written in the bureau's long list of those who died at their posts, were Hugh M. Williams, master; Andrew Leahy, mate; Charles W. Butler, engineer; Cornelius Leahy, assistant engineer; William Jensen, seaman, and Peter Mackey, cook.

In that same storm two other lightships on the great lakes were dragged from their moorings and great damage was done to them and to lighthouses.

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Late in November another storm swept the Pacific coast and did widespread damage to the lightships and lighthouses. Famous Tillamook Rock light, on the Oregon coast, fifteen miles south of the mouth of the Columbia, and known all over the world as one of the most seaswept lights in existence, suffered particularly.

One hundred and thirty-two feet above sea level is the giant lens of this light. Nevertheless, whipped by the wind, the waves rose still higher and for more than fourteen hours pounded their tons of water against the topmost part of the tower. The first great wave smashed in the panes of the light, and thereafter literally millions of gallons of water were poured into the top of the tower, drenching the whole place and endangering the lives of the keepers.

In a storm in an earlier year a mass of concrete weighing half a ton was lifted from its resting place, eighty-eight feet above the sea, and thrown over the fence in the keeper's yard at this light station. Some thirty-five years ago, when the erection of the Tillamook light was begun, the foreman of the work was drowned the first day of operation in trying to get ashore. Baptized in blood, Tillamook has a savage record.

October, 1912, like November, 1913, produced a fearful storm about Tillamook. For seven weeks the keepers were completely isolated, the light tender not daring to approach because of the surly sea. The light was smashed and the fog signal, whose horns are ninety-five feet above sea level, was put out of commission by being filled with stones thrown into them by the waves.

Thirteen miles off Cape Hatteras, N. C., marking a reef upon which a number of unsuccessful attempts have been made to erect a lighthouse, is moored Diamond shoal light vessel No. 71, in one of the most dangerous and exposed positions on which any aid to navigation is maintained. The last few years have been adventurous ones for this ship.

In January, 1912, a schooner ran into the ship in a fog—collisions with light ships in thick weather are not infrequent—and smashed her up badly. In September, 1913, a storm dragged her nearly a mile from her moorings, and shook her up. Various minor storms disturbed the vessel's equanimity not at all, but in the storm of February 14 of this year the elements went after her hard. Read this portion of the report of Charles L. Swanberg, master of the vessel, and draw your own conclusions as to the comfort or living on a lightship:

"I respectfully report to you that all day yesterday and all last night we had the heaviest southeast gale that I have experienced here. About midnight she was breaking all over the ship. One sea came over and carried away the two windleaders on the port side; the after one went over, but the forward we managed to save. She broke in the two after engine room skylights and broke off the after part of the forward railing on port side, but we managed to keep on the station and the light and fog signals going all night. Everything that we are able to will be put in order. All is well on board."

Columbia river light vessel No. 88, stationed near the entrance to the Columbia river and off the Oregon coast, a station of many storms and great danger, seems to get rather more than her share of bad weather, judging by the records in the lighthouse bureau. The chief engineer of this ship, by the way, is Michael O'Rourke, the same Michael O'Rourke who has figured, without disguise of name, in a series of popular fiction stories written about the work of the lighthouse service. O'Rourke is the same philosophical, witty character in real life that he is pictured in fiction.

In reporting on the storm of January 2 last the master of this vessel tersely described how the seas that came aboard smashed his pilot house, carried away considerable of the superstructure of the ship, tore the bridge binnacle from the deck, flooded Mickey O'Rourke's engine room, cut Seaman C. Carlson about the head with bits of flying glass from a broken lantern and washed Seaman H. K. Hansen away with the wreck of the wheelhouse. Hansen grabbed the railing as he was starting overboard and saved himself.

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In the record of the previous year—fiscal year 1913—the crew of this Columbia river lightship gets notice for having "brought to light vessel part of crew of steamship Daisy Freeman, which had stranded." That was a hazardous and heroic bit of work, taking off in a high sea men from a ship which was being pounded to pieces on the beach.

The same lightship crew also is mentioned for the care it took of the survivors of the wreck of the steamship Rosecrans and the crew of the Port Adams lifesaving station, all of whom took refuge on the lightship and were cared for until weather permitted them to get ashore.

The Rosecrans was wrecked off the Columbia river bar in a storm of extraordinary fury. The Port Adams lifesavers went to her rescue, but could not make their way back through the cross seas. They and those who were rescued finally were gathered in by those efficient mariners, Capt. Kenney and Engineer O'Rourke. While this was going on, the lighthouse tender Kanzanita risked the roughness of the bar—windswept until it was almost bare in places—and rushed to the Rosecrans. She stood by, but the lifesavers had got the survivors off by that time.

Cape Lookout shoals light vessel, off the coast of North Carolina, has had almost as much wild adventure as the Columbia river ship. July 25 five of her crew in her whaleboat were attempting to put the mail from the lightship aboard the steamer City of Atlanta while a high sea was on. The steamer ran down and crushed the boat and all five men were drowned.

In the gale of February 24 the ship was dragged from her anchorage and for four days she made a desperate fight against the wind and waves to keep near her station. So thick was the weather that it was impossible to see more than 200 yards. Battling every moment of the time against wind and tide, the ship, heavily powered as she is, managed to keep within a few miles of her proper position and finally got back there.

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The annals of the lighthouse service are full of tales of heroism. Not a month passes but finds a number of these recorded. The bureau's annual report for the fiscal year ending June 30, 1913, contains, in terse, official language, reports of ninety-two of these cases. Since that date almost as many more have been placed on the records. Here is one that is typical:

"January 13, 1914, at 1:30 a.m., five men from the disabled schooner John Paul were taken on board relief light vessel No. 9, on station at Cross Rip, Mass., under command of Richard E. B. Phillips, master. Owing to the extreme cold the men were in a helpless condition when taken on board the light vessel, one of the crew having died before reaching it. They were given food and dry clothing and taken care of until the morning of the 14th, when the tender Anemone arrived and took them to Vineyard Haven, Mass."

Here is the official statement in regard to the case of Robert Allen, keeper of the Presque Isle pierhead light station, Pa., dramatic in the very curtness of its phrasing: "Rescued two persons who were about to drown while bathing in Lake Erie. Life saving medal awarded by Treasury Department."

Here are the bones of a story of dramatic human interest: Henry R. Bevry, keeper; Alfred L. Cornell, first assistant keeper; Royal G. Petersen, second assistant keeper, and Peter Anderson, laborer, at Pilot Island light station, Wis., towed to light station motor boat carrying United States mail which had been frozen in ice ten miles from station; also rescued three men from rowboat who were in search of the mail boat." And then, quite casually, the report adds: "Reported that keepers and crew were seventy-two hours without sleep."

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Many miles north of Tillamook, on the Pacific, is another sea-swept lighthouse at Cape Flattery, lighting the entrance to the straits of Juan de Fuca and Puget sound. John M. Cowan is keeper here, and has been for a generation. His wife and family live with him, the children's playground being the broad platform, high above the sea, about the living quarters of the light. But the raging, unpacific Pacific took its toll of Cowan for robbing it of its prey of mariners. Twice its winds have snatched from the platform a Cowan child, tossed it into the boiling sea and drowned it. Still Cowan stays. The lure of the service is on him.

There are tragedies a-plenty in the history of the beacons of the sea. There was the one at Sand Island light, at the entrance to Mobile bay, Alabama. The hurricane of September, 1906, which swept the gulf coast, washed away the entire island. It left the wreck of a tower, but that was all. A keeper and his wife perished. The second keeper happened to be ashore and was saved.

Minots Ledge light was erected in 1848 on a reef off Boston harbor that had caused many a wreck. Built on wrought-iron piles, this open-work, iron-frame structure survived several storms, but the gale of April 17, 1851, razed it and scattered its parts to the four winds. The two keepers who were in it at the time were never seen again. In 1855 the new Minots Ledge light was begun, and was completed five years later. Each stone was dovetailed into the other in curious fashion; every part made to bear the maximum of strain. It ranks among the difficult lighthouse engineering works of the world.

Lighthouse keepers, crews of light ships and crews of lighthouse tenders, it may have been gathered from the foregoing, give much of their time to succoring mariners in distress and to saving life and property. The tremendous increase in the number of motor boats and small pleasure craft in recent years has added to the chances for giving help. In every month in recent years reports come in of men of the service rescuing yachting and motor boating parties that were confronting death.

Now come the airships to give further chances to the lighthouse service to help the distressed. The aeroplane and the hydroplane, in their habitual unexpected dashes from the sky, are growing fond of dropping into the sea in the vicinity of a light station. That betokens discretion. The sea offers a much nicer cushion for a defective aeroplane and its crew than the hard earth.

William H. Nash, second assistant keeper of Wind Point light station, Wisconsin, has the distinction of being the first of the service to salve an airship. Last Fourth of July the hydroplane Fire Fly suddenly quit flying over Lake Michigan. Nash went out in a small boat and rescued the unsuccessful flier, and with the assistance of the professional life-savers towed his craft ashore.

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July 25 the navy's hydroplane C-1 dropped with two surprised young officers into Chesapeake bay off the Point Lookout light station, Maryland. Keeper Thomas Jefferson went out, removed the officers from the water and towed their machine to safety.

In the early days of the American settlement, the colonies established lighthouses. The general court of Massachusetts in 1713 heard from one of its committees that the proposal to erect a lighthouse at the entrance of Boston harbor "will be of general public benefit and service and is worthy to be encouraged, and that the want of such a lighthouse "has been a great discouragement to navigation by the loss of lives and estates of several of his majesty's subjects." Forthwith the lighthouse was built.

Then, a few years later, the first fog signal in America, a cannon, also was established beside the lighthouse. Thirteen lighthouses were in existence when the federal government was established, and these were ceded in 1789 by the several states to that government. The idea that aids to navigation are of "general public benefit and service" has not been questioned since that time. Hence the lighthouse bureau of today.

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Small though the pay of a keeper or of a member of the crew of a lightship is, the employes rarely leave the service. Records of thirty and forty years of continuous employment are not unusual. In fact, this is one of the problems of the bureau. Scores of keepers of advanced age, but still vigorous, are borne on the rolls. There is no retirement provision for them. Their only fault is their gray hair and the fear in the executive offices that some day, perhaps, they will not be equal to the calls on them. No one as yet has failed to make good, but still some time one might. True, no keeper is left alone in a lighthouse; always there is assistance; nevertheless the service must take no unnecessary chances. But is it fair to turn a faithful tender of the lights adrift in his old age? It is a problem the bureau is trying to solve.

Six hundred dollars a year is the maximum salary paid to a lighthouse keeper. Still, there are advantages over the man on the lightship. The keepers, save in most dangerous spots, can have their families with them; they get well built and decently furnished homes free; they have the use of the land about the lighthouses, where there is any land, to cultivate a garden and on which to keep cows and chickens, and they have the deep sea in which to fish and eke out their fare; and also they get 30 cents a day commutation of rations.

But the man aboard the lightship fares not so well. He is cooped up in a prison that ramps and charges and drags at its moorings most of the time. Then, too, in fog he is always liable to waken out of a sound sleep to find that a misguided steamer has poked her nose through the side of his home and jostled him into the salt and icy ocean. Many a stout lightship has been mishandled in this manner.

In view of all this the lightship man is a bit better paid. Then, too, he is allowed ninety days leave every year. He does not take this all at once, but spreads it along in reliefs. Lighthouse keepers are allowed seventy-two days a year leave. They also take it in reliefs.

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Some of the lighthouses on the great lakes are abandoned during the winter, as, the lakes being frozen, there is no navigation, but where the channels are open they are maintained.

The openwork, iron-frame type of lighthouse is much in evidence on the Florida reefs. Built on coral, it is not advisable to erect masonry, so they are supported by iron piles forced about ten feet into the coral rock or sand. Sombrero Key is the barber pole one at Cape Hatteras, on the coast of North Carolina. It is 200 feet high. A light must be that height in order to be seen from the deck of a vessel twenty nautical miles away, so sharp is the curvature of the earth. Cape Mendocino, on the coast of California, has the highest light, it being in a twenty-foot high house, the floor of which is 402 feet above water.

The most expensive lighthouse Uncle Sam ever undertook to build was that on St. George's reef, six miles off the California coast. It cost $712,000. For days the workmen would have to lay off and remain aboard their vessel, it being impossible to go ashore even by the cable rigged from ship to shore for the purpose.

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Possibly the most curious lighthouse in the country is in Charleston, S. C. The stately spire of St. Philips' Church is used for the purpose, its lamp being one of two that in line form a range for entering the harbor, the other being on historic Fort Sumter.

Oil, various sorts of gas and electricity form the illuminants in the lighthouses and other lights to aid navigation, but chiefly oil is used, on the double ground of cheapness and practicability. More than 600,000 gallons of kerosene oil are burned a year in the light stations of the country. Electricity is used only where it can be bought cheap from some nearby plant. The most notable electric lighted lighthouse in the service is the famous one at Navesink, on the highlands south of New York, and this, too, is the most powerful. It has about 10,000,000 candlepower and its beam has been seen in the sky at a distance of seventy miles.

In the majority of lights, wicks are used in regular lamps, but for the more important ones an oil vapor lamp is used and this intensifies the light wonderfully.

Oil gas under compression is used in many buoy lights, but acetylene gas is coming into more and more general use. This is used precisely as in an automobile's lights. The statement has been widely printed that acetylene-lighted buoys, self-lighting and self-darkening, are in use, but this is not a fact. An ingenious invention has been devised by which the rays of the sun operate a valve, which shuts off the light in the daytime and permits it to come on at night, but as yet the service has not found it adaptable to buoys.

However, this device is coming into wider use every month in the service for shore beacons. Of the ninety-five lights that have been established in Alaska in the last eleven years a large proportion are of the acetylene gas type, some self-tending and some requiring the services of a keeper. Inasmuch as many of these lights are placed in sharply turning channels, they do not have to be of great strength, and, in a country of small population, their self-tending properties make them of added value.

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A number of these lights can be loaded up with a charge of acetylene and left alone with the certainty that, if they are not interfered with, they will flash a beam of light every three seconds for five months without being recharged. It has been found cheaper to let some of them flash night and day rather than to install the sun valve, which does not always work in a region of heavy fogs, or to hire an attendant.

Where there is more sun the valve is used. It has proven most successful at the Fairport West Pier light in Ohio. The untended acetylene flashing light also is doing good work on Richardsons rock, Cal., in a place where it would be most difficult to erect and maintain a regular lighthouse.

Study the coast and geodetic survey charts of the country's coast line and you will see to what extent the lighthouse service is aiding seamen to avoid dangerous places and in safeguarding the lives of all who travel by water. Observe the dotted arcs that indicate the range of fixed lights. Along the most traveled coasts, such as the north Atlantic, you will see that the arcs overlap; on the gulf, the great lakes and the Pacific there are many gaps. These gaps, as the years pass, are being rapidly closed. Uncle Sam is becoming more and more vigilant.

UNDER THE BIG WHITE DOME

A New One.

Secretary Bryan of the State Department believes a man and his wife should divide their joys. "For then," says he, "they multiply." In this connection he relates the following anecdote:

"One night a man went home from a function quite late. When he reached the front door his wife upbraided him severely.

"'Well, you see, my dear,' he replied, 'as I didn't have you with me I enjoyed myself only half as much; and therefore I had to stay twice as long.'"

Spoke Right Out.

A man with the nerve and the "pep" to ravish away from Uncle Joe Cannon his time-honored seat in the House of Representatives—a feat of daring accomplished in the political cyclone of 1912 by Frank T. O'Hair—isn't the kind to sit modestly silent in the courtroom when he thinks the judge isn't giving him a square deal.

In such unhappy situation Representative O'Hair once found himself while trying a case in Chicago. The city judge, thinking the young attorney a hayseed lawyer from the back blocks, treated him with scant consideration. On reaching the point where patience was no longer virtuous—which isn't very far from the kick-off—young O'Hair stopped short in the trial and, frowning upon the judge, said:

"Your honor, you think I'm a rube, a hayseed; but you're mistaken. I'm no rube. Down in the part of the country I come from they think I'm just about the best lawyer in that neck of the woods. I'm of the same opinion, and, if you'll simply give me a fair show, it won't be long before you'll agree with us."

The court gasped, wavering an instant on the verge of a commitment for contempt. But a second glance into the face of the young lawyer showed him there was no trifling there. Throughout the rest of the trial young O'Hair got attention—and his client a verdict at the close.

"Coming and Going."

The greatness of "little old New York" is often the subject of Representative Fess of Ohio. He told the following anecdote recently to illustrate the rapidity with which things move there.

"A countryman," said he, "clung to a lighting post in New York at one of the busiest corners. After he had been standing there for several minutes a man walked up to him and asked what he was doing."

"I am waiting for this crowd to get by," answered the countryman.

"Why," laughed the stranger, "this crowd is here all the time."

"Well, then," said the countryman, "I might as well try to get across the street."

"He made a dart and had reached the middle of the street when the gong of a trolley car stopped him. He turned to go in the opposite direction, when the car on the other track stopped him. He turned toward the right, but was confronted by an automobile. He turned to the left and a motor cycle passed him. Despairingly he looked above him and an elevated train shot over his head. In desperation he dropped into a manhole—and the subway train ran over him."

Poor Democrats!

Representative W. A. Watson of Virginia is a new member, but comes to Congress with the reputation of being one of the fairest and kindest judges that ever wore ermine. He presided over the famous Henry Clay Beattie trial in a manner which won for him admiration over the entire country.

Mr. Watson is a typical Virginian in his soft manner and burring speech. And he is typically democratic. But the judge numbers among his constituents many colored brothers who have a strong leaning to the opposite party.

One day Mr. Watson was being shaved, which, of course, meant learning all of the barber's religious and political principles. He attacked the democratic party, which Watson ardently defended.

"Well, I tells you, jedge," said the colored brother at last, as if clinching the matter, "you all democrats mought have enough sense to run a little place like Virginia, but you ain't got enough to spread around in running the whole country."

Playing Hunches.

"The prospects for my renomination and election look very bright," remarked Representative Anthony of Leavenworth, Kan., recently. "So I guess I'll be left at home next time."

"Yes, left at home," he repeated; "that's just what I mean. I've learned that in politics the more likely a thing is to happen the more liable it is not to.

"For instance? Why, I'll do for one, myself, I guess. When I ran for mayor of Leavenworth in 1906 my prospects were as black as a tarball in a negro's pocket at midnight—and I was triumphantly elected!

"The next time I ran for office a rosea-at pink suffused the whole political horizon. I could prove my victory as conclusively as a problem in Euclid; it didn't seem doubtful enough to furnish one good thrill—and the other fellow won in a walk!

"When I ran for Congress this last time I was leading a forlorn hope; just running to keep the party organization up, so to speak. Remembering the past, however, I made arrangements for a couple of years' absence in Washington—and here I am!

"Next time? Well, things look mighty bright, so——" and Mr. Anthony concluded with an expressive shrug of the shoulders.

Twice Have We Taken Old Castle at Vera Cruz

WHEN, on Tuesday morning April 28, Admiral Fletcher took charge of old San Juan de Ulloa Castle at Vera Cruz, it was the second time in the history of Mexico that "the most celebrated fortress in America," as well as "the foulest prison," came into the temporary possession of the United States.

Just as Morro Castle played an important part in the Spanish war, so this famous San Juan de Ulloa Castle, with its "under the sea cells" and sturdy fortress, played a prominent part in the Mexican war of 1847.

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Admiral Fletcher's dispatch to the Navy Department reporting the taking over of the prison read in part: "There are in the prison 43 persons who have been sentenced for crime, 75 who have been accused of crime but have not been brought to trial, and also 325 who have not been accused of any misdemeanor whatever. These 325 were arrested mostly within the last two months, in order to be forced into the federal army and for no other reason. The above data was obtained from the Mexican officer in charge. The condition in the prison under which the 325 men are living is described as frightful."

Secretary Daniels, on Admiral Fletcher's recommendation, wired orders for the release of the 325 uncondemned prisoners incarcerated. Upon releasing the men, it was found that one was an American, while the stories told of life in the prison were frightful in the extreme.

The history of San Juan de Ulloa dates back to a time even before Cortez discovered Mexico, and since then the castle has played an important part in the story of Vera Cruz.

In 1518 Don Juan de Grijalva, sent out by Velasquez, the Governor of Cuba, landed upon a tiny island, hardly more than a spot upon the water. On it he discovered a small temple in which human sacrifices were offered to the Aztec deities. It was understood by the adventurers that these offerings were made in accordance with commands sent out by the king of Acolhua, one of the provinces of the empire.

The island was then named partly for its discoverer—San Juan—with the last word—de Ulloa—as a contraction of Acolhula. It was the discovery of this island, and de Grijalva's good report of it, which determined Velasquez to send out a stronger expedition. And so, the following year, Cortez discovered Vera Cruz.

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This tiny island lies but three-eighths of a mile from the city of Vera Cruz itself, and since the early days of the town has served as a strong defense. Upon one side of Vera Cruz lies old Fort Santiago, while upon the other is old Fort Conception; and these, with San Juan directly opposite, have made Vera Cruz a well garrisoned stronghold in times gone by. Even they, however, were not strong enough to keep Vera Cruz free from invaders; and on numerous occasions San Juan figured in losing encounters, three of which won for Vera Cruz the name of "thrice heroic."

The fortress is irregular in shape, being 300 yards long on the side facing Vera Cruz, and 200 yards on the north side. It is made of stone, "Madrepora Astrea," a species of soft coral, while the walls and exposed points are further strengthened by a stone of harder quality. The castle, begun in the year 1582, was built by the Spaniards at a cost of $10,000,000.

As formidable as San Juan Castle was it was to fail before the attacks of less even than invading armies. Its very first defeat came from the hands of Juan Aguinas Acle, a well known buccaneer of that day. He was shortly afterward expelled, however, by Don Francisco di Lojan, supported by a fleet of twenty-three vessels.

The second capture was a remarkable one in the annals of Vera Cruz and occurred on the night of the 17th of May, 1683. This time, too, it was a daring "freebooter" who won the castle. Lorencilla, the pirate, not only defeated the garrison, but sacked Vera Cruz at his leisure, retaining possession of both for two weeks. Then, having secured an immense amount of plunder, he departed unmolested.

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The third capture was by the French in 1838, when the fortress was found to contain 177 guns of various caliber. After this encounter, in which the castle was considerably weakened, repairs were necessary. The next capture was by the United States when, in March, 1847, the castle itself was the prime objective point in our naval attack upon Vera Cruz.

But even these numerous defeats of Vera Cruz's stronghold were not to end the list of her encounters, for in 1865 the castle was again stormed, this time by the allied forces of France, England and Spain. And again the castle was taken. This was the third defeat in the history of San Juan which won for Vera Cruz the title of "thrice heroic," the French and American defeats being the other two.

But the old fortress was to suffer still another indignity—that of being captured by a faction in an internal struggle. In 1867, during the war of the reform, Vera Cruz again fell, this time after a battle with the liberals under Juarez.

Since then San Juan has been allowed to play a peaceful part, so far as battles are concerned, and has been nothing more forbidding to the outside world than a prison. But to the inside world—to Mexico itself—San Juan has stood for all that is terrible in the way of prisons. Those who entered it as prisoners usually did so with the feeling that they were bidding farewell to the world for all time.

And, since its erection in 1582, it is probable that the first time it has been taken over by another government peacefully was Tuesday, April 28, when it again came under American control. And, perhaps, the release of its 325 uncondemned prisoners also ranks as a distinct novelty in its history.

Famous Rosebushes.

IT is thought that the oldest rosebush in the world is that on the cathedral wall at Hildesheim, Germany. Its history may be traced, it is said, with certainty to the eleventh century, when, the records of the cathedral show, it was an item of expense to the caretakers of the ancient edifice.

The main trunk of this bush is twenty inches in diameter and the branches spread over the wall to a height of twenty-five feet.

Though the Hildesheim rosebush is the oldest, it is not the largest. To Germany also pertains this distinction. The bush in the Wehrle gardens, in Freiburg, attains a height of 115 feet. The stock is wild rose, and the graft, made some thirty years ago, a tearose of the Chromatella variety.

There is an enormous Banksia rose at the Castle of Chillon, on Lake Geneva, that is better known to tourists than either of these, though as a matter of fact it is exceeded in size by the one of the same variety in the Marine gardens of Toulon.

This spreads over a space eighty feet wide and fifteen feet high, and has as many as fifty thousand of its flowers in bloom at once.