35 Feet

·THE · FULTON · ON · WAYS AT . GREENPORT - LONG . ISLAND .

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## THE APPEAL.

.—It is the organ of ALL Afro-Americans. 5—It is not controlled by any ring or clique. 6—It asks no support but the people's.

·THE ·FULTON'S · INDICATORS ·

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Submazine Boat Fulton to Cross the Atlantic Under Her Owis Power, Goes First to Washington from New York, and Will Cover a Good Part of that Voyage While Submerged at a Depth of

CAPTAIN FRANK CABLE, COMMANDER OF THE FULTON

American submarine boat acros under the sea is contemplated for the audacious little Fulton.
Should it be carried out successfully the

navies of the world again will be electrifled by Yankee spirit and daring, as the torpedo boat is only 63.4 feet over all and

and crew speak of it as being neither im-probable nor even startling. She has proved herself so stable that there will not be the slightest difficulty in getting crew to make the trip.

"I would sooner go in her than in a liner," said Capt. Frank T. Cable. "Should a storm come up we can sink at will un-til it is over." This statement, showing perfect confidence in the stability of the boat, was made to a correspondent for The Sunday Pioneer Press who was permitted to go aboard and inspect the little marvel on her recent trip, when she made a run from Greenport to New Suffolk for the purpose of trying a new and more owerful propeller.

And on that trip she gave a new per-

formance that showed she possessed a merit that even her enthusiastic owners never gave her credit for. She proved herself a wonderful ice breaker, going through four inches of

solid ice as if it were paper and at the same time losing little speed, to the de-light of her captain and proud crew and the deep gratification of her owners.

The little Fulton traveled full tilt for
the ice field with her nose about a foot
under water. She lifted up the ice, hurling it on either side as a plow would overturn soft soil. As she lifts the ice up on her steel bow, which slants up-ward from the submerged nose toward the conning tower, it breaks into cakes. which either fall on top of the ice further away or are thrust under it. In this way she makes a cleaner path for herself and does not waste as much power as if she crashed into the ice field and broke up a

path by mere force.

So impressive was the performance and so successful was the Fulton in a work for which she had not been designed and sue that Capt. Arthur MacArthur, the government naval expert abroad, was both astonished and pleased. He is a son of Gen. MacArthur and will be in command of the Adder, another Holland submarine boat, when it is launched from the New Suffolk yards in a couple of weeks. Though the Fulton is not owned by the government, and is commissioned as a private yacht for the company's purp highest possible grade of efficiency, her trip to Washington about the last of Feb ruary will be the first step taken to show that she is perfectly able to cross the ocean with safety to herself and those or board. This trip will all be made entirely in the open sea, and has been ordered to settle the question whether or not sub marine boats are of use only in the still

They are being built only for harbor de also have great seagoing ability. The trip to Washington will be only the first step-after it will come the more serious enterprise-the trip across the ocean, as the fuel carrying capacity of the marvelous little craft must be increased largely for

such a long voyage.

Great secrecy is maintained regarding the building of the submarine torpedo boats in the works in New Suffolk. To keep experts or men in the employ foreign governments away from the Holland boats detectives investigate every person of whom they are suspi-cious. The correspondent of the Sunday Pioneer Press had to furnish credentials that were examined carefully before he was permitted to observe the works, board the Fulton, go over her interior from bow to stern and then study the ands-cious little torpede boat in action from her own deck in the trip which unexpectedly gave the demonstration of he

Capt. Frank Cable and Capt. MacAr thur were found at 10 o'clock on the night preceding the test on board the hand-some steam yacht Giralda, in Greenport basin. To reach the yacht it was necessary to pass through the shippard Capt. Rich of the Giralda acting as an escort and giving timely warning of hat-smashing timbers overhead or tripping boards

the stocks, dimly made out against the night sky to be cigar-shaped, with the forward end blunter than the stern.

"What is that boat next to her?" was asked. "That one painted white, with the graceful lines?"

ing lines sliewed plainty in the night, A ways at ease, her white sides rested gracefully on the stocks, as if they pressed but lightly against her dear old bones. Two masts showed that her present owner, Percy Chubb, had rigged her as a yawl on pleasure bent. He had put her to bed on the stocks lest ice or storm distress, and she lay there, a white thing of peaceful victory, and dozed and dreamed of her maiden days of conquest

So close beside her that they almost touched was the Fulton. The dark red of her sides showed black in the night The timbers on which she rested could not be seen. Her great propeller flared from the stern and she seemed an uncouth bird of prey, poised by the bird of peace for protection or destruction, whichever way her pregnant mind might

A cheerful party of two was found in the saloon of the Giralda—Captains Ca-ble and MacArthur. The commander of the Fulton, who is a relative of the nov clist, is clean shaven and has a sad and serious face. Though young, deep lines emphasize an expression of much dignity and strength. He is a man of whom one can well believe it is often said: "Well,

if Capt. Cable says so it is all right."

Beside him, and equalling his scant six feet, was Capt. MacArthur, the ideal handsome young naval officer. With such a father he might have had prefer ment and a ballroom future. But that was not to his liking, and on leaving Annapolis he volunteered immediately to take command of the sinister Adder when she is put in commission. Only men who volunteer for the duty are placed on board of a submarine boat. This service is the "extra hazardous" class, as a scared life insurance agent

would say.

MacArthur and Cable have become great friends during their few months or acquaintance. The former is not inclined to take life as seriously as the other out Cable's smiles are frequent when his friend drops into a spirit of raillery. Their conversation was devoted aimost entirely to the topic of submarine hoats when the Adder and Moccasin will be finished in New Suffolk; the Porpoise, Shark and Plunger at Nixon's, and the two boats, as yet unnamed, building in the Union Iron works, San Francisco. Work on all of these boats is going on day and night, forty men being busy at New Suffolk. Of course they also talked Suffolk. Of course they also talked of the probable commanders of the other boats and wars and rumors of wars and the part they might be called upon to

the part they might be called upon to play some day.

"The old men finished up the last war neatly and quickly," said Capt. MacArthur, who had served on the Vixen as a minor officer during the war, "but it looks as if young men will have something to do with the next one, should it come. My crew for the Adder is now on the Windsor getting in training, and there isn't a man of them more than there isn't a man of them more than twenty-eight. The oldest man in Capt. twenty-eight. The oldest man in Capt. Cable's crew is only thirty-one years, and it looks as if all the other crews for the submarines will be young men."

Though it was late the steward of the yacht here interrupted with a dinner, one of the several appetizing courses being sweet fried scallops, for which the entir

sweet fried scallops, for which the entire Peconic bay region is so celebrated.

"When do you expect to make that Washington trip?" Capt. Cable was asked.

"Probably in the latter part of February. We will go outside all the way. I intend to carry ten men on that trip, including Capt. MacArthur, who goes along to make a report on it as an expert for cluding Capt. MacArthur, who goes along to make a report on it as an expert for the government."

ing timbers overhead or tripping boards anderfoot.

"There she is," said Capt. Rich. pointing upward to a welrd looking thing it is being considered seriously. The Fulton, you know, is not owned by the government, and could go under yachting papers. I wouldn't have the slightest hesitation in taking her. I would sooner go on her than on a liner. Should a storm come up we can submerge at will until it is over. But before that trip is undertaken she must have greater fuel carrying capacity. As she is now, she can travel of the grand old cup defender was in some open papers. I wouldn't have the slightest hesitation in taking her. I would sooner go on her than on a liner. Should a storm come up we can submerge at will until it is over. But before that trip is undertaken she must have greater fuel carrying capacity. As she is now, she can travel to miles under her own power, both electric and gasoline. We put it at 500 miles so as to have a safe margin, but she real-live can go further." "How about that trip abroad?"

"I won't say a European trip is impos-sible," said Capt. MacArthur; "but I would call it improbable. Still, we thought the Oregon's feat was improbable when could be made by taking out the thirty five tons of storage battery in the Fulto and either putting in an improved and more compact battery, or more gasolene for the gas ergines. Now I am absolutely enthusiastic about these submarines and have full confidence in them; and if Cable says they can go across the ocean, I beheve him. In case of war that would be a very easy thing to do. All we would have to do would be to seal them up, then tow them to a place of action or around the world if necessary. This would save the crews, and put them on board absolutely fresh when their services are needed. Of course a trip across under her own power would be merely for exhibition

"That is what the ocean trip to Washington is for," said her commander. "It will be a final answer to critics who say submarines aren't seaworthy, though they really are intended for harbor defense Though we are going to carry ten men. in case of a pinch two can run her. Three would insure more safety, so if it is ever found necessary to remain submerged for a long time the number of men who will

would hardly dare say how long she could "On the Washington trip, when about wenty miles off Sandy Hook, I intend to ubmerge the Fulton about thirty-five leet below the surface. Even at that lepth in looking out of the conning towr there is a fair light, so good that we need not use the electric lights. That s because the water is so clear. Of sourse I can't see anything below there except green water, and I steer entirely by the compass. We will travel twentyive miles under water before rising submerge again in the Potomac (the capain always said "submerge," not "sink". The water of that river is always bad, and when submerged there it as dark as Egypt until we turn on the

lectric lights." "What if you should strike a sub-nerged derelict on your trip?"
"What if an ocean liner should strike a submerged derelict? I think we would have the better chance, because the submarines are built so that they would glance or slide off many objects. But hat contingency is so remote that it sn't even thought of. "We expect to make that twenty-five

miles under water in a short time, and, by the way, that reminds me of the way experts have by fooled regarding travel under water. They have insisted that we can't travel beneath the surface as fast is we can travel awash. The contrary is the case. We can travel half again as fast with the same power when sub-merged: That's where the designer of the Fulton upsets theorists. When under way on the surface the propeller makes a hollow at either side of the stern, into which the water is constantly trying to fall. That makes a pull or drag on any boat and holds her back. When we are submerged, say at the best depth of thirty-five feet, there is no such action as on the surface. There are no hollows made by the propeller to pull us astern, and we go straight through a solid body of water. With the same power we can go more than half again as fast when sub-

merged."

"Another thing," interrupted Capt.
MacArthur, "the Fulton doesn't sink, as that word is used ordinarily. Let me explain this. Through the five Kingston valves in the bottom enough water is admitted into the compertments to bring her to the noint of sinking. She has a

THE . FULTON . akes thirteen tons—that is, it above. As sne moved quickly out of ner dock under electric power and pointed, oottom, but she is only sent there for over the Kelpie's track the water rippled experimental purposes, as she was in that recent fifteen-hour test. By the way, did you know that the air tanks were not called on in that experiment? ody of the boat was sufficient for the

nen.
"But about this submerging. All of the puoyancy is not taken out or ner. Enough s left to give her the very slightest inclination to rise; so if left alone she grad-ually would come to the surface. This leaves her absolutely under control of the horizontal rudder. If it is raised it throws her nose up, and as she is under way she rises on this imaginary inclined way one rises on this imaginary inclined plane. If it is lowered, her mose lowers and she follows. Her action is so rapid and she obeys so quickly that I have seen her rise and disappear in her famous por-poise act three times in five seconds.' "What else can this submarine wonder lo?" Capt. Cable was asked.

"Well." he said, with one of his rare miles, "Give me the submarines for safe-y. I made more than 500 dives in the old folland, and the Fulton can de anything except climb trees. We are going to cut ice with her to-morrow. Come, it's time to

The next morning nothing was done early or in a hurry, and the launching attracted no more attention among the country folk than if a new scallop boat were slipped from the ways. At first they had looked upon the submarines with wonder and increduility, but this has all staled with custom and little attention is given even to their most maryelous per-formances. The Fulton may dive like a loon and dart about like a perpoise for all the countryside cares. She speedily grew to be a fact with them, and her appearance in the bay does not even ceus remark. About the most interesting thing to them is the coming and going of new crews, for the men must learn the ways of the different boats. Each has a way of her own, for it is impossible to build twins that act exactly alike. Though perfect twins in appearance and construction, each has her peculiarities in the center of the beat. It only admits

in the center of the best. It only admits that must be studied to be mastered.

About the most bustling thing concerning the launching and preparations for the trip to New Suffolk with the Kelple, the tender for the Fulton. She is a fat, little thing, as far removed from the eerie water spirits of Scottish legend as one possibly could imagine. She came bustling up from down the bay about noon. Then, when the Fulton slid from the ways, she took to her heels again. The Kelple's master feared the new propeller and the ice would make Cable's boat too fast for the tender, so he wanted a good start. And he needed it.

As the Fulton started out she carried her nose a little closer to the surface of the water than usual, her commander not caring to scrape more of the new coat of paint from her upper body than necessary in going through the ce. Since her trip was to be made awash, the temporary raffings on seek were not taken down, and Capt. Cable sterned her from

Below, down a hatchway just wid: enough to admit a man's body freely only the electric and gas engineers were needed. The boat seems decidedly roomy at first glance, but that is only because she is all in one compartment. Everything is open, and one can see from her bow to her stern-from the end of the torpedo chamber to the electric motor in the stern. Despite the fact that owing to a blunder she had sunk not long agoon Dec. 11 it was—her interior was as bright and clean as a new pin. And, by the way, the mate, James Wilson, had a little experience the time that the Fulton sank that he never told until on this trip. He told about it in a modest way, but it was evident that he had a fight for his As the Fulton lay at her pier her sterr was raised to permit an examination of the muffier. This depressed her nose, as was expected, but what was not expected was that some one had left the torpedo valve open in the bow. Wilson was within the boat at the time and as she began to fill he ran forward to try to climb to daylight, but the solid body of water pressing on the hatchway was too strong or him. As the Fulton sank she tilted a little to one side, then lay hard on the bottom. In perfect darkness the cool fel-low stood straight up in the boat until his head touched the steel frame. Every few feet there are ribs of steel about six inches deep, and between this, as the water raised, air cushions formed. By pressing his face close and sideways to the shell of the boat he could breathe; with some difficulty and gasping, but still breathe. There he stood until the boat had filled as much as she could, the air cushions, of course, preventing her from filling completely. Then, in darkness, when he believed she had taken in all the water she could, he started for the ladder. It was only a short dive, as he knew right where it was, but never was there such a dive under such circumstances. He passed up through the hatch, which he easily raised, as pressure had been equalized, through solid water and in a few moments was being congratulated by his

to the feet of the men standing on deck.

moments was being congratulated by his friends above. They had counted exactly on what he would do, and decided not to send down after him, for fear of mixing things up with two men in the narrow hatchway. In another minute, however, Charles Bechtold, the gunner, would have been after him, as he was stripped. Bechtold made his dive anyway, and with little trouble closed the torpedo valve. The raising of the boat then was easy. Thus luckily ended the only accident

After the hero of the story had told it with the scantest detail, Capt. Cable permitted the reporter to stand in the conning tower, to see how, the boat is steered when submerged. Above water one can see plainly through the small, thick glasses in the tiny tower, which is the head and shoulders of one man, and when submerged he steers only by a compass, which is in front of thim. Attached to the side of the boat is a queer opedical result a pure plottopage.

with a few branches of trees to cover the small conning tower and a concealed gun-ner. With about one-third speed on to away within beautiful range. That would make a great ducking boat, that Fulton, Occasionally a pair of coots, or perhaps the racier black ducks, would quarter to most of them than any saliboat could, when in twos or threes. The larger flocks got up further away because of some timid members, but she got closer for the first part of the forther away because the forther than permitted the Fulton to approach closely flocks of thousands wintering in the bay while the action of the motor was noise-less. Wild ducks, of which there are hardly a tremor from the great wheel as the queer looking craft sped by indit-ferent scallop fishermen, there was tertaining, if not important. The captain said the new propeller was working beau-tifully with the electric motor. In truth,

uxurious living. On deck affairs were decidedly more enposed a submarine terror was built for trip, but it so it means a steward with a chailing dish. However, no one over supnarrow cushions. Capt. Cable says he is stretching after the other on the long They are not even bunks, and the men reality they cover a part of the tank in the amidship bottom, which gives the bost its power of rising and sinking. benches twenty-five feet long and only are not benches, they look like them. In who must occupy them on that trip to Washington. They consist of cushioned musing, except, perhaps, to the ten mer But the "quarters" are somewhat

of the shell, or hull, itself. The lines are most graceful, each being an arc of a circle. would cause a tremor if fired within nity yards of the fullon, as the water acts as cushion to ward off the blow.

A saide from the little mechanism told of, and the gas engine and motor in the siern, and the torpedo tube and alt of altifuncts a layman below except the to attract a layman below except the man and the superance of the shell, or hull, itself. The lines are of the shell, or hull, itself. The lines are marines, protected as they are by a most rigid steel shell, offering a target too small to hit when awash and protection against shock when awash repedo searcely probabilities are that a terpedo searcely would cause a tremor if inced within fifty yards of the Pulion, as the water act or back to permit the Fution to lay the passes of laster a survey of the course of any of the course of the little wonder in that part, of course, will be contained in a long and serious report, both to the government and the gratified Holland people of Sulph Sulphan pagola of Sulphan passes of Sulphan

or cantain gives the order to pedo. His assistant at his elbow, regthe enemy, sighting it instead of the torter. The captain in the conning tower gets the direction and points the boat at are the simple and exact indications upon which they depend when under the wawhich the boat is tilted, whether rising or descending. A small steel indicator shows the position of the rudder. These being most accurately shown by the pressure of the water. Attached to this is a spirit level, showing the angle at fooking satist, much time a section of hand there points to the number of feet the boat is below the surface, that

whole duck family before they would know what it was all about,

But the men on deck weren't thinking of ducks and it is possible they didn't even glance at them. The power suddenly was changed to gasoline and the speed increased instantly, as the Fulton sprang way under the stronger force. The elec-ric motor is for use when submerged, and gives a speed of about six knots. The more powerful gasoline engine can't be more powerful gasoline engine can be used long when the boat is under water. in the cylinders. Gasoline is cheap nough, but air is most precious submerged, as the men need a little of it

the deck was awash with a vengeance, and the men in dry rubber boots glanced inquiringly at the captain. He didn't say what the speed was, nor did Capt. Mac-Arthur, as they aren't making public their reports. One of the men, however, 52:36 that the old propellor had given a speed of eight and a half knots awash, but be thought the new one was pushing the Ful-ton ahead at an easy ten knots.

The Kelpie was fast being gained on, but the Giraida, which had cut loose and came booming along behind at a fifteer-

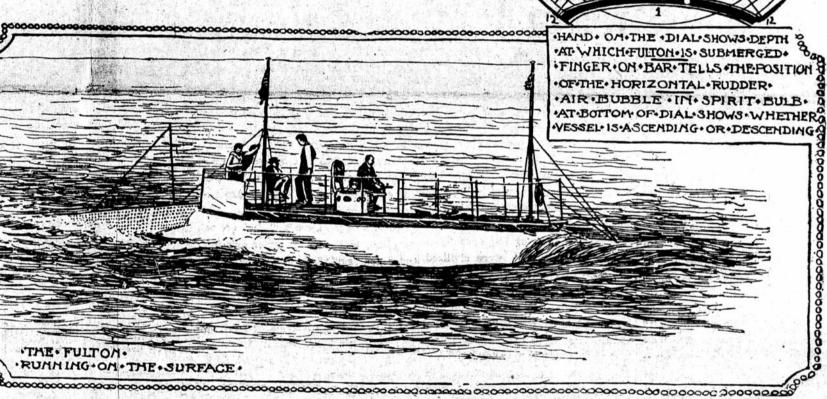
knot gait, was overhauling the Fulton, when the little wonder took to the ice, which had formed three and four inches thick in the quiet waters of Jessups Point and Hog's Neck Point and at a place opposite the upper end of Robbin's island. Seeing the ice ahead, the Kelpie hung back to permit the Fulton to lay the

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