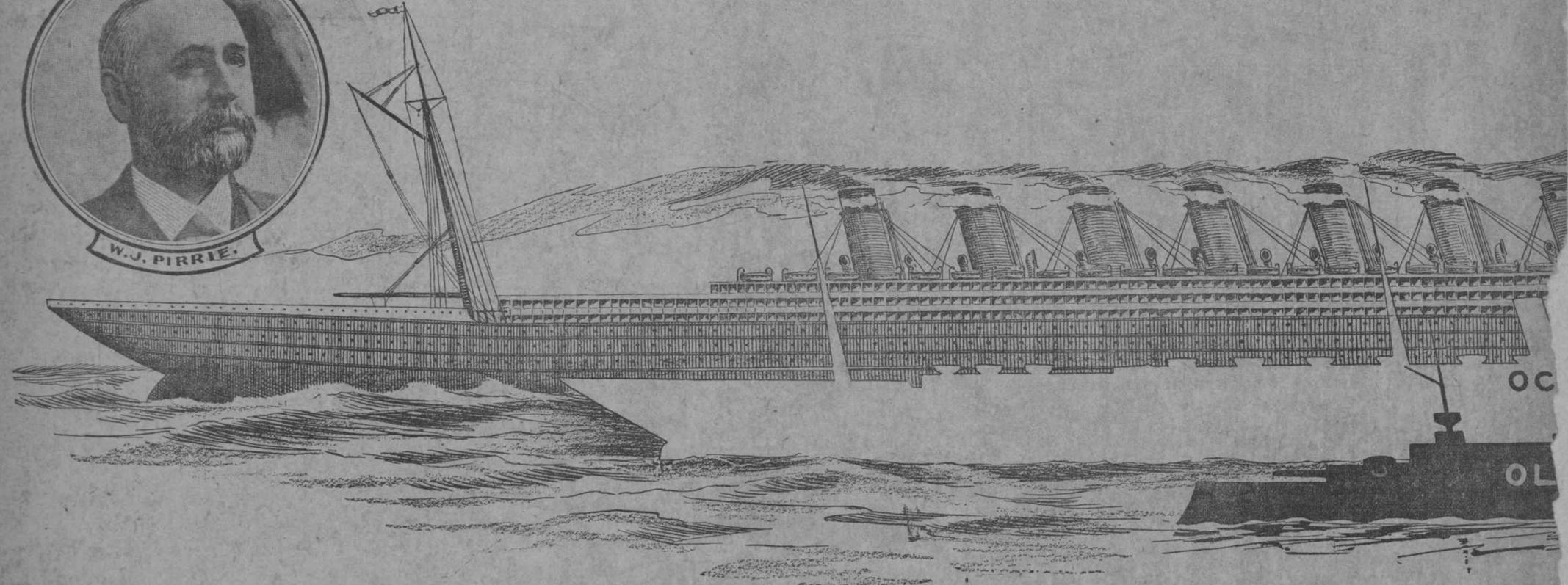
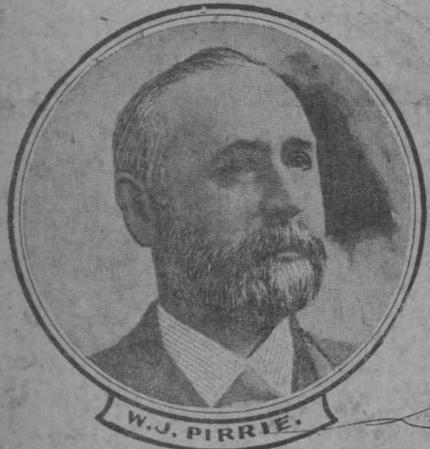


She Will Be 1,200 Feet Long, Carry 4,000 People, Go 50 Miles an Hour, Have 12 Smoke-stacks, and be Wider Than Fifth Avenue.

# THE NEXT BIG TRA



## The Unsinkable Aluminum Ocean Monster Which the Present Generation Will Live to See.

BY JOSEPH R. OLDHAM, N. A., M. E.

IMAGINE a ship 1,200 feet long, 120 feet wide, 75 feet deep, of 60,000 registered tons, one that would be propelled by triple screws the energy for which would come from 100 steam boilers. Then imagine such a vessel made of aluminum, and you have my idea of the great steamship that will be built before long to outdo the Oceanic.

I am not dismayed by the fact that a steamer such as I describe will be almost twice as long as the present world's wonder, the Oceanic. Not only is this idea feasible, but it is one that will probably be accepted as such by naval architects the world around.

The outward appearance of the ship will be strange as compared with the vessels of to-day. She will have from six to twelve smokestacks, probably twelve, arranged in a single line down the middle of the boat. As she will be of aluminum, she will be light and will draw but twenty feet of water. She will be painted with anti-corrosive paint, recently discovered, and would be proof against the ravages of time.

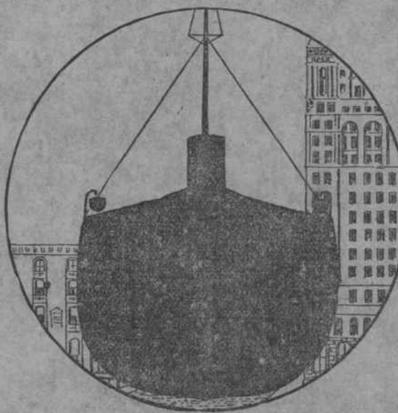
Stronger materials and lighter than those used at present will be used in her structure. She may be moved by multiple propellers, possibly working in a tunnel, so that a number of wheels could be worked by separate shafts actuated by rotary motors, as the sizes of screw shafts and engines even now under construction are perilously large. Or the motive power may be produced by compressed air or gas.

Then the form of least resistance probably being discovered, the hull, broad and light in comparison with the augmented dimensions, will rise on top of the waves rather than pass through them.

It will probably interest the readers of the Journal to know that the rolling and pitching may be greater than at present, but with improved cabins and a shortened voyage the difference may not be noticed.

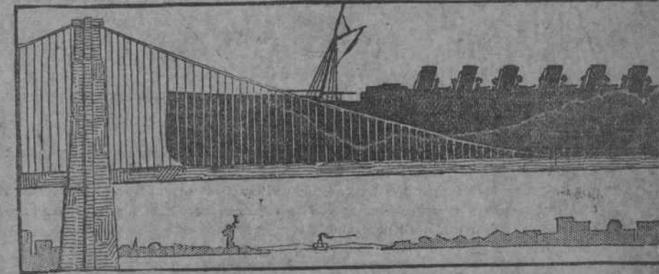
It is my firm conviction that no better time than four and a half days will be made across the ocean. In other words, the time limit has almost been reached. The reasons for this are obvious. Between seventeen and twenty knots the difference in resistance is as ten is to five. The power has to be increased just double. As you pass twenty knots and go higher the resistance becomes much greater in proportion, hence the difficulties in the way of securing great speed. It is my idea that light as the boat of the future will be, strong as she may be, backed with power that is at present almost incomprehensible, the 35 mile-clip will never be passed.

That aluminum will be the material of the future is beyond question. The precursor of this improvement was the yacht Defender which has a great deal of aluminum in her. Perhaps nickel steel will be likewise used. This steel, it must be remembered, is fifty per cent. stronger than other metals of the same density and would naturally prove lighter of construction.



Admiral Dewey's "Olympia," 340 Feet, and the "Oceanic," 700 Feet.

She Would be Twenty Feet Wider Than Fifth Avenue and Overlap the Waldorf-Astoria and the House Across the Street.



How the Big Ship Would Almost Reach for

than they are now, for the engines of to-day are practically perfect. Motive power would come from about one hundred boilers.

These figures may seem stupendous, but when we stop and consider that the ordinary battle ship has forty boilers, they will not seem so large.

The boilers would be fed from ten separate stoke-holes, each of which would be in water-tight compartments, built right up to the upper deck.

I will venture to say that before all the new ships of to-day are worn out

## QUEER EFFECTS OF WEATHER

PROFESSOR EDWIN GRANT DEXTER, of the Colorado State Normal College, after several years' study, has arrived at some interesting conclusions about heat and cold on the human system. Temperature and humidity, he says, are not the only conditions that have an effect on the feelings and actions of people. The barometer and wind, clouds and sunshine have a strong influence also.

Through statistics gathered in New York, he finds that suicides are more numerous on bright days than on cloudy or rainy days. This is quite contrary to the usual impression that it is the dull, cloudy, muggy day that is the most conducive to self-destruction. A calm, bright day in summer is the most dangerous of all. On such days the death and suicide rate is highest.

Professor Dexter accounts for this on the theory that calm air in summer, in a city, is lacking in vitality. It has a depressing effect. At the same time the brightness of the sunshine is dazzling and tantalizing. It makes people restless and want to do something.

In a depressed state this restlessness often takes the form of suicidal mania. On warm, rainy or cloudy days the same inclination to kill oneself might be present, but the energetic impulse to put the idea into execution is more apt to be lacking.

"Every individual," says Professor Dexter, "has both an energy necessary to the vital processes of living and a reserve energy for intellectual processes and activities. An increase in the vital reserve of energy tends to increase the number of misdeeds. A disorderly act of the nature of an assault or misdemeanor can only occur at such a time as there may be both energy and inclination or impulse to undertake it."

"The days upon which we most often find

## FOR THE FIRST TIME IN THE HISTORY OF AN INTERNATIONAL YACHT RACE IN AMERICAN WATERS THE UNITED STATES GOVERNMENT WILL TAKE A HAND AND SEE TO IT THAT THE COMPETING CRAFT ARE NOT INTERFERED WITH BY SIGHT-SEEING VESSELS.

Elaborate plans have been prepared, which will insure to a certainty a free and unhindered course to the Shamrock and Columbia. It is proposed to literally encompass the two racers in a flying column of Government ships, surrounding them by a cordon through which excursion steamers and all unauthorized ships will not be permitted to pass.

It is estimated that nearly twenty-five patrol vessels will be needed to establish the cordon that is contemplated. Many of the vessels of the patrol will be new and fast revenue cutters, while others, it is said, will be fast steam yachts loaned to the Government for the occasion by public-spirited men. The yachts pressed into patrol service will each carry one lieutenant, who will fly a distinguishing flag from the masthead.

By direction of the President, Captain Robley D. Evans, U. S. N. (Fighting Bob), has been placed in command of the combined patrol fleet. The President has also directed that five torpedo boats be assigned to duty in addition to the fleet of revenue cutters. This is not the first time that Captain Evans has commanded a combined force of revenue cutters and naval ships. In 1892, when serving in the Pacific as commander of the cruiser Yorktown, Captain Evans was assigned to charge of the Beving Sea patrol. He commanded on that occasion a fleet of five revenue cutters and four naval ships.

The officials of the Lighthouse Department of the Government have arranged, under instructions from Washington, to place a line of buoys down in the vicinity of the starting point for the race. Behind this line of buoys will be the cordon of Government craft, and behind the cordon the great mass of sight-seeing vessels. The

## HOW TORPEDO BOATS WILL KEEP THE COURSE

buoys will constitute the dead line beyond which no vessel must pass save the racers and the umpire's boat.

The great difficulty of which competing vessels have heretofore complained has been the crowded conditions at the start and finish and at the rounding points. The Government patrol will undertake to picket the stake buoys and the finish point. As the yachts cross the starting line they will be followed by a line of patrol steamers so disposed as to prevent any other craft approaching to within a distance of one

mile. This arrangement is said to be absolutely necessary in order to insure not blanketing the racing boats in the event of light winds.

The flying cordon arrangement proposed for the yacht race is a well defined naval formation which war ships assume nowadays when desiring to protect some valuable craft from the raids of an enemy. Before the vessels within can be reached the cordon must be pierced.

Every available revenue cutter on the Atlantic coast will be pressed into ser-

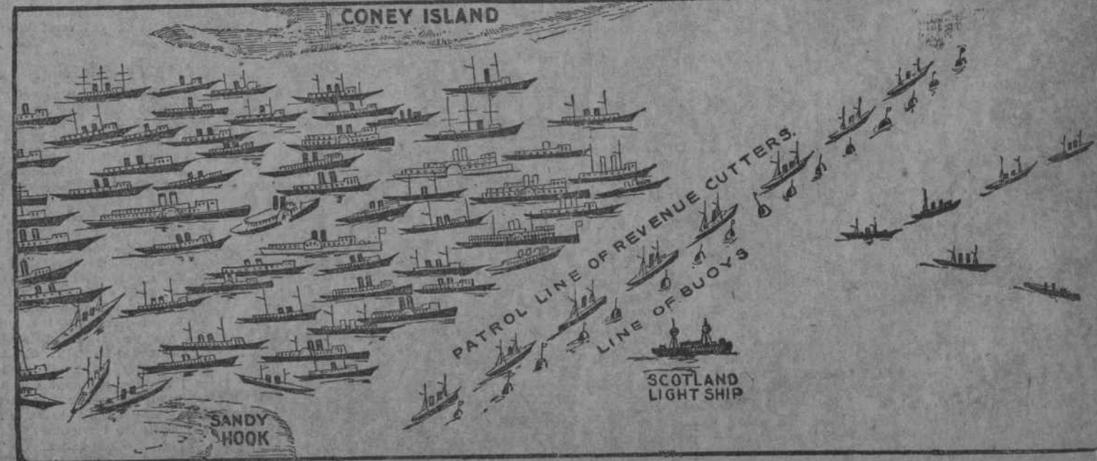
vice for duty in connection with the racers Algonquin, Gresham, Onondaga, steamers Hamilton, Dallas, Dexter, and

comprise fully fourteen craft, which is of revenue cutters.

The Windom is the vessel which fired the shot which destroyed the lighthouse



Captain Robley D. Evans, in Command of the Patrol Fleet.



THIS PICTURE SHOWS HOW THE FLEET OF EXCURSION BOATS WILL BE HELD

## Turtles Can Be Trained Like Pet Dogs.

TURTLES are generally considered better adapted for soup than for trick performers, but a Philadelphia woman has a different idea.

She has half a dozen of these shellbacks, and declares they are just as intelligent as dogs or cats. Every day she puts them through a set of performances.

At her word of command they will march single file, in twos, in threes or all six abreast.

With their little heads alert and sticking in front of their huge armored backs, their four tiny feet scrambling along as the funniest com-

pany of mimic soldiers ever seen. They have learned that a good military drill brings them a fine lot of bread crumbs and milk.

At an adjacent factory a large bell is rung every morning, noon and night, and at the first sound of the bell the turtles know it is time to eat, and they get together of their own accord in military order and start on the double quick toward the kitchen steps.

They also insist upon coming into the kitchen during a rain storm, and the little fellows who cannot mount the steps poke out their heads and give voice to a peevish, shrill bark until they are also brought under shelter.