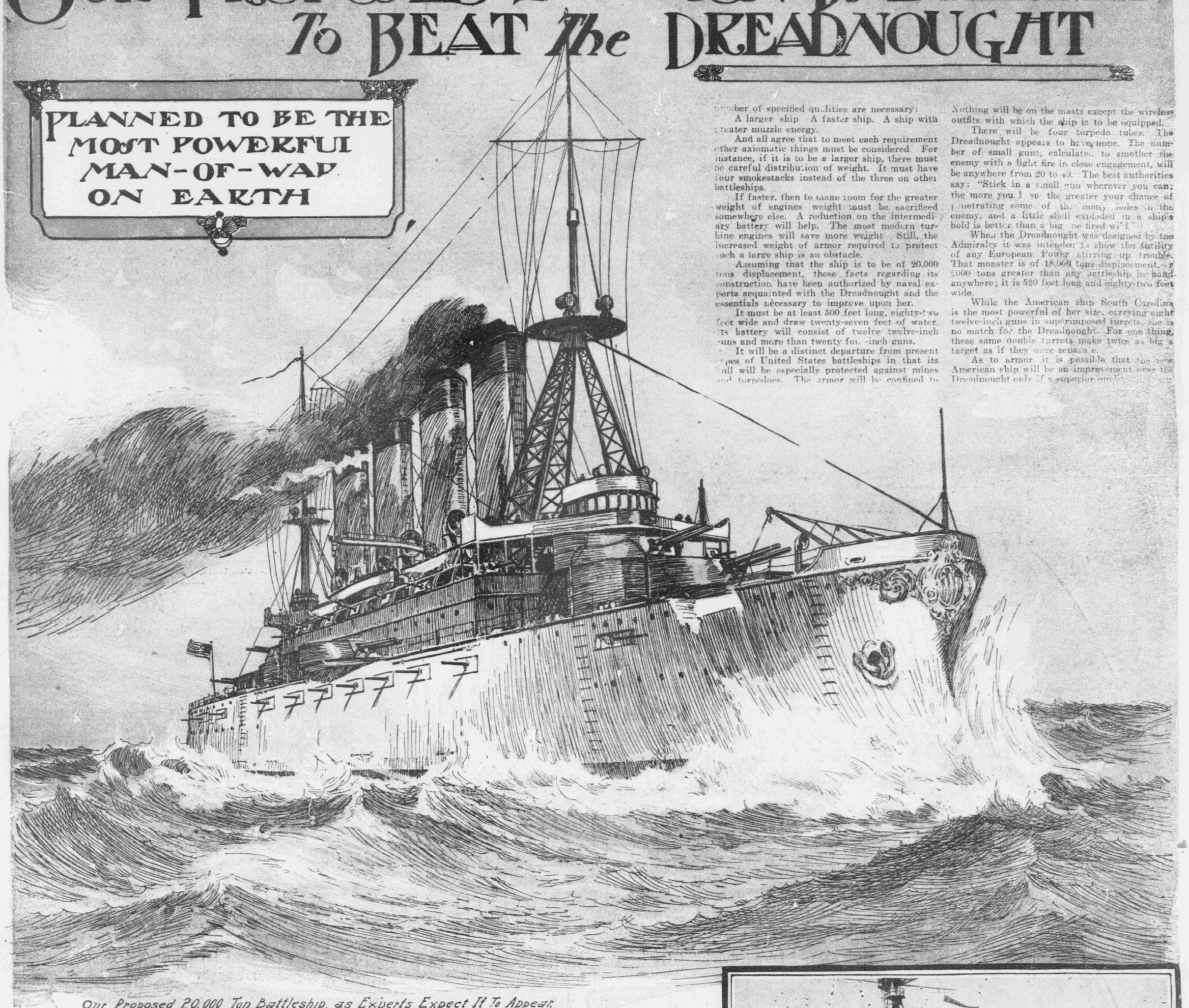
OUR PROPOSED 20,000 TON BATTLESHIP To BEAT The DREADNOUGHT

PLANNED TO BE THE MOST POWERFUL MAN-OF-WAR ON EARTH



Our Proposed 20,000 Ton Battleship, as Experts Expect It To Appear.

PERHAPS she will be christened the Lick Creation, or maybe a more typically Yankee name would be the Skeerd-o'-Nothin'; but, anyhow, whatever the letters on her stern, Uncle Sam's proposed new 20,000-ton battleship, to be built at a cost of $9,000,000, will not dread the English Dreadnought—and that means that she will fear nothing afloat.

Not many days ago there was tested on British waters the most mighty battleship ever built, H. M. S. Dreadnought. When from her barbettes blazed simultaneously fire from eight of her ten twelve-inch guns, making an explosive force equal in the aggregate to 400,000 tons, which sent the great craft skidding sideways many yards, there was reached in naval achievement a point where the world gasped.

There rode the waves then, truly tested and proved, a fighter of steel and fire which could catch and destroy any giant that inhabits the main. England had built her in eighteen months, not, she protested, to destroy peace, but to insure peace. For, she argued, with such proof of superiority on the high seas, surely no nation would be so foolhardy as to contest her supremacy.

She erred. Already England's supremacy is in peril. Germany has planned a battleship which, with sixteen eleven inch guns, was intended to mark an advance over the 18,000-ton English marvel. Italy, having once before taught John Bull something about ship construction, proposes to do so again. The Jap, who in the late war gave some pointers to the naval world, has not retired from the seas. And Uncle Sam?

Uncle Sam is planning a battleship superior to any other yet conceived in the world. He will make it so big and strong and fast that it will be able to catch and demolish any foe with its twelve twelve-inch guns; he proposes to protect it by improved armor and arrangement of hull compartments. Indeed, in the new monster he will endeavor to say the very last word in the way of battleship construction

CAREFULLY, secretly, the naval architects at Washington pursue their work, which is to decide whether America is to be outdone abroad in the construction of battleships, which may even mean an answer to the question whether or not a European power might, if it wished, ignore the Monroe Doctrine and pick up South American territory in contempt of Uncle Sam.

The Dreadnought marks the longest step forward since the Monitor during the Rebellion —although its honor is somewhat depreciated by the simultaneous advance, almost as great, by this country in the South Carolina, now under way.

Indeed, it is asserted by a high naval authority, ten years ago a member of the Bureau of Construction, that plans similar to those of the Dreadnought were considered at Washington years ago, and that while this government failed to see the advantages in them, England's representatives at Washington carefully took them home. Now they have appeared in the new battleship.

Congress itself will decide what our Dreadnought beater is to be like, after considering the seven plans now drafted, two by architects of the Navy Department and five by outsiders.

One plan is for a 20,500-ton ship, with twelve twelve-inch guns, in six turrets, all on a centre line, the second pair to shoot over the first pair, the third to shoot over the second, the highest to be forty-five feet above the water-line. This is considered to hold in some respects possibilities overbalancing those of the English fighter.

It means that all the twelve guns could be fired at one time upon either broadside. Only eight of the Dreadnought's ten guns can be so trained. Eight against twelve!

To understand what this means, consider that when such a twelve-inch gun is fired it generates an energy at the muzzle equal to that of 50,000 foot-tons, that is, an energy which would lift 50,000 tons a foot from the ground. So eight of these guns fired at once would create 400,000 tons energy, while twelve would generate 600,000 tons.

Before the construction of the Dreadnought the greatest number of twelve-inch guns on any vessel that could be fired on a broadside were four of the 40,000-ton type.

Could the ship withstand the shock of such a tremendous discharge of guns? The engineers who prepared the plans contend that by placing the turrets containing the guns far enough apart, and by placing them at different elevations so that the vibration would not all affect the same deck, it would be feasible.

These plans also include sixteen five-inch guns to fight off torpedo boats. A criticism is that none of the small guns can be fired to the rear, and only two over the bow.

In another plan, provision is made for a 20,000-ton ship also, with six turrets, each containing two twelve-inch guns, only ten of its guns arranged, however, to be fired upon a broadside.

At least two of the seven plans being considered by the special board appointed by Secretary Bonaparte, it is said by those who have seen them, contain principles which would insure a stronger fighter than the Dreadnought.

Some things, axiomatic in battleship construction, are recognized in all the plans. For instance, all start with the assumption that a number of specified qualities are necessary:

A larger ship. A faster ship. A ship with greater muzzle energy.

And all agree that to meet each requirement other axiomatic things must be considered. For instance, if it is to be a larger ship, there must be careful distribution of weight. It must have four smokestacks instead of the three on other battleships.

If faster, then to make room for the greater weight of engines weight must be sacrificed somewhere else. A reduction on the intermediary battery will help. The most modern turbine engines will save more weight. Still, the increased weight of armor required to protect such a large ship is an obstacle.

Assuming that the ship is to be of 20,000 tons displacement, these facts regarding its construction have been authorized by naval experts acquainted with the Dreadnought and the essentials necessary to improve upon her.

It must be at least 500 feet long, eighty-two feet wide and draw twenty-seven feet of water. Its battery will consist of twelve twelve-inch guns and more than twenty four-inch guns.

It will be a distinct departure from present types of United States battleships in that its hull will be especially protected against mines and torpedoes. The armor will be confined to protection of the machinery and magazines and the stability of the vessel. Outside of this there will be no armored protection except on the turrets containing the twelve-inch guns.

Of the twelve-inch guns, four will probably be mounted in two turrets, on a line forward, the rear turret higher than the other one, thus firing over it. Four other guns, in two turrets, will be mounted on the after deck. A turret with two twelve-inch guns will probably be located on either broadside. Such an arrangement would admit of a broadside of ten twelve-inch guns. From all of the twelve-inch guns shells, each weighing 900 pounds, will be driven by 275 pounds of cordite at a speed of 2000 miles an hour.

Turbine engines must give a speed of at least twenty-four knots, and possibly twenty-seven. The Dreadnought was designed to go twenty-one knots, but in a test has gone twenty-three. Speed is recognized as an essential in the matter of gaining position in engagement and in pursuing or protecting merchant marine.

There will probably be no fighting top. Nothing will be on the masts except the wireless outfits with which the ship is to be equipped.

There will be four torpedo tubes. The Dreadnought appears to have none. The number of small guns, calculated to smother the enemy with a light fire in close engagement, will be anywhere from 20 to 40. The best authorities say: "Stick in a small gun wherever you can; the more you have the greater your chance of penetrating some of the many holes in the enemy, and a little shell exploded in a ship's hold is better than a big one fired wild."

When the Dreadnought was designed by the Admiralty it was intended to show the futility of any European Power stirring up trouble. That monster is of 18,000 tons displacement, or 2000 tons greater than any battleship in hand anywhere; it is 520 feet long and eighty-two feet wide.

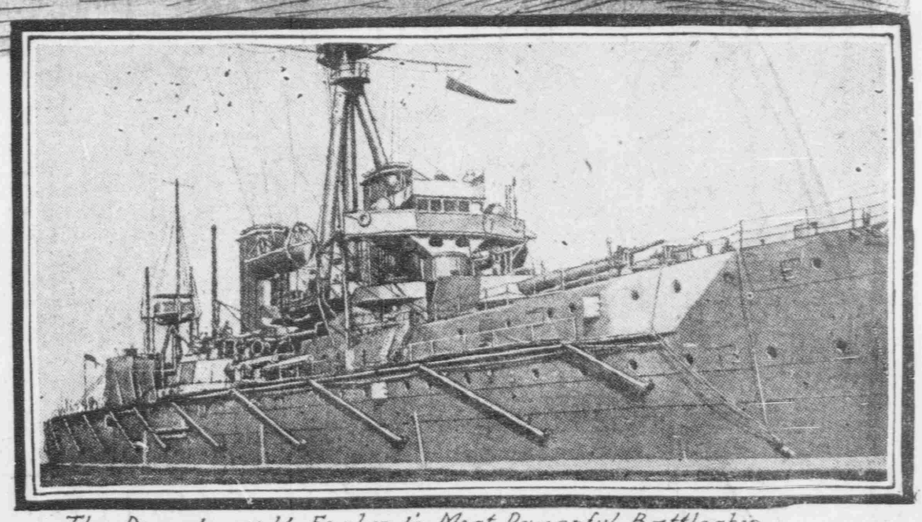
While the American ship South Carolina is the most powerful of her size, carrying eight twelve-inch guns in superimposed turrets, she is no match for the Dreadnought. For one thing, these same double turrets make twice as big a target as if they were separate.

As to armor, it is possible that the new American ship will be an improvement over the Dreadnought only if a superior quality of plate can be produced in this country. The Dreadnought carries eleven inches of armor in the most protected places, and the South Carolina twelve.

Whether by eliminating protection above the magazines and machinery, excepting the big turrets, it would be possible to place this weight in the underbody to protect it against mines and torpedoes is one of the questions to be decided. If so, an important advance will be made, for the Japanese war proved that such protection is one of the crying needs of the present-day navy.

At a range of 3000 yards the Dreadnought's guns will pierce a fraction over seventeen inches armor of any kind now made. The Navy Department is sure, however, that a superior armor can be had. So that it to armor that the American inventor, interested in the prestige of the navy, is turning his hand.

Has the last word been spoken by England? Or is American genius arising to the emergency? The government at Washington believes that it



The Dreadnought, England's Most Powerful Battleship.