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CRUISER ARMED WITH PNEUMATIC DYNAMITE GUNS.

In our issue of February 26 we presented a plan and longitudinal section of the cruiser now being built for the government by the Cramps, and which will be furnished with three of the pneumatic dynamite guns designed by Lieut. Zalinski. We herewith publish a perspective view of the boat, and give a few more details concerning its construction.

The air from the compressors passes to the main reservoirs, which, being located along the keel, occupy space which is of little value. The air is then conducted to an intermediate or firing reservoir, from whence it is admitted to the breech of either of the gun tubes. The storage reservoirs are designed to carry a pressure of 2,000 pounds to the square inch, while the intermediate will carry 1,000 pounds. The capacity of the reservoirs is such that thirty shots can be fired as rapidly as the guns can be loaded; and of these thirty

shots, fifteen can be fired the full distance—which according to the contract must be one mile or over—and fifteen at close quarters, which means one thousand yards or over.

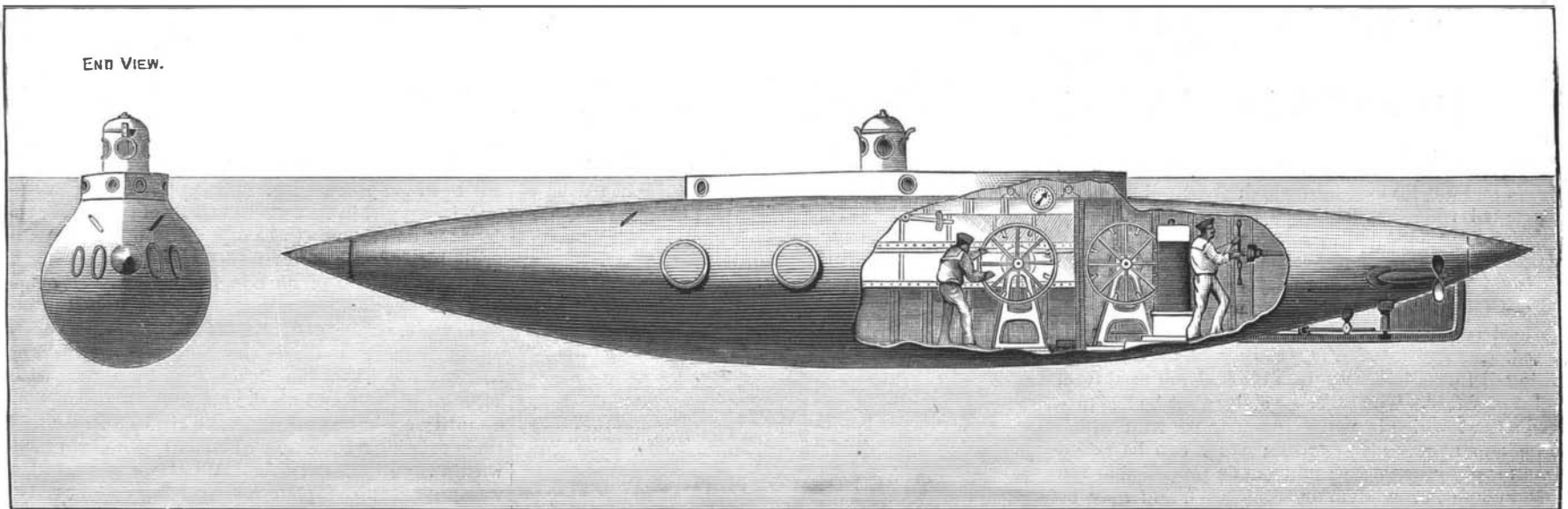
The pilot steers, fires, and has absolute control of each of the independent engines driving the twin screws. This system, by doing away with the transmitting of orders by voice or signal, places all the machinery under the immediate control of one man, who is responsible for the handling of the boat, and who himself executes what, in the usual way, would be his own orders. The rapidity thus insured is of the utmost importance, while the danger of error arising through excitement, when the boat is under fire, is perhaps reduced by the placing of all the responsibility upon one man.

Contrary to the reports which have been circulated, the cruiser will be American from stem to stern, both

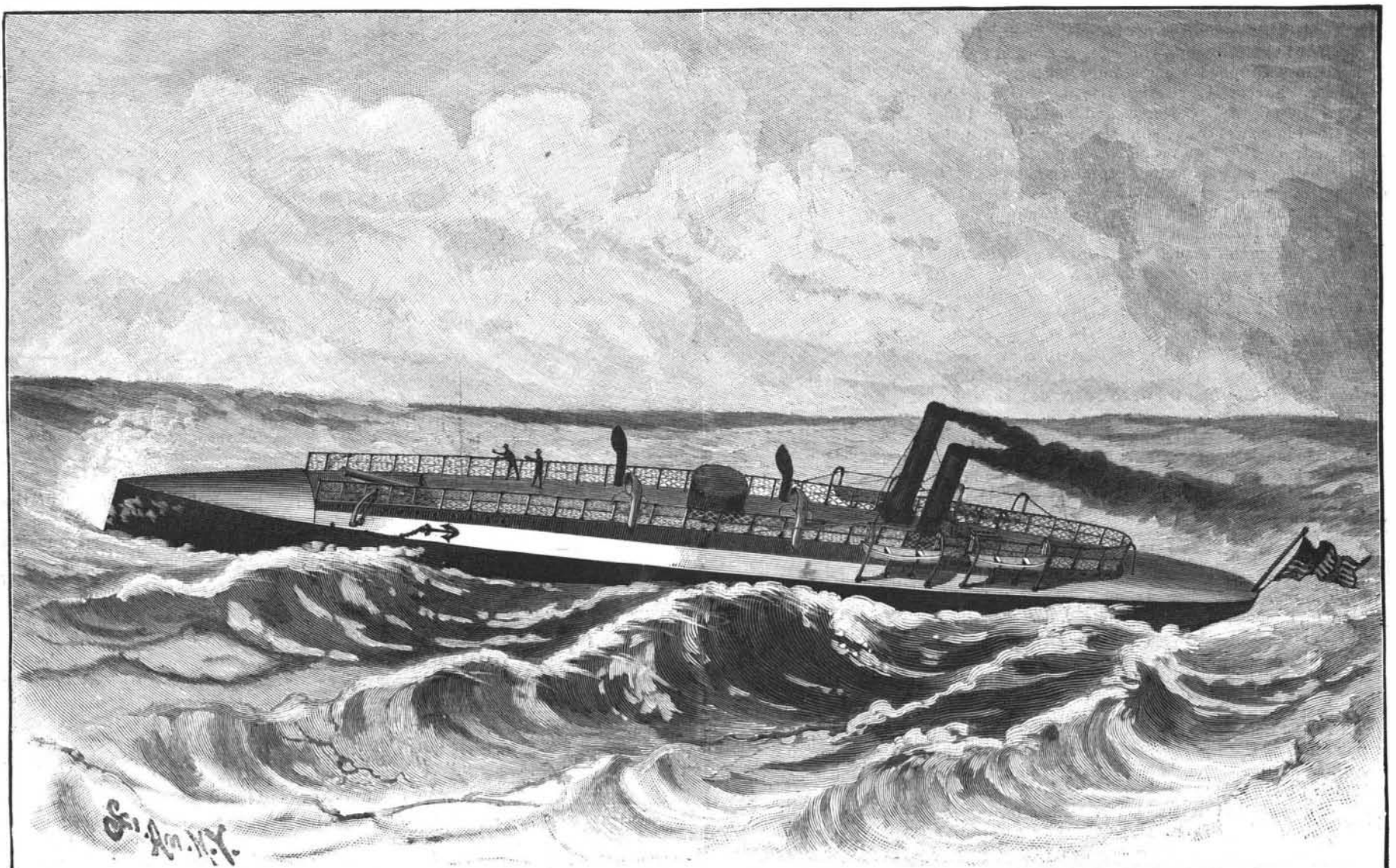
in design and in the material entering into its construction. Judging from the many successful experiments that have been carried on with the dynamite gun now at Fort Lafayette, it is most probable that the new boat will meet the expectations of its projectors.

THE SUBMARINE BOAT NAUTILUS.

Our illustration represents the Nautilus, a boat designed for submarine movement by electric power, furnished with means of sinking and rising at will on the principle devised by Mr. Andrew Campbell, to whose ideas practical effect has been given by Mr. Edward Wolsley and Mr. C. E. Lyon. The boat has been constructed by Messrs. Henry Fletcher, Son & Fearnall, the well known shipbuilders, of Limehouse, and its action was successfully exhibited, two months ago, at the West India Docks, to Lord Charles Beresford, R.N., and other naval officers.



THE DISPLACEMENT SINKING AND RISING SUBMARINE BOAT NAUTILUS, WORKING BY ELECTRIC POWER.



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