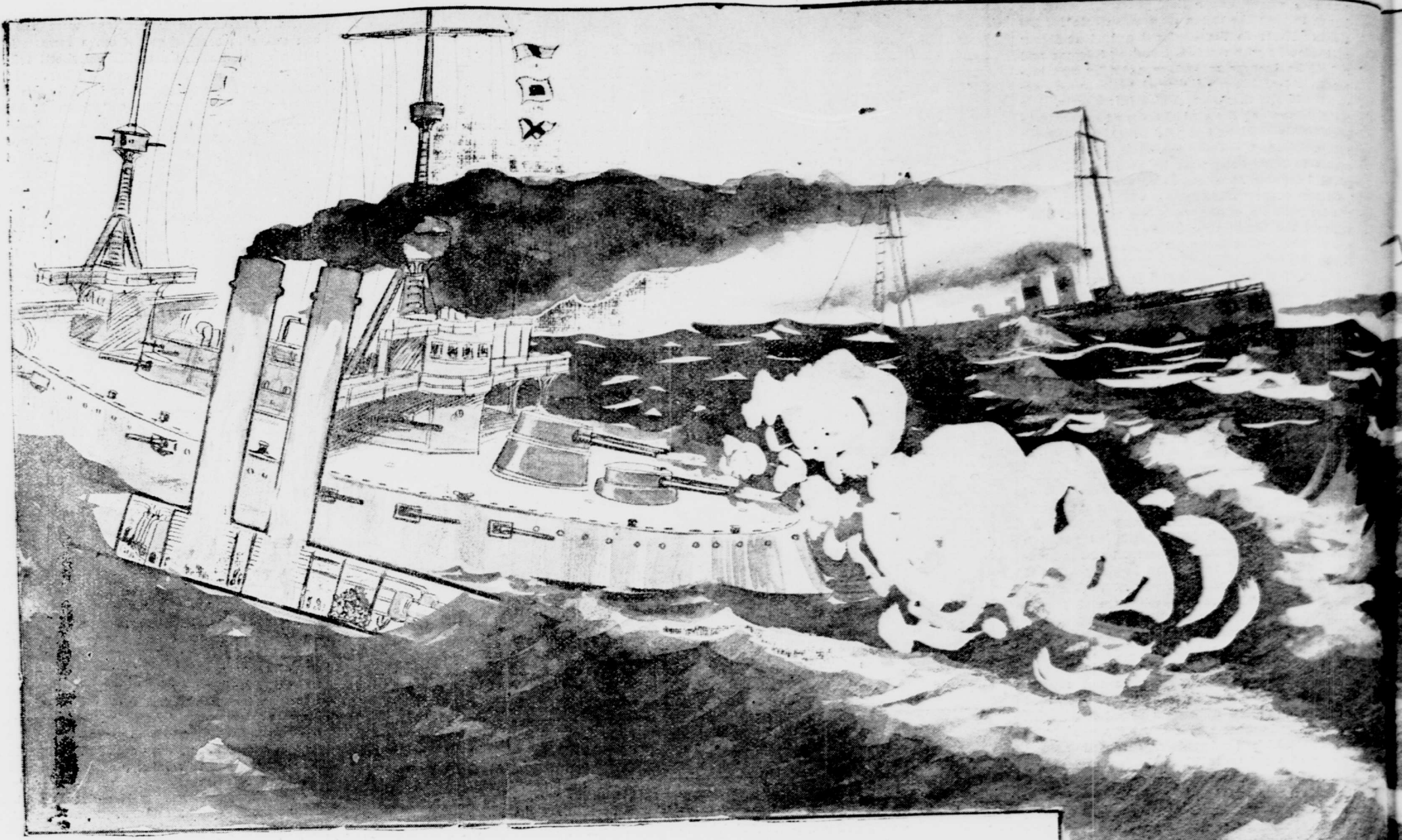


# A NAVAL ARCHITECT'S VISION OF THE COMING TYPE OF SEA FIGHTER THAT BRISTLING WITH 14-INCH RIFLES AN OIL FUEL BATTLESHIP OF THE FUTURE BRINGS ALL HER BIG GUNS OF TO-DAY, WHICH CAN ONLY REPLY FROM TWO OF HER TURRETS, BECAUSE HER OWN FUNNELS PREVENT



## THE MOTOR DRIVEN WARSHIP, A REVOLUTION IN PROSPECT.

*Experts Say She Is Coming Soon and Will Possess So Many Advantages Over the Present Dreadnoughts That She Will Send Them All to the Junk Heap Without Firing a Shot.*

Only the other day The Tribune pictured in this place the newly launched British Dreadnought Orion in the act of discharging her full broadside of ten 13½-inch guns, and it was explained that, owing to the placing of these big guns along the central line of the vessel, this was the heaviest broadside that could be discharged by any warship now afloat anywhere in the world. Hardly has the terrifying significance of this truly awful discharge of metal against an enemy's fleet been assimilated than along come naval experts predicting that the real scourge of the seas and undisputed master of all the steam driven Dreadnoughts of the world will be a motor driven warship, for the reason that a motor driven warship will be able to discharge her entire complement of big guns not only in broadside but fore and aft as well.

The Orion, with all her broadside advantages over other steam driven Dreadnoughts, can discharge only six of her guns dead ahead and only four of her big guns dead astern. This restriction of her powers is due to the fact that two huge smokestacks project from her deck, to say nothing of her masts. These effectually prevent her forward guns from firing dead astern and her after guns from firing dead forward. But the motor driven warship, experts declare, will need no smokestacks at all and her comparatively small masts can be of the folding variety, which can be laid down horizontally along the deck when required. Thus the newest kind of warship would carry no obstruction at all which would hinder her entire complement of great guns from being fired all together in any direction desired.

A distinct advantage pertains to the firing of guns fore and aft, as any land lubber will readily understand, because in either of those positions the ship offers the smallest possible target to the enemy. On the other hand, a vessel like the Orion, obliged to present her broadside to the enemy in order to use all her big guns at the same time, offers the foe the biggest target that she possibly can, and in these days of extremely accurate aim with the biggest of guns, assuming such a position toward several gun crews of 12-inch sharpshooters might prove fatal almost instantly.

The better to present this advantage our artist has drawn a motor driven warship in the act of pursuing a steam driven Dreadnought. Her foremast has been folded down for the occasion,

and as there are no smokestacks this gives her free play for all big guns in her five revolving turrets, which are aiming directly at the fleeing foe, who can reply with the big guns from only two of her turrets, the after ones. By swinging to one side or the other the Dreadnought could bring into play one or more of her forward turrets, but this would largely increase the target she now presents to the foe, whereas the motor driven pursuer presents the smallest possible target, but is able to use her armament to the best advantage.

Another point which our artist has brought out in his picture is the large amount of space taken up in the Dreadnought's hold by the machinery and fuel necessary to a steam driven vessel, and the comparatively small amount of space occupied in the hold by the machinery and fuel of a motor driven warship. This means

that the latter can carry heavier armor than the former, with the same displacement. She is smokeless. She has great speed. Her clear deck means an absence of death dealing flying splinters in an engagement.

This advance in naval construction is not a dream. Messrs. Vickers, Sons & Maxim have already constructed at their works at Barrow-in-Furness, England, internal combustion engines developing 40,000 horsepower, and one of King George's new unarmored cruisers is to be equipped with them; and if this is successful it will doubtless be followed by a warship fitted out in the same manner. The world, in fact, seems to be on the eve of another revolution in warship construction which will send several big fleets of Dreadnoughts speedily to the junk heap and prove almost as far-reaching in its effects as was the introduction of steam itself.

## THE PIANOFORTE.

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quities which are impossibilities to other pianists with the greatest ease and a small but neat touch, and without once disturbing the quiet posture of his body; who often plays whole passages in moderate tempo *legato* with one and the same finger (as in the andante of the Mozart Fantasia, the long passage in sixteenth notes in the tenor voice)—such a pianist certainly is without a fellow in his art."

In 1901—that is, only nine years ago—there still lived in London an English musician who could and did tell us how some of the great pianists of the eighteenth and nineteenth centuries played. The memory of Charles Salaman went back to J. B. Cramer, who with Clementi, Hummel and Czerny formed the first great group of creative virtuosi whose formative influence has been felt down to to-day. Salaman wrote down his recollections of the old pianists whom he had heard and his essay was printed in "Blackwood's Edinburgh Magazine" for September, 1901, only a few weeks after the death of the author. The testimony is of the highest importance, for Salaman had lived through all the phases of musical development and made experience of them from, let us say, five years before the death of Beethoven to as many after the death of Liszt—a period of more than two

entire generations. His description of Cramer, for instance, carries us back into the eighteenth century and emphasizes several things which have been pointed out in these studies:

As a musician he was of the school of Mozart, whose compositions he constantly interpreted with true enthusiasm and perfect sympathy, and it was beautiful to hear him speak of Mozart, with whom he was contemporary for the first twenty years of his life. In appearance Cramer was dignified and elegant, with something of the look and bearing of the Kembles; and well can I recall the tranquil manner in which he displayed his mastery of the instrument, so different from the exhibitions of restless exaggeration and affectation one so often sees at the modern pianoforte recitals. It was a pleasure to watch the easy grace with which John Cramer moved his hands, with bent fingers covering the keys. H. E. K.

### FACT AND FANCY.

If love levels all things, why are there so few level-headed lovers?

The man who marries happily may be said to be transported for life.

Locomotives are called "she" on account of the horrible noise they make when they try to whistle.

A good thing needs no puffing, but this truth does not apply to tobacco.