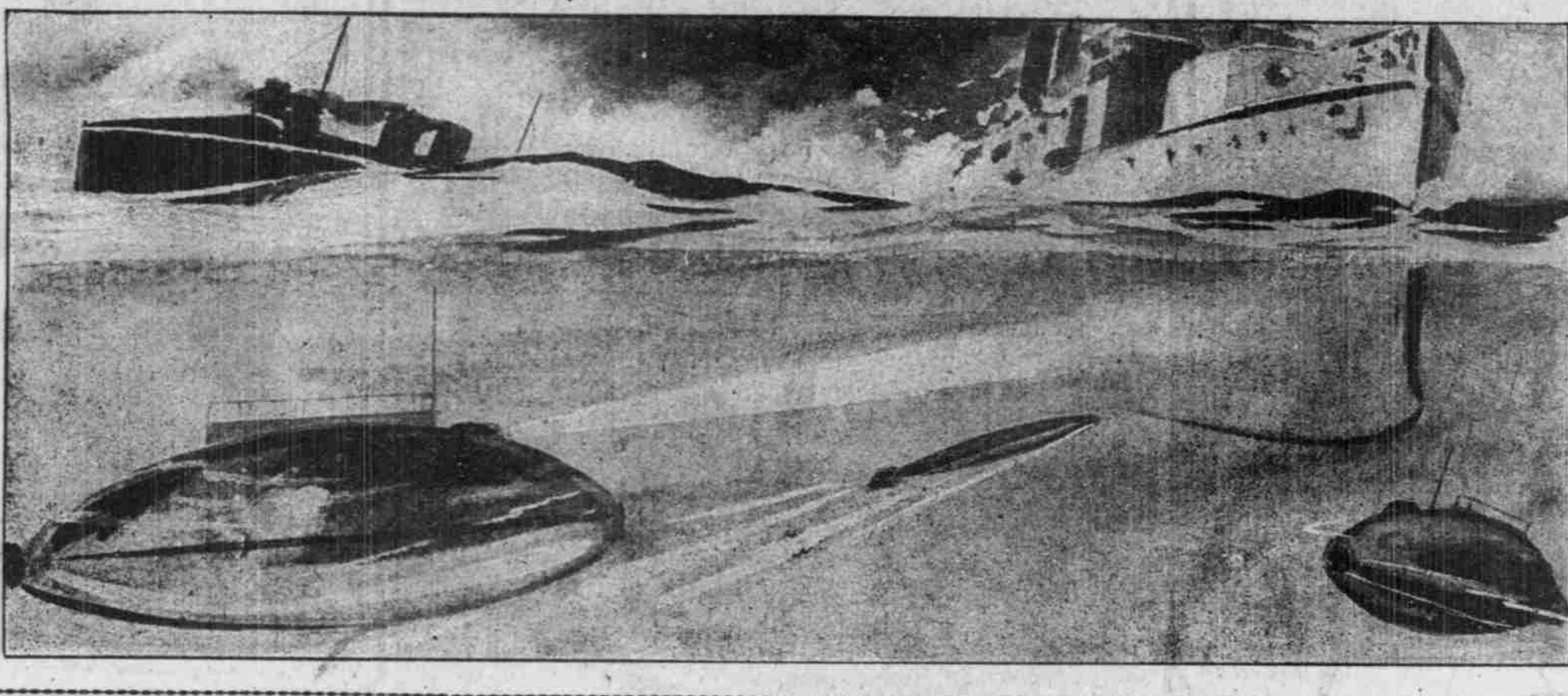




THE BATTLESHIP OF THE FUTURE

Mr. Lewis Nixon, who recently resigned as leader of Tammany Hall, enjoys an international reputation as an authority on shipbuilding, and especially in regard to the subject of naval construction, in which he enjoys the foremost position of any man in the United States.



THERE is one possibility that makes anything like an accurate forecast of the type of warship of the future very difficult.

There is one possibility that makes anything like an accurate forecast of the type of warship of the future very difficult. This is the chance that there may come at any moment a complete revolution through the discovery of some agent of propulsion that will do away with coal and the steam engine.

and the holes made in the vessel were plugged up with comparative ease. Even chain shot was not fatal to a sturdy vessel, nor impaired seriously, her fighting qualities, but a shell carrying a high explosive is a different proposition.

Danger to the Guns. However, we are only at the threshold in the matter of explosives. There is certain to come more rapid development along these lines.

marine boat is concerned. It is at the very outset a practically perfect craft. Such changes as will be brought about by its enrollment in the Navy will be in the conditions to which it is opposed.

Dangers in Submarine Boats. We know that the submarine boat is practically a perfect type of its class because of the limitations of the field.

depth, and when it fires its torpedoes under water must not lose its longitudinal stability. This is all that has been asked of it.

The problem we are confronting now is to find something that will give us protection against the submarine. At present we have nothing.

vessels be heavily armored as a protective measure, but this proposition has met with no favor. It would mean an additional loading down of our ships which are already carrying as much armor as weight can be spared for.

But whatever the influence of the submarine I doubt that it will change materially the general type of the battleship. There may be deeper double bottoms, more bulkheads and a general increase of honeycomb structure.

The Cost Considered. One thing is certain and that is that as naval equipment advances there will be a concurrent advance in the relative cost.

experience in the past. The expense of firing 100 rounds from the 15-inch guns of the battleship Massachusetts in ammunition alone would exceed the entire cost of the old Constitution battery in 1812, with ammunition enough thrown in to fight all her batteries.

The development of our new colonial policy will greatly influence the Navy of the United States, both in regard to numbers and types.

One thing is certain and that is that as naval equipment advances there will be a concurrent advance in the relative cost. This is shown very conclusively by

her keel was laid until she bombarded the Barbary Coast at Tripoli. The cost of the whole battery of the Massachusetts, including the armor used as gun protection, would have built, armed and equipped ready for battle two 12-gun three-decked like the old Pennsylvania; the cost of the side armor alone of the Massachusetts would have built and put in motion the Hornet and the Wasp of our little Navy of 1812, and the cost of the Massachusetts' machinery would have provided sailing power for our whole naval force at that time.

But while the direct cost of the fighting ship is large it represents a very low rate of National Insurance. By a vigorous stand wars are prevented. It is almost impossible to estimate what a war costs in the loss of life, the destruction of public structures, closing up of channels, cutting of cables, diversions of trade and other losses.

The development of our new colonial policy will greatly influence the Navy of the United States, both in regard to numbers and types. In this swift-moving age subjugation and even assimilation of ideas of government can be accomplished in years instead of decades and generations as formerly.

We have entered into active competition for the world's markets, and we have to face a severe commercial rivalry with other nations. This condition enormously increases the character of war. Its requirements are both direct and specific in developing both the type and character of the Navy.

The development of our new colonial policy will greatly influence the Navy of the United States, both in regard to numbers and types.

One thing is certain and that is that as naval equipment advances there will be a concurrent advance in the relative cost.

A FIREROOM WOOING

HOW A MUCH-COVED PHOTOGRAPH FIGURED IN A SEA ROMANCE.

This charming story was written for the San Francisco Examiner by John Fleming Wilson, a regular contributor to that publication. He is the son of Dr. John H. Wilson, principal of the Portland Academy.

JOHN FORBES, chief fireman of the steamship Emperor, had a reputation on the Pacific for making a ton of coal go almost as far as owners demanded that a ton should.

Months ago when he had joined the Emperor in San Francisco, the chief engineer had tried his strength, his endurance, and his temper; approved them, and afterward taken the clean-mouthed youth into his confidence.

Many a night the burly Forbes and his heavy-limbed subordinate leaned over the bars around the foremast, and spoke to each other of Her. If the elder were satisfied with the youngster's attitude, he took him quietly to his little cabin and let him look at the picture of Her on the bulkhead.

In a most timid and reverent fashion he attempted to show himself worthy of Her. He worked steadily; he saved every cent of his wages; and, when in port, he took a delight in letting the chief fireman know where he spent his time.

To his disappointment Forbes took everything in a matter-of-fact way. He praised his work sparingly, nodded his head kindly when he displayed his savings, and simply took it for granted that he behaved himself ashore.

These feelings developed into strong emotion at times, and the more rapidly when he tried to bring his fancy down to concrete details.

"What sort of a woman was she?" he asked Forbes one evening.

"That I reckon a cap's most likely her headgear. Maybe she does wear a hat."

"How does she do her hair?" Lyle went on with some directness.

Forbes looked at him blankly. To the young man's senses there was an implied rebuke, a hint that he was prying into the secrets of a modest girl.

Little while ago Lyle was to mental or emotional activity, he steadily progressed to a state where certainty was the one cry of his heart.

There was no answer, and he added, as though it might be taken for granted: "I love her."

He waited for a long time, but Forbes made no reply, even by a gesture.

They neared San Francisco, and Forbes' insistence upon economy in coal became almost unbearable.

But this time he seemed to be unjust—a sin never before imputed to this chief fireman.

One evening, when he was on his way to San Francisco the next day, Edward Lyle went wearily to his bunk in the starboard alley-way.

His bunk was dark, and he fumbled under the mattress for matches.

But it was simply a photograph awkwardly pinned there by John Forbes.

Officers of the Degree of Honor SUPERIOR LODGE WILL MEET IN PORTLAND NEXT WEEK.



The Superior Lodge of the Degree of Honor, being the women's department of the fraternity of Ancient Order of United Workmen, will hold its annual meeting this month in Portland.

Expert Opinions Differ.

For a generation past the creation of a battleship has been as conventional as the trimming of a hat. The trimming may be varied here and there, and the shape slightly altered, but the frame always remains about the same.

Hence it is in the factors going to make up the battleship that we must look for the probable changes that will be made in the vessels themselves.

It has been asserted by eminent constructors that we are approaching an era where armor will be subordinated entirely; that the battleship of the future will depend upon speed and quick handling for defensive purposes.

Battleships are like prize-fighters, they go into the ring to fight to a finish, and realize that they must be prepared to take many about blows in return for those that they deal if they win the victory.

From the time that explosive shells first came into use armor became imperative. In the days of solid shot it made no particular difference whether a vessel was pierced or not, unless at the water line. The shot seldom hit anyone inside,

Electrical War is Near. In the matter of explosives a good indication of what may be expected in the future are the "thunderbolts," as the Spaniards called them, hurled by the Vesuvius against the Cuban fortifications.

It is the heat that plays havoc at present with our guns, so that the life of a gun is perhaps 15 discharges. At the end of that time the interior of the gun barrel is all torn and seamed, and the weapon is useless.

Electrical War is Near. In the matter of explosives a good indication of what may be expected in the future are the "thunderbolts," as the Spaniards called them, hurled by the Vesuvius against the Cuban fortifications.

I have no doubt that soon electric influences will be projected and that the metal work of an enemy's guns may be able to transmit shocks to those serving them. The most important factor we have at present to influence the future Navy is the submarine boat. It is a peculiarity of this new addition to our fighting force that its influence will be outside itself.