Five Serious Charges of Inefficiency of Our Navy

Congressman Gardner's "Wake Up, America," Speech Supported by Further Disquieting Accusations Made to the Senate Naval Committee.

HE warnings of Representative A. P. Gardner in his notable speech in Washington last week on the unpreparedness of the United States for war has had a widespread influence in waking up other members of Congress. Congressman Gardner did not attempt much more than a general survey of the situation; he did not go into searching details to show exactly where our army and navy are insufficient and inefficient.

Mr. Gardner's speech has served to call attention to another notable address recently made to the Senate Naval Affairs Committee by Mr. Willard S. Isham, a military engineer and expert, and the inventor of a torpedo shell. Mr. Isham makes five very specific charges of inefficiency against the United States Navy. These charges were made on September 30, publicly, and in the presence of high officials of the navy, and they have not been challenged explained nor denied.

The graveness of Mr. Isham's charges can scarcely be overestimated. If they are unjustifled they ought to be proved untrue by the navy experts; if they are true our navy administration needs immediate investigation and reorganization.

Here is an official copy of Mr. Isham's address to the Naval Affairs Committee of the Senate:

Gentlemen-The main purpose of this brief presentation is to direct attention to some of the many defects in the material of our navy which, neutralizing many good points, destroy the efficiency of our navy as a means of national defense. A further purpose is to dis-close some of the contributing causes that have resulted in present conditions in the ex-pectation that when these are fully considered a searching investigation of our national de-fenses will result.

Since the time when our Government was established it has been recognized that an efficient navy operating on the high sea was the most practical means for the protection of our long coast lines against hostile invasion. A navy to accomplish this purpose must be able to intercept and overcome any convoyed force before a port suitable for a base could be secured and made defensible, and since it is obviously impossible to determine in advance the objective point of attack of an enemy it is necessary that our navy, to be efficient must possess eyes, as it is recognized that a blind fighter could never accomplish much in a combat with an active enemy.

Hence an important adjunct to a fleet con-

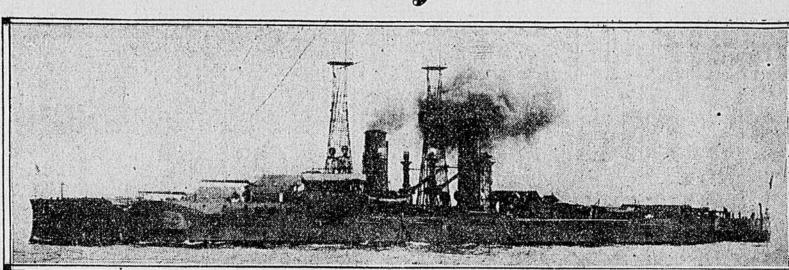
sists in scout ships for scouring the seas and ascertaining the strength, location, direction and speed of an enemy's expeditionary force, so that he may be met by a suitable force at such a point and at such a time that a tactical advantage may be secured and a favorable result obtained. We possess no ships capable of cruising as scouts at a distance from our battle fleet which sould not be suickly designed. battle fleet which could not be quickly de-stroyed by the faster and more powerfully armed battleships and battle cruisers of other navies. Hence at the door of those responsible for the condition of our navy is laid charge

1. Our navy is inefficient because of its inability to scout out an enemy on the high seas.
Our battle fleets are made up of battleships
in which speed has been sacrificed for armor plate and from a strategical or tactical standpoint are no better than floating fortresses, as they can never force a battle upon an unwilling enemy or interfere with any of his movements. Moreover, no part of a battle fleet can must possess the force necessary to meet at any time or place the maximum force which an enemy can concentrate against them. This condition also results from the second defect

2. We possess no ships capable of operating at such a distance from our battle fleets as to screen its formation and strength from the scout ships of an enemy.

Because of this defect our fleets are compelled to be always ready and are as a consejuence never ready to meet an enemy to the best advantage. This defect makes the de-

fense of our fleets impossible at night, since it permits a hostile torpedo flotilla to hover about them at sundown like a pack of coyotes around a campfire ready to rusn in when the conditions are favorable. Against this attack be safely detached as a flying base for cruisers, destroyers or other fast ships acting as scouts, since they might be cut off and destroyed by a concentrated force of ships having superior



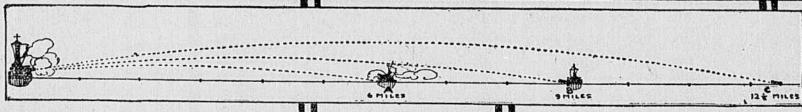


Diagram showing how the armor-piercing shells used by our navy are limited to shells used by our navy are limited to close-range fighting, and, as Mr. Isham claims, places our navy far below the standard of efficiency. The point (A) is the maximum distance (six miles) that the armor-piercing shell is capable of destroying a ship of an enemy. (B) The same shells at this range (nine miles) may make many hits, but have lost their destructive power, while if a shell of the destructive power, while if a shell of the torpedo type is used it will still have its destructive power and tear a hole in the ship many times the shell's diameter. C represents the maximum distance of shell accomplished by the battleships of our navy, using a shell weighing 870 pounds; yet, as Mr. Isham points out, they are not capable of totally destroying a battleship at one-half this distance.

speed and armament. Hence it is that our battle fleets must operate as an entity and our battleships are powerless, as shown by Lord Charles Beresford in The Betrayal, page

"No guns, heavy or light, will protect a dat-tle fleet from torpedo attack at night. The only effective method of protection is to em-ploy a large number of small cruisers to clear a wide area about the battle fleet at sundown.

These cruisers do not exist in the requisite number.

* * The small cruiser force must be disposed so that they form a protecting screen distant one hundred and twenty or one hundred and forty miles on all sides from the battle squadron. By no other means it is possible to move a battle squadron at night without risking its destruction by the attack of torpedo craft."

Rear Admiral Twining, late Chief of the Bureau of Ordnance, stated in the House hearings, March 12, 1912, page 907:
"The torpedo boat continues to be held in

"The torpedo boat continues to be held in great favor as a weapon of underwater attack, and it must be admitted that no navy has at present an adequate system of defense against such attack if efficiently delivered. Torpedoes have been designed which can cut, penetrate or displace the nets. The searchlight is in-effective, since a torpedo may be successfully launched at a range beyond its reach. Gun-fire is ineffective against an invisible target, and the torpedo boat can launch its weapon while still invisible to the gun."

The great naval expert, Percy Scott, who formerly championed the construction of battleships, now declares them to be worthless and defenseless against underwater attack. far has shown that no commander dares to expose a battleship to underwater attack. Hence the charge is laid and should be investigated:

3. Our battleships are defenseless in a fog or at night.

Moreover, the results thus far obtained as to the naval operations in the European war seem to indicate that heavy ships are defenseless by day against underwater attack. Notwithstanding this accumulation of evidence, our technical boards still propose to construct

Diagram illustrating the only means by which our slow battle fleets may be moved on the high seas with a convoy of many small fleet cruisers forming a pro-tecting screen at a distance of one hundred and twenty or one hundred and fifty miles on all sides of the battle fleet. By no other means is it safe to move a squadron of battleships, especially at night, without risking its destruction by the attack of an enemy's torpedo craft.

slow battleships, and one week from to-day bids will be opened for thre such ships that will cost \$45,000,000 and that an investigation will show to be as worthless and as antiquated as the flintlock musket.

These defects in our battleships result from the sacrifice of active aggression for passive resistance, a vital sacrifice in speed for an unnecessary increase in armor plate. Because of this our ships are compelled to fight fleets, which make them an easy prey for the tor-pedo and which fired at the line of battleships will in one case out of four hit and sink a ship.
The Napoleonic maxim that "The thicker the grass, the faster it is mown," applies with especial force to naval warfare. This is one of the fruits of armor plate domination in the construction of our navy. Had our battleships been constructed with such speed that the ships. been constructed with such speed that they could cruise as fighting units they would have nothing to fear on the high seas from torpedo attack. Let us examine the advantages which this excess armor plate has given our ships.
Since the remotest ages the art of war and

the implements of warfare have developed ac-cording to certain immutable principles. For example, the boy David slew the giant Goliath because he could select a range for his attack where his sling was destructive, but which range the slow-moving Goliath could not lessen so as to make his ponderous sword and spear effective. This principle has been expounded for centuries and employed to secure victories in all ages, and it was recently re-affirmed as The United States Ship Delaware, the most formidable type of Dreadnought and pride of the American Navy. This type, as well as those now building, according to Mr. Isham, is so far out-classed by ships of foreign nations that they are obsolete, and from a strategical standpoint "no better than floating for-tresses," in which speed and armament have been sacrificed for armor plate.

Idaho and Mississippi that they were outranged by the larger guns of foreign fast ships. Hence charge 4 is laid and should be investi-

4. Thirty-two of our older battleships, carrying guns of equal or lesser power than those in the Idaho, are inefficient for the purposes

in the Idaho, are inefficient for the purposes for which they were designed because they are outranged by foreign ships having guns of superior range and possessing superior speed.

A corrollary of this principle is that the effect of a missile weapon is not dependent upon its ultimate range, but upon its destructive range. The guns of the Idaho and Mississippi and our other thirty-two ships having the same armament fire shell weighing 870 pounds about 22,000 yards, yet these shell cannot destroy a battleship at even one-half this range, which general fact is stated not only in the last British Naval Annual and in other technical journals, but also has been proven by tests carried out by a special committee of Congress and reported to Congress by the chairman, Captain Hobson, on April 30, of the present year. Admiral Twining, in testimony referred to, stated that hits could be made at a range of 16,000 yards. The British navy, last a range of 16,000 yards. The British navy, last December, sunk the battleship Empress of India at over 16,000 yards, and the account of the test in the Naval Institute Proceedings for April of the present year states that "holes were blown in her like lock gates," showing the employment of torpedo shell, since A. P. shell never make a hole larger than their diameter. Since then torpedo shell are used abroad that are effective at 16,000 yards or up to the limit of manage fixed her limit of the lim to the limit of range fixed by visual conditions, as stated by Admiral Twining.

as stated by Admiral Twining.

The question naturally arises why these thirty-two battleships of our navy are not supplied with such shell so as to prevent them from being outranged, as it is stated they would be in combat with foreign ships. Several types of torpedo shell were brought out in this country nearly twenty years ago. The War Department perfected one. I presented one, but neither type has been adopted. The cry of danger was raised against one of these cry of danger was raised against one of these types. That charge would have been accepted as honest had either of the other types of torpedo shell been adopted and against which no such charge could be brought. Either of these shell could destroy any battleship without even exploding in contact with it, as was established by experiments carried out by General Abbott nearly twenty years ago. It was also proven by tests made with the army shell against a caisson representing a battleship and fur-nished by the Navy Department, an account

Gunnery, by Lissak, page 583, which shows that this shell would destroy a battleship at even a distance of fifteen feet from it. Hence

charge 5 is laid and should be investigated:
5. Ordnance officers of this country for the past fifteen or twenty years have been in pos-session of safe torpedo shell that could destroy any ship at any range within the limit fixed by visual and other conditions, but, notwithstanding this, such shell have not been adopted for the service and our ships have not been con-structed either to employ them or meet the change that would result if other navies

Tests of these shell have shown that by means of them not only can ships be sunk at extreme ranges, but also irrespective of their armor protection, as their most favorable point of attack is below the water line. Has this recognized destructive effect of torpedo shell which discounts the use of armor plate been the cause of the vigorous opposition to their adoption? Has their use been opposed because their adoption would at once extend the de-structive range of all the primary guns on all our battleships and thereby prevent such ships from ever becoming obsolete? Has their use been opposed because their adoption would destroy the basis of the permanent naval building programme so dear to many? Those back of this opposition should be permitted to give the reasons therefor, and these reasons should be programmed. be weighed and tested by a searching investi-

The immediate cause for this request for a hearing in the hope of securing an investigation has been the arrogant act of the Naval Chief of Ordnance, who has refused to carry out tests with either of two types of torpedo shell in which I am interested and as requested by the House Subcommittee on Ordnance Tests, but who has at the same time carried out a test with one of these shell in utter dis-regard of the wishes of either the House committee or myself, which for high-handed dis-regard for the interests of the navy and of this country stands without parallel in the history of his department, and I am informed, having thereby secured the material for an unfavorable report, the caisson employed in the test was blown up and destroyed, thereby preventing further tests to disprove the in-accuracy of the reports and conclusions ob-

tained and uttered by the department.

It is recognized that a saw may be proven to be worthless if tested as a means to drive nails. Likewise a hammer may be proven worthless as a means for cutting off timber; but a test to prove their efficiency should be made under such conditions as they are de-signed to be used, and I am informed by many Members of Congress who received invitations Members of Congress who received invitations to be present at a test requested by the House Committee on Ordnance Tests that they expect such test to take place. I am also informed that if the subterfuge of biowing up the calsson has been resorted to in order to prevent the result of an honest test from stopping contracts for hattlashing or shell the blame. ping contracts for battleships or shell the blame will be placed where it belongs.

The issue is not the Isham shell or anybody's iell in particular. The question is whether the ordnance officers shall prevent the use of any torpedo shell because they lessen the demand for armor plate and for new ships. This issue, it is submitted, should be decided by an investigation and by honest tests, and it is be-lieved that it will be so decided.

Believing that the few serious charges here-

in made can be established by the honest officers composing 95 per cent of those in the service, and that a searching investigation will result in great good to our navy, I respectfully request that such an investigation be made.





shout like that. You shall have her. I am going to get hold of Cosina Bacoare."

At the sound of the name Nicholas hesitated a moment, then he sighed and said: "All right."

"Quick, quick, tell me what it is. I Racoare came three days later. will give you seven. Her eyes have set me mad"
"Whatever you do master, don't bouque. Cosina was dressed in his chew! What was a seven with the control of the control of the cost of the cost

bouque. Cosina was dressed in his most picturesque costume, with his famous long gun, and was leading his horse by the bridle.

"Oh, there you are," said Nicholas, as if aroused from a dream. "Vasili, have them bring some coffee and

come back here right away."
"One cup will be enough," said Cos.
ina. "I never drink coffee."
"You don't?" said Nicholas absentmindedly. "You have come for that
little affair. How much do you want?
Will fifty gold pieces be enough?"
"That will do it," said Racoare

stolidly.

Vasili came back, hiding a smile.

"Have you settled the conditions?"
he asked.
"Vasili," said Nicholas, "go and get
my purse from under my pillow."
"It is not necessary," said Racoare.
"I do not need any money When I
bring you Sultana, you will pay me.
Not before."
"Good" said Nicholas ""

"Good," said Nicholas "That is an understanding. You hand her to me



most marvellous fellow. In ers. At dawn he reached his house my mind's eye I see him before while Vasili was waiting, gain seated on his gray horse "That woman beat us all off, Vasili." my mind's eye I see him before me again seated on his gray horse with his sunburned face, his heavy drooping moustache and his eyes like liue steel.

The district of Voltarike at that time belonged to a Greek, and next time belonged to a Greek, and next to his estate on our side of the line to his

time belonged to a Greek, and next to his estate on our side of the line lived a most beautiful Roumanian girl, and the Greek was madly in love with her. Well, as I said, Nicholas Zampiridi

was madly in love with her, but she would not look at him, and told him a thousand times that she despised the Greeks.

But Nicholas could not give her up, and one day he called his old overseer, Vasilt who knew all about his love affair, and said:
"What am I to do. Vasili?"
"I don't know. master."
"We'll try to think of some plan.

You have so often given me good advice"——
"I should like nothing better than

Vasili scratched his head.
"You might promise me two, three, four rold coins. What good would it do when I cannot think of anything? There is only one thing you might do—hire some rufflans at Frasini, break into her house at night and carry her off by force."

"Good!" cried Nicholas. I will do it." That same night he got together five strong fellows, gave each of them a horse and set out for Sultana's farm. Tying their horses to the trees, they scaled the wall and slid down on the other side.

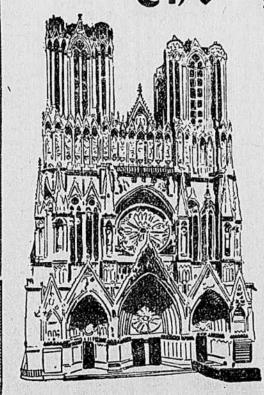
At that moment the door of the house occured and Sultana americal.

house opened and Sultana appeared, dressed in a white gown and carrying a sword. She frowned and stared angrily at Nicholas, who felt like throwing himself at her feet and begging her forgiveness, but he was atraid of making himself ridiculous to the same of the followers, so he the of his followers, so he are to seize her in his arms. The suitana. "I thought her in see it is a see it."

> ords she hit him with Word on the top of the vers tried to pro-but she dilied on



Cathedra Edmond



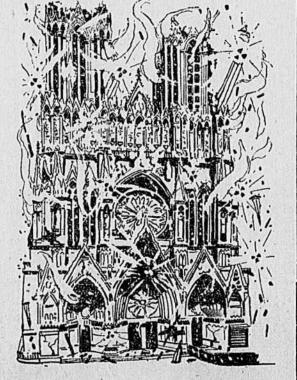
(From the original French of the distinguished poet's sonnet on the mutilation of the Rheims Cathedral by German guns.)

REATIONS do not perish which a ruffian mars; Only a little more immortal yet they stand. Inquire of Rodin, or of Phidias demand, If works of theirs are less esteemed for vandal scars.

The fortress, once dismantled, irretrievably is gone; The broken temple, made more noble, lives again; The eyes, remembering that roof with mild disdain, Prefer to view the heavens through lacework of stone.

Let us give thanks. Now envy in our hearts is still-Envy of what the Greeks have on their Golden Hill: Their Symbol without price which Insult consecrates!

Our thanks to those who urged the stupid cannon on, Since from their German skill forever there awaits But shame for them-for France a Parthenon!



and I will count the money."

"Just what I thought," said Vasili. "Cossina would bring you the devil if you asked him to."

Racoare went down into the garden, tied his horse to a tree, wrapped himself in his mantle and laid down to sleep, "B-r-r-r!" said Nicholas; "that man

makes me shudder, but he has taken a heavy burden off my mind."
When evening came Racoare saddled his horse and rode away with the words: "You will wait for me at the clearing at Voltaresti."
When he reached surana's house everyhody was asleep. He banged at the gate.

the gate.
"Who is there?" cried a voice inside.
"Open the gate," said Racoare.

"Who are you?"
"Open the gate, I say," roared

Racoare.
"No, I will not open the gate."
"It is I, Cosina."
"It is I, was thrown wide open

The gate was thrown wide open at Cosina entered the yard, which was

empty. He tied his horse and entered the house. Sultana appeared in the doorway of her chamber, dressed in her night dress, sword in hand. "Who are you and what do you want?"

I have come to take you to Kye

Nicholas."
"Good," she said. "I will treat you as I treated him."

"Goon," she said. "I will treat you as I treated him."

Raccare made a step forward, caught hold of her wrist and her sword flew into a corner.

Sultana sprang back and called to her servants, but when they saw who their mighty guest was they hung back and said: "We cannot do anything, mistress; it is Raccare."

"You cowards!" cried Sultana, and rushed at Cosina, who caught her in his arms, tied her hands with a leather thong and carried her out of the room without paying any attention to the servants.

Sultana looked into Cosina's blue eyes and asked: "Who are you?"

"Cosina Rocare."

Sultana looked at her panic-stricken servants and understood.

When outside Cosina mounted his horse, placed her in front of him and carried her off with the swiftness of