A MILLION AN HOUR

Cost of One Hour's Fighting by the North Atlantic Squadron.

EXPENSE OF A NAVAL WAR

The Warships Indiana and Brooklyn Alone Would Use Up Two Hundred Thousand Dollars' Worth of Ammunition.

At Newport on June 1 the naval officers assigned to form the class of instruction for the term will assemble at the war college to study the most expensive problem with which nations have now to deal in their plans of offense and defense.

Naval warfare has become so expensive that naval strategy must be understood thoroughly by naval officers in order that the greatest results may be obtained with the least amount of actual fighting. For this reason every year a number of naval officers are sent to the war college to study the most effective employment of sea power. Modern naval warfare is the most expensive sort of fighting.

Approximate figures, gathered from the best authorities, show in a startling manner how costly naval warfare has become.

It would cost $1,000,000 in powder and shot alone for the North Atlantic fleet to fight one hour.

The cost of the powder and steel that one modern battleship would fire away in one hour's fighting is as great as the cost of building a creditable man-of-war in the days before the nations began to build fleets of iron and steel. The Indiana, for instance, in an hour's fight would expend powder and shot to the value of $111,654.40 from her main battery alone, and to that must be added the cost of the fire from her machine guns and rapid-fires of small caliber.

MILLIONS FOR ONE SQUADRON.

The United States has five squadrons afloat—the North Atlantic, the South Atlantic, the European, the Asiatic and the Pacific. Of these the most powerful is the North Atlantic. To keep that fleet in action for one hour would cost at least $1,000,000 for podwer and shot. One of the big battleships would burn up about 60 tons of powder, and powder costs the government 27 cents a pound. The whole North Atlantic fleet, including the Iowa, would burn up over 535 tons from the main atteries alone. And that is powder used to send the projectiles from the guns, and does not include the bursting charge of explosives in the shells.

COST OF A SINGLE DISCHARGE.

This table will give some idea of the expense in powder and shot of fighting the North Atlantic fleet for one hour:

Ship.	Cost of powder.	Cost of shot.	Total.
Indiana	$ 33,134.40	$ 78,520.00	$111,654.40
Iowa	32,907.60	53,489.60	86,397.20
Massachus'ts	33,134.40	78,520.00	111,654.40
New York	28,771.20	30,080.00	58,851.20
Brooklyn	38,102.40	31,200.00	69,302.40
Columbia	16,880.40	27,750.00	44,630.40
Maine	14,472.00	56,236.00	70,708.00
Texas	14,364.00	53,084.80	67,448.80
Terror	4,752.00	18,256.00	23,008.00
Amphitrite	4,752.00	18,256.00	23,008.00
Puritan	9,288.00	30,209.60	42,390.00
Raleigh	21,060.00	21,330.00	42,390.00
Montgomery	18,792.00	24,660.00	43,452.00
Marblehead	18,792.00	24,660.00	43,452.00
Totals	$289,202.40	$546,252.00	$835,454.40

This is the cost of firing the main batteries alone. A ship's main battery consists of all guns of over three-inch caliber. The main battery is supplemented by a battery of machine and small calibre rapid-fire guns.

The estimate in the table as to the cost of shot is based on the cost of common shell for the 13-inch, 8-inch, 5-inch and 4-inch guns and of armor-piercing projectiles, for the 12, 10 and 6-inch guns. In actual battle a greater percentage of armor-piercing projectiles would be used and the cost for the main batteries much augmented. With this and the expenditures of the light guns (the machine and small rapid fire) it can be seen at a glance that a million dollars of Uncle Sam's money and over would disappear in the course of an hour.

ALL GUNS WOULD BE IN ACTION.

It might be argued that a ship would not put all her guns in action at the same time, but in modern naval tactics the ships circle about and "yaw" from one side to the other, so as to keep as many guns bearing as possible, and are so constructed that at all times the heavier guns can be kept bearing on the enemy. All things considered, a million dollars is not a large estimate for the cost of powder and shot expended in one hour's hard fighting.

Some idea of the cost of firing a big gun may be gathered from the fact that an armor-piercing projectile from a 12-inch gun costs $377.62, and it takes 430 pounds of powder to send it on its mission of destruction. A 12-inch gun can be fired once in every three minutes.

A common shell for a 13-inch gun costs $116.63, and the armor-piercing projectiles for the same gun at least $500 each. One charge of powder for a 13-inch gun is 550 pounds. An 8-inch gun can be fired once a minute; a 4-inch gun 420 times an hour. But it is the total cost of powder and shot fired away in one hour's engagement which is most impressive as illustriating the immense strides which the costliness of naval warfare has made of late years. One single naval engagement of any duration would cost more in the value of powder and shot expended by the opposing fleets than it would have cost to conduct an entire naval war at the beginning of the century.

SKILL AND JUDGMENT.

With this greatly increased cost of firing of a gun on board ship has come a positive necessity for great skill and cool judgment in "the man behind the gun." A fleet in which the gunners simply fired off their guns as rapidly as they could without hitting anything, unless by accident, would start a nation on the road to bankruptcy without doing much harm to the enemy. Hence the need of constant target practice, discipline and instruction. Yet target practice is itself expensive, and only the rich nations can afford to give their fleets the requisite amount of it. Only the wealthy nations of the world can afford to fight them. If the North Atlantic fleet fought for four hours it would use up in the value of powder and shot the entire yearly revenues of Greece.

COMPARISON IN SHIPS.

One interesting thing to be seen from the table given herewith is that it costs considerably less to fight those effective vessels, the monitors Puritan, Amphitrite and Terror, than it does the second class cruisers Montgomery, Raleigh and Marblehead. The monitors carry four heavy guns each (the Puritan 12-inch and the others 10-inch) and could engage a battleship, while the cruisers mentioned have no guns larger than a 6-inch. The Iowa also, it will be seen, is a more economical ship than the other two first class battleships, the Indiana and the Massachusetts.

As the Monitor type is dictinctly American and as the first monitor on that glorious day at Hampton Roads revolutionized naval warefare, and was the germ from which all modern fleets have sprung, this is particularly gratifying. The only fault with ships of the monitor class is that they are of necessity slow.

EXPENSE OF INJURY.

To illustrate again the immense expense of naval warfare, take two ships out of the table, say the first-class battleship Indiana and the first-class cruiser Brooklyn. The contract price of the Indiana was $3,020,000 and of the Brooklyn $2,986,000, and both of these ships won large bonuses and their armaments cost a big fortune. But take them at their contract price alone and we have two ships, one of them not a battleship, costing together $6,006,000, expending nearly $200,000 in shot and shell in one hour's fight. It is hardly to be supposed that from a naval engagement a fleet would come out entirely unscathed, and when to the cost of keeping the North Atlantic squadron in action for one hour in the matter of powder and shot is added the certainty of great injury being done to the costly ships and the probability of the sinking of one or more of them, the figures which would really represent the expense of such a fight to the government mount up not only to one million, but to several. The very multiplication table when naval warfare is in question, cries out, "Let us have peace." It would seem as if a prolonged naval warfare were impossible in modern times from the great drain it would make on the resources of even the richest countries, if for no other reason.

Jones County Justice.

From the Jones County News.

When his honor, 'Squire Balkcom, called the court to order this morning in the spacious umbrage of the trees that shadow his yard he noticed a dsuky son of Ham and his wife standing among the spectators with an anxious look upon their faces.

"What can I do for you?" asked his honor.

"I'se come to get you to 'vorce us, jedge."

"You have?" said his honor.

"Yes, sah."

"Don't you know that such an act is beyond the pale of this court?"

"Yes, sah; shore. She 'tacted me wid de pail, an' it wuz full er watah, and busted it over mah head, an' I ain't gwine lib wid her no moh—she shore did, jedge."

"I say, you wooly-headed imp of Ethiopia, don't you know that the constitution of the United States, embodied in its laws, denies to a justice court the power of annulling the marital vows; that it belongs to a higher tribunal? Is that any plainer?"

"Yes, sah, boss; she shore did null my constitution; why—"

"Oh, go to Gehenna. I say I can't and won't separate you. Do you understand, now?"

"Say, jedge, I'se got de money to pay you, boss, for God's sake—"

"How much you got?" asked his honor.

"Six dollars and a half, boss."

"Then I fine you $1.50 for taking up the time of the court and $5 for attempting to sully its judicial ermine by a bribe."

MECCA'S VAST MENACE

Incredible Abuses Which Prevail at This Goal of Pilgrims.

SEEK HEAVEN AND FIND DEATH

Asiatic Ideas of Quarantine—Atrocious Extortions—European Officials Helpless Against Moslem Fanaticism.

Every year, at the time of the great annual pilgrimage to Mecca, which is now in progress, there is to be seen the most extraordinary collection of poor zealots who have come on foot from distant homes, begging their food by the way, and who may be a year or two on the journey. The poor tramp may "drill" from Morocco all the way across Northern Africa, or he may come from Persia or British India by parched and barren desert routes, eating daily a handful of dates or rice. If a grade or two less abjectly poor, the pilgrim will have a camel, which doesn't better matters in Mecca, from a sanitary point of view.

Rich and poor, well and ill fed, hale or decrepit, the pilgrims reach at last by various routes, but the vast majority from Djeddah by sea, the hagios or holy space of 18 hours' march from Mecca. Here they not only strip naked, but even put off their turbans, and have their heads shaved. By way of clothing they tear new cotton cloth into squares of one yard each. Each man gets two squares, one of which is thrown over the left shoulder. In this attire the last procession marches to kiss the black stone.

This stone is suposed to date from patriarch Abraham's time. The Arabic word for stone "haggard," or in some dialects "hajar," is the same as the word Hagar, which occurs in the Bible as that of the mother of Ishmael. Hagg is a pilgrimage. Haggi are pilgrims. Hagios is the Greek word for "holy." But that is another story. The holy stone is an ordinary enough affair built into the wall of the Kaaba or sacred enclosure. It is said to have been turned black because the sins of the pilgrims pass into it, leaving them clean.

Clean! In the great Mohammedan feast that follows the procession more animals are slaughtered than the total number of the pilgrims. Sometimes the number reaches half a million of sheep and goats, less often calves and young camels. A perfect young camel is regarded as the finest sacrifice, so that many artifices are devised to pass off camels that have died of sickness for fine specimens; or camels with broken legs. The Arabs about Djeddah have a sportive way of creeping up behind a young camel and breaking its leg with a sudden twist of a forked stick, all in the interest of trade. Here are the refuse of half a million beasts; the entrails and offal stinking in the sun, the utter lack of sanitary conveniences, the feebleness of so many of the pilgrims and the long continued vegetarian habits of nine-tenths of them. Then they are suddenly gorged with meat. For the rich regard it a sacred duty to buy meat for the poor at Big Beiram feast and none need go without.

ASHA PRAYER OF POOR MECCA PILGRIM.

What some say is that cholera always breaks out within 24 hours after the feast. As a rule, it's no great matter. Cholera isn't a bad disease. Under favorable conditions it merely kills a few thousands of the dirtiest people on earth, adds a dozen clean ones by accident, travels its hundreds of thousands of miles and is snuffed out in the north by frost. In the south it is always present. This year the plague may find in the meeting and parting of so many men from such widely separated climes, just the oportunity it wants to travel and see the world.

What an oportunity! There are Shii from Persia and Suni from Asia Minor. There are dancing dervishes, howling dervishes, glass eating dervishes and dervishes who jab themselves with unpleasant pointed steel things. There are Touregs from Sahara, Bedouins from the Libyan desert, wild Megrabbins from the Lord knows where, proud white Moors in gelabas and burnouses, yellow Hindoos in bushel-basket turbans, brown Egyptians in tarbushes, coal-black negroes from Ethiopia in brown skullcaps and blue gowns. There are Persians and Turks and Chinese. And there is the cholera.

Not the real cholera always, some people say who know the conditions well. Perhaps it may be only enteric fever from change of food and polluted water, and sunstroke from the fierce rays of the sun beating down on so many bald shaven pates. They treat sunstroke by putting a bandage around the head, thrusting a stick through it and twisting it tourniquet fashion. Even this sometimes strangely fails to cure.

Of course there are quarantines and regulations. But of course, also, this is the East.

The British government in India has forbidden pilgrims to set out from districts where the plague exists, a case of locking the stable after the horse is stolen. It also requires that each pilgrim has 30 rupees as a safeguard against starvation on the way. The candidates are sorted on a long wharf divided by a picket fence. A man who has been passed hands his rupees to another, through the fence, and he to another.

There's another way. Every one has heard of the "basket trick" performed by Indian fakirs. One of these extraordinary creatures will curl up in a space somewhat larger than a bandbox and be carried on board as baggage by another. Hence the steamboat men have acquired the habit of sticking things into baggage to see if it squeals, and baggage has, in accord with the well known law of modification by environment, acquired the habit of refraining from squealing when stuck.

Then there are the French, who have this year forbidden the pilgrimage from Algiers, Tunis and Tripoli. But the desert is unfenced, and a man who sets out to visit his son-in-law may change his mind and conclude to go to Mecca when he gets into Morocco or Egypt. And the Egyptian government is hardly likely, for political reasons, to forbid the pilgrimage. For the same reasons it permits the law requiring each pilgrim to have three months' subsistence money to remain a dead letter. European inspectors would enforce the rule, refuse bakshish and make the government unpopular. Native ones think every one rich enough to pass who can beg or borrow a shilling fee.

In spite of all this, most of the pilgrims have money, and it takes the Turkish doctors at the Djeddah quartantine to find it out. Talk of quarantines! That at Djeddah is the finest in the world, considered as a means of extracting money. The doctors charge what the traffic will bear; no more. They never make the mistake of holding up a shipload of folks for more money than there is on the ship. Sometimes when business is dull and fees are running light, the medical men will send a load of people to the quarantine island, Abou Saad, to make them appreciate better the advantages of a clean bill of health and to enable them to enjoy for a while fine scenery and water at $1 a pint. As the sacred day approaches, it becomes a game of bluff. The doctors don't dare keep the pilgrims too late, for if they are not likely to be on time, they will get sullen and refuse to pay a cent. On the other hand, the pilgrims will not hold out too long, fearing to lose the entire trip. Each side knowing both the strength and weakness of the position of the other, an arrangement of some sort is patched up by which those who have money pay and those who haven't don't.

Oh, yes, there's a quarantine.

A gentleman of high official rank in Egypt who was in his younger days in the Red sea steamship businesss gives me much of this information, which he thinks ought to be made public, but which he could not himself print in any Mohammedan country.

"Such is the fear which the pilgrims feel of Abou Saad," said he, "that I once quelled a mutiny in Alexandria harbor by merely mentioning its dreaded name. The sailors were hiding. Admiral Blomfield and the British marines were guarding the ship to see that no rioters came ashore and five hundred pilgrims were storming all over her. I was only 22 and weighed a little over a hundred pounds, but I knew Arabic, and the captain asked me to go out and arrange matters. I was unarmed of course, and most of the pilgrims carried long desert guns loaded to the muzzle with slugs.

"'What's all this row about?' said I when I got on deck and they made a rush for me. They said they wanted to go on; they were afraid they'd be too late, and so on.

"'Oh, you want to go on,' said I, and I stepped to the signal box without another word and began bending on three signal flags. They watched me curiously.

"'Sure you want to go on?' said I, after they had time to get perfectly quiet. 'The captain is getting his health papers.' (He was in my room watching the ship with a glass and we were waiting for nothing under heaven but more freight.)

"Yes, they were sure.

"'All right,' said I, 'we can start when you like, without the papers, but in that case you'll be stopped at Abou Saad sure.'

"They fell on their knees to me, those big, fierce Mograbbins and Moors and Sudanese, and begged me for God's sake not to go without the papers. Some of them had been on Abou Saad and the rest had heard of it. They would have licked the dust off my boots if I had cared for that kind of a polish.

"Finally I explained to them that they had plenty of time, found out that they were worrying mainly because their food was running low, and the whole affair ended in the company giving them five bags of rice."

NOT WHOLLY IRRELEVANT.

At Least to Her Womanly Eye, but It Made Him Brutally Sarcastic.

From the Washington Star.

They had been discussing the plans for a new house, and it frequently occurred that his suggestions did not strike her as apropos. "Everything seems to be out of proportion," she was saying.

"Why," he replied, "the picture that the architect drew looks first-rate. I was going to frame it and hang it up, whether we build the house or not."

"That shows your idea of consistency. Of course, the house is very well. But you realize, don't you, that it will have to stay exactly where we put it?"

"Unless a cyclone comes along."

"But you must take the locality into consideration. What I have doubts about is the propriety of putting a $15,000 house on a $4,000 lot."

"Well, we've got to do the best we can. It would be just as hard to move the lot before we build as it would be to move the house afterwards."

"Of course; that's just like you. Nothing makes you so comfortable as to wear an overcoat that cost $75 with a suit of clothes for which you paid $15."

"Have I been doing anything like that?" he inquired, apprehensively.

"Of course, you have. And the arrangements you have been making for the stable on the property show precisely the same spirit. You know that our horse is a fine animal, and you have arranged the shelter for him as if he were the commonest sort of a beast of burden. It does seem out of all reason to me to house an animal with a pedigree in a cheap stable of that sort."

"Maybe it is a little unusual."

"Yet it is nothing more than was to be expected from a man who put a $4 frame around a $2,000 oil painting, as you did.

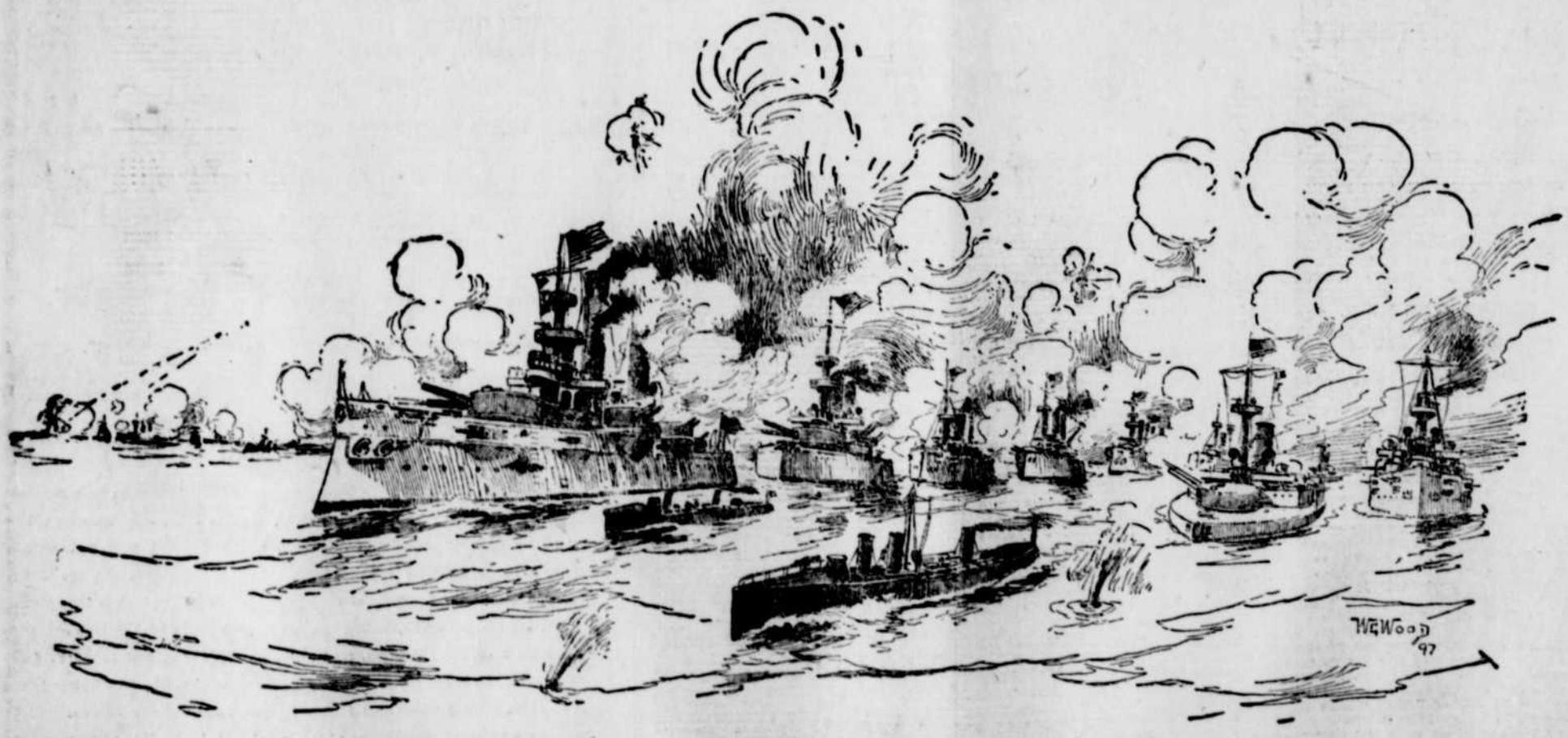
He maintained a thoughtful silence for some time, and she exclaimed:

"I hope you are not pouting?"

"No. I'm just holding my peace. I don't want to make any comments for fear you will think I am sarcastic."

"You needn't be afraid of hurting my feelings. Of what were you thinking?"

"Of your new dress for which the material cost $3.50 and the lining $27."



NORTH ATLANTIC SQUADRON IN ACTION FIRING OFF $1,000,000 WORTH OF POWDER AND SHELL IN AN HOUR
[Drawn by an expert marine artist from exact details. The line of battle is that described by Captain Mahan.]