TO TEST 14-INCH GUNS.

Army-Navy Rivalry in Matter-Ram To Be Shot to Pieces.

Rivalry between the army and the navy in times of peace, which has become traditional, receives new incentive from a race between the men of these departments in the manufacture and testing of new 14-inch guns, which seem destined to outclass existing foreign armament.

Already the War Department has five 14-inch guns under construction, two of which have been rushed to completion. The officers of the Sandy Hook proving ground have been expecting a trial as early as November 1. In view of this expectancy placement has been set for the reception of one of the monster rifles, but reports from Washington intimate that the initial trial may not occur before the first of the year. In addition to these five rifles, four others of like pattern have been authorized by Congress also for the army

Surrounded with every precaution for secrecy, the naval gun factory at Washington and the Midvale Steel Company, contractors, have been preparing a single 14-inch gun for the navy, and, despite the progress of the five army rifles, the naval ordnance men are in hopes that their test, scheduled to take place at the Indian Head proving grounds, will precede the army test at Sandy Hook.

The 14-inch type of gun measures 531/2 feet in length and weighs more than 63 tons, being heavier by ten tons than the 12-inch guns of the new battleships North Dakota and Delaware and six tons heavier than those of the Arkansas and the Wyoming. It is designed to send a 1,400-pound projectile at a speed of 2,600 feet a second, and will have an extreme range of 25 miles. Its effective range in battle will measure more than five miles. The cost of this 'peacemaker' is \$100,000. Those of this type allotted to the navy will be placed aboard battleships of two different styles planned by the Board of Naval Construction, each calling for a main battery of eight 14-inch rifles.

The most expert and careful mechanical labor has been expended in the construction of the gun. The boring of the tube, surface finishing, jacketing, heating, lathe work and kindred operations have been directed by most approved plans. It is interesting to know that the projectile will travel 542 inches through the bore before leaving the muzzle, and that if there is a variation of more than two one-thousandths of an inch in the bore the gun will fail to meet requirements. The fifty-two rifling grooves decrease in width as they approach the muzzle, so as to impart the usual rotary motion to the projectile. This will prevent the missile from turning lengthwise in flight. The capacity of the chamber is 15,843 cubic inches, and it is designed to accommodate 365 pounds of smokeless powder.

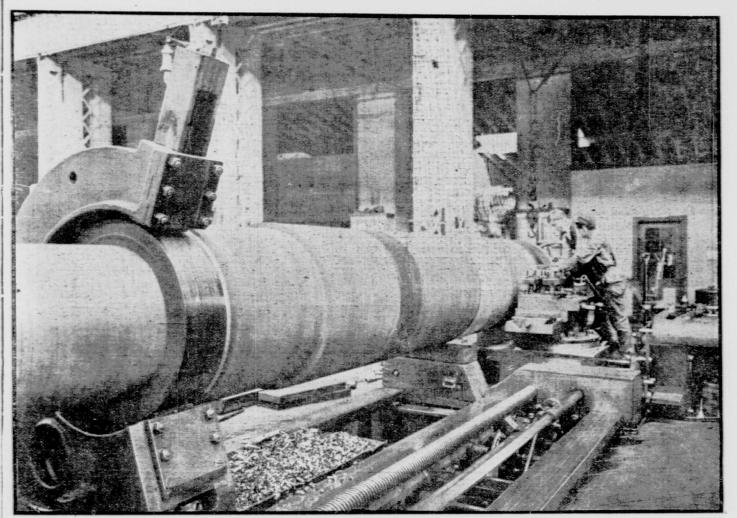
The destructive powers of the new rife are such that no modern armor, it is estimated, can survive the impact of the projectile.

Off the Indian Head proving grounds, where the 14-inch gun test for the navy is to be made, the famous ram Katahdin, which cost the government more than a million dollars, is soon to serve as a floating target. Clad in a new coat of steel, as if robed for the sacrifice, she will be shot to pieces. The experiment will be conducted secretly, according to custom, and will be witnessed by the ordnance experts of the navy, with Rear Admiral Mason, chief of ordnance, in charge.

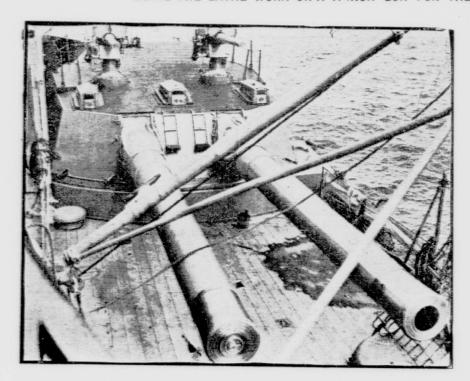
Orders have been received at the League Island Navy Yard to send the ram to Washing-There she will be divested of her armament of 6-pound rapid firing guns, her machinery and useful material, and towed to Hampton Roads.

The opportunity never came for the Katahdin to use her menacing steel prow, for modern warfare has removed ships of this type from 1893. She is 250 feet in length, 43 feet in width the sphere of serviceability. The British navy started the practice of utilizing out-of-date war vessels for ordnance tests, and the Katahdin will follow in the wake of the monitor Florida and the torpedo boats Nicholson and O'Brien, earlier victims of this peaceful tragedy in Amer-

thick, she will be strengthened by the heaviest fornian who often visited a leading Santa Barof modern plate, and, placed in line with the bara hotel because they have such excellent Marylan I shore, will reco ive the projectiles sent from the proving ground.



DOING THE LATHE WORK ON A 14-INCH GUN FOR THE AMERICAN NAVY.



TWO OF THE 12-INCH RIFLES ON THE BRITISH WARSHIP INFLEXIBLE. This mighty battleship-cruiser, which came to New York to take part in the Hudson-Fulton celebration, has been much admired. Supplied with huge rifles and thick armor, she is yet so speedy that it was reported she would try to beat the Mauretania's record on her voyage home.

The Katahdin was finished at Bath, Me., in and has a displacement of 2,150 tons.

HIS HONEY.

Luther M. Burbank, the plant wizard of California, said of honey, apropos of a flower that

"This flower grows abundantly near Santa The armor of the ram being only six inches Barbara, and there was once a young Calihoney there flower.

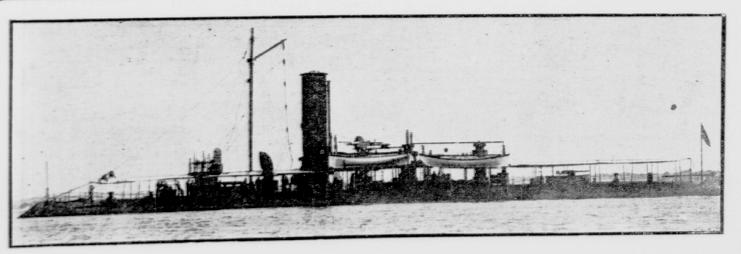
"Well, the young man got married in due course, and the wedding trip itinerary must include Santa Barbara, so that the bride might taste this superb honey.

"But the first morning at the Santa Barbara hotel there was no honey on the breakfast table. The bridegroom frowned. He called the old familiar waiter over to him.

"'Where's my honey?' he demanded.

"The waiter hesitated, looked awkwardly at "The waiter hesitated, looked awkwardly at the bride, then bent toward the young man's ear commission before many months have passed. and in a stage whisper stammered:

" "Ar-Mamie don't work here no more, sir.' "



SUPER-DREADNOUGHTS.

Costliness of Naval Competition-Germany and England.

London, September 25. Shortlived as the modern novel is the costly warship. The Dreadnought and the Invincible condemned the battleships and armored cruisers of the British navy and all rival fleets to the scrap heap; but how short may be their own day! The Americans and Germans began with imitating them, and speedily improved upon them. British designers did not stand still, but revised their calculations and planned superior war vessels of each type, and these were launched more rapidly than competing ships in the two rival navies. The types were not altered, and it is now suspected the British Admiralty has virtually been marking time while the Germans have been forging ahead. Englishmen do not take note of American naval progress except in mischievous and misleading comparisons based upon the two-nation standard. They do not believe that there will ever be a naval war between England and America, but look upon the two fleets as natural allies in the work of civilization. The German campaign for challenging the ascendency of British sea power is more serious. Every stage of it is watched with jealousy and suspicion, and rightly so, because German designers are making a deliberate attempt to outrival the British navy in every type and class of fighting ship. If they are successful, the newest war vessels in the most powerful fleet afloat will have to be "scrapped" in the course of a few years. British inventiveness itself may be equally destructive to new types.

The first super-Dreadnought, as the well known expert, Mr. H. W. Wilson, describes an ssentially new type of battleship, has been launched to-day at Hamburg. It is not a Nas-sau, which, while larger than the original Dreadnought and provided with thicker armor and a better balanced and more serviceable battery, is a variant of the primary type. Germany will er ability to construct them as rapid similar work has been done in England will have been proved. The Siegfried, which is now in the water and is to be followed by the Beowolf before the end of the year and by four other sister ships next year, is almost as mysterious as the Flying Dutchman, so secretly has the work been done in the shipyards and so closely have the measurements and details of construction and armament been kept out of print. The German experts have made a prolonged study of the problem while improving upon their first Nassau, and have succeeded, it is reported, in producing a design so superior in all respects to the latest British battleship as to justify the name, "Super-Dreadnought." While official information is still withheld, the Siegfried is evidently a battleship with a displacement approximating 22,000 tons and a speed exceeding

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