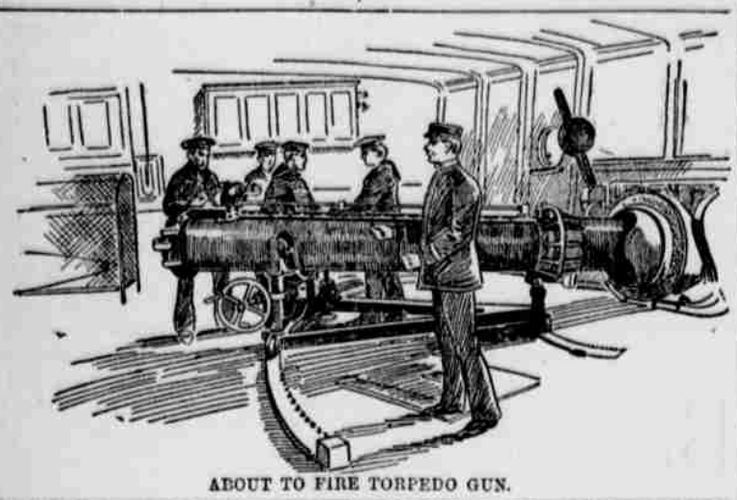
BELOW DECKS.

HOW AMMUNITION IS HANDLED ON A MAN-OF-WAR.

Just What Will Happen Under Her Water Line When She Goes Into Battle—Is Directed From Midair.

OF all the ships of the new navy the Texas, which anchored at the Brooklyn Navy Yard last week, is in some respects the most interesting. A great steel fort spans her decks. At each end of the citadel is a turret, and in each turret a twelve-inch breechloading rifle, a magnificent monster of destruction, an engine of war that would be terrible if we only knew just what it would accomplish in an emergency aimed against men and cities and ships in-

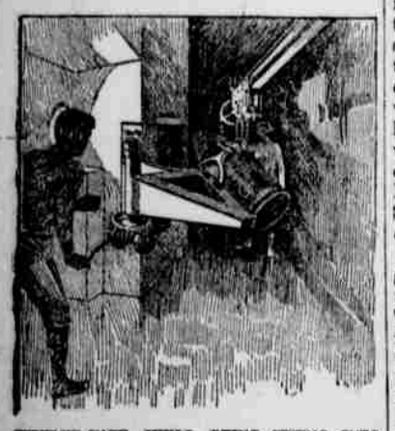


ABOUT TO FIRE TORPEDO GUN.

stead of steel plates and wooden backing. The Texas isn't as heavy a ship as the New York, for example, but her redoubt makes her a battle ship, and the New York remains with all her perfection only an armored cruiser after all. If the Texas is only second class among battle ships, by reason of her tonnage, she is, nevertheless, the pride of her officers and crew, and would undoubtedly give a good account of herself in battle.

There is a certain fearful curiosity to know just what will take place down in the submarine wells, cells, magazines, engine room and stoke holes of this steel castle of the deep, what vast energies that have lain dormant will suddenly be released when once the order to prepare for action has been signaled through the ship. In old times the commander of a frigate stood on the bridge with his glass under his arm and gave his orders in full view of his men, who cheered and "went at em."

Nowadays, in the chilled steel cell called the conning tower, far removed



TWELVE-INCH SHELL BEING SWUNG INTO HOISTING WELL.
(Showing trolley for conveying shell from magazine.)

above the smothered din of the decks, with no ears to hear and no eyes to see him, he puts his ears to the speaking tube, and fifty, sixty, seventy feet below him, here in the iron box called the shell room, there in the seething pit called the fire room; here in the dungeon of the engineers, there in the torpedo rooms, far away in the very bowels of the ships, where the high explosives and mines are stowed, flies the mysterious messages, rousing every man and every engine to utmost efforts.

In the long steel gallery, suspended between the sweat boxes, called the fire rooms, of the Texas, is the central station. Here a midshipman may connect the conning tower, or the tiller room, or the redoubts, with any other part of the ship. There is no such thing as shouting an order. The furnaces going, the engines clanking, the tramp of hundreds of feet waking sullen echoes from resounding metal, the chain trolleys bearing their perilous burdens of shell and powder and gun cotton, traveling harshly along; the mysterious awakening of the complicated automata hidden away in every nook, the sliding of the loading trays from the ammunition hoist to the breeches of the great guns, whose muzzles, forty feet away, are even now threatening to shatter the air with the hoarse earthquaking, sea maddening roar of a discharge that will do murder twelve miles away—amid all this diabolical saturnalia what chance would an old fashioned speaking trumpet have?

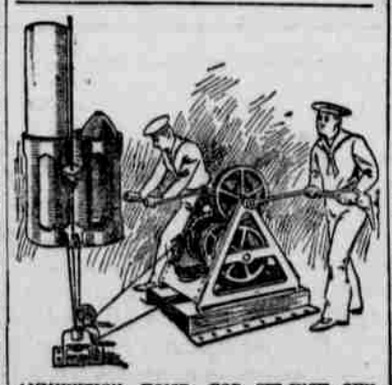
The central station, in which these speaking tubes are concentrated, must be carefully guarded. A steel pipe, twelve inches thick, carries them under the protective deck. Once there they are safe. The side armor, which distinguishes the battle ship, is, in the Texas, twelve inches thick, covering two-thirds of her length amidships. The walls of the conning tower are only nine inches thick, but its diameter is so small, comparatively, as to make walls of that thickness practically impenetrable. With the shell and round shot, grape and rifle balls impinging, bursting, battering on these circular walls, the fighting boss of the ship, perched there to overlook the enemy and direct the progress of the action, feels secure in his ability to reach and rally the toilers under him, for he knows that every tube that leads from him to them is guarded by twelve-inch steel walls.

The order to clear for action having been given, the eight fire rooms, down next to the keel, with only a few inches of steel shutting out the cool, rushing waters, into which many a fireman would already like to plunge, are crowded with half naked men, forcing to still greater fervor the fires beneath the four double-ender boilers of the Texas. There are, perhaps, fifty of these men, and thanks to their exertions, the temperature of these fire rooms is already 130 degrees. There are eight men in each of the two engine rooms nearby—sixteen fierce looking heroes, each working in a pair of trousers cut off below the knees, as if his life depended on it. Many other lives do. There are two machinists and four or five oilers in attendance on each of these engines. Without her engines the Texas would fall a prey to the first unarmored cruiser that came along, swift to circle about the helpless leviathan, ready now and then to pour in broadside after broadside, any one of which might disable the 12-inch guns and pierce the magazines. The engine is the master machine, and everybody in the Texas realizes this. There are ninety men in the engineer's force, and all but twenty of them are on duty at the fires, engines and boilers.

But what of those twenty? What a fateful and all important labor is theirs! Some of them, by the glow from the glass cased electric light boxes, let down to them from above, are raising slowly out from the magazine bins the deadly treasures of high explosive, shell and cartridge. Here, the mines are making ready, there the torpedoes are preparing, and yonder in the shell room the vast missiles to be hurled from the throats of the 12-inch guns are being hoisted through the wells to the loading trays far above. Were the dynamos to stop and these light boxes to become suddenly dark, what a horror of black muck would envelop these toilers and paralize every energy of their frames. It was such a casuality as that which caused the collision in the harbor of Havana some weeks ago by which a Spanish cruiser went down, with her crew and captain.

Let's look at the steam steering engine. There are six wheels by which the Texas can be directed in her course. There is one in the chart house on the flying bridge, just over the conning tower, for steam steering. There's another in the conning tower, for use in action; a third on the after gun deck; a fourth in the steering room, away down in the after hold. There's a big hand wheel in the steering room for use if the steering engine breaks; a wheel on the steering engine itself, in the tiller room. Once disarranged or broken, the steam steering engine is disconnected and the hand wheels, any one of them, brought into immediate use.

But take a look into the compressor room, where the air is compressed by steam for the torpedoes. Like all these vital elements, this room is down below the protective deck. The torpedo charge is confined at a pressure of 1350 pounds to the square inch, and



AMMUNITION HOIST—FOR SIX-INCH GUN.

when desired a pressure of 2000 pounds can be obtained. The first will send a torpedo four hundred yards at a speed of thirty-two knots an hour. Eight hundred yards range may be reached, but without accuracy of aim. Through the submarine torpedo room proper into which the three prisons open, the submarine mine room is reached. Here also the trap doors over the gun cotton and torpedo head compartments, each reached by a shaft, are to be seen. Just forward is the fore hold, where the wet stores, lumber, spare gear and beef are stored.

Down in the shell room, twenty feet below the sea level, eight men would work in time of action. It is six feet wide, 6.6 feet high, and some twenty feet long, a steel tunnel, shut in by the wooden partition of the various ammunition compartments; here at least wood may not be displaced by steel, owing to the danger of concussion. A great square shaft runs far up between steel walls to the redoubts, from which the twelve-inch guns are fired. Down this shaft comes a car, on which a shell, with its firing charge of 425 pounds of powder, must be loaded. The steel itself would be no mean burden, with its bursting charge of twenty-five pounds of explosive, for it is thirty-four inches long, 11.96 inches in diameter, and weighs 850 pounds.

The ammunition hoist room proper or handling room, on the after platform deck, is immediateley over the magazines, for which it is a cover. It is cut off from the berth deck above by the battle plates, weighing about 1000 pounds each, and handled by steam gear. The water line is ten feet above. Every hatchway on this protective deck, which covers the ship's vitals as a cuirass covered a warrior of old, is supplied with these steel plates, water tight, which isolate every room and compartment below from the gun deck and crew space above. It is the machinery, not the men, that must be first considered. From abreast the upper end of the vertical armor, which does not cover the ends of the ship, this protective deck begins to drop down over the precious storehouse of mechanism amidships. Where it was only two inches thick, horizontally, it is now three inches thick, inclining at an angle of seven to ten degrees.

All the work of the battle ship is down in her midst. The forward end of the ship is used for stowing only. But this concentration amidships is curiously contrasted with the still more crucial rule in a battle ship that she can conquer only by division. Divided by innumerable water tight walls and bulkheads she stands; united in one whole she would fall.—New York Herald.

A Frog a Foot and a Half Tall.

The king of frogs was caught recently at Rahway, N. J. He weighed ten and three-quarters pounds. His right leg weighed 2¼ pounds, and his left leg 2¼ pounds. He was eighteen inches long and twelve inches wide.

COMPARATIVE SIZE OF THE BIG FROG AND A SILVER DOLLAR.

The width of his mouth was eight inches, the length of his leg 13½ inches.

The biggest frogs on earth are found in this country. Nowhere else are frogs so large a feature of swamp and marsh life. A year ago twelve enormous American frogs were sent alive to Europe, where they excited much wonder, but none of them was as large as the Rahway frog here described.

Lived Like a Pauper, Died Rich.

Miss Elizabeth B. Cook, of Bridgeport, a little hamlet in Fayette County, Penn., always lived as though she were a pauper. Recently she died without medical attention or friends present, and the exact circumstances of the death are not known. She was found lying upon the floor some time after her death. Dr. H. J. English was made administrator, and he got a firm of attorneys to look around and see what her few effects amounted to. The inventory of the estate shows that she was the owner of over $22,000 of bank stock. She also had over $28,000 in cash on deposit, and was the holder of ten shares of stock in the Fittsburg, Virginia and Charleston Railroad Company. Nearly $2500 in gold coin and $100 in silver coin and bank notes were found sealed up tight in an old fruit can in her home after her death. The property will go to nephews, neices, and grandnephews and grandnieces.—Philadelphia Times.

A Town Under One Roof.

There exists in Wieden (borough of Vienna) an immense house called "Freihaus." This colossal building has thirteen courtyards, thirty-one staircases and 2112 inhabitants. It has its own postman, and the letters if they would reach their destination, must bear the Christian name, surname and also nickname of the addressee, the number of his room, staircase and courtyard.

Sawing a Church Asunder.

In order to enlarge St. Agnes's Roman Catholic Church, which stands on Masonic avenue, between Page and Oak streets, it has been literally bi-

THE CHURCH THAT WAS SAWN ASUNDER.

sected. The western portion has been moved twenty-five feet further west and the intervening space is now being pieced out. The insertion will double the seating capacity of the church.—San Francisco Examiner.

CYCLING COSTUME.

NORFOLK JACKET AND SKIRT FOR WHEEL-WOMEN.

A Favorite Basque for Riding the Bicycle and for General Wear—Stylish Ladies' Waist With Applied Basque.

THE Norfolk basque is a favorite garment for cycling, shopping and general wear, as its trim outlines are becoming to all, and it looks comfortable and business-like. We here present one of its simplest modes, made of greenish drab covert cloth, closed with round white pearl buttons, and finished with machine stitching in tailor style. The basque is shaped with single bust darts, under arm gores, and a curving centre seam in back. The plaits are graduated at the waist line, and applied on back and front with a single row of machine stitching near the edges, or they can be blind stitched on if so preferred. The fronts are reversed at the top to form coat lapels that meet the rolling collar in notches, a chemisette with bow tie being worn at the neck. The sleeves, in gigot style, are shaped with two seams, and are of fashionable size, the wrists being finished with stitching to simulate cuffs, that are decorated near the back seam with three buttons. A narrow leather belt encircles the waist. The graceful skirt is specially designed for wheelwomen, its distinguishing features being an underlying box plait laid in the centre of front gore, the edges of which meet and are flatly pressed, so as to be hardly noticeable when standing and when mounted give ample room for the free action of the limbs, and prevent the ugly girded appearance so often seen. Two backward turning plaits at the back conceal the saddle gore in the centre that keeps the skirt in proper position. Placket openings on each side of front gore are finished by pointed overlaps and decorated with buttons. Suits in this style can be made from all kinds of cloth, tweed, cheviot, serge, or cycle cloth, and worn with knickers and legging to match.

The quantity of material required to make this basque for a lady having a 36-inch bust measure is three yards. To make the skirt it will require 4½ yards of the same width material.

NORFOLK JACKET AND SKIRT FOR WHEEL-WOMEN.

ORGANDIE WAIST WITH APPLIED BASQUE.

May Manton says this very stylish waist, depicted in the second large engraving, is made from white organdie, over violet silk linings, and is decorated with lace, insertion and ribbon to match the color of linings. The waist linings are glove fitting and close in centre front. A narrow vest trimmed crosswise with insertion is sewed to the right front and closes over on the left. Wide box plaits that taper towards the waist are formed on the edge of each front meeting those on the back at the shoulder seams. A blouse effect is given in front by gathers at the lower edge of vest and box plaits. The ripple basque is joined to the lower edge of waist, box plaits meeting those of the waist at the back. A narrow belt with buckle encircles the waist. The crush collar of violet silk has large fans of lace on each side. Fashionable puffs reach to the elbow and are stylishly arranged over comfortable sleeve linings that can be cut elbow length or faced to the wrists, if so desired. The epaulettes are made from lace mitered at the edges to form three points over the full puffs. The mode is very generally becoming and the ripple basque or epaulettes, or both can be omitted if not desired. All kinds of silk, linen, cotton, or light weight woolen fabrics are adapted to develop waists in this style, any fashionable garniture being chosen for decoration.

The quantity of material 36 inches wide required to make this waist for a lady of medium size is four yards.

STYLES IN COAT SLEEVES.

LADIES' AND MISSES' COAT SLEEVES.

The demand for smaller sleeves is steadily increasing, ladies not being loth to disencumber their arms from the weight of material hitherto prescribed by fashion. Two styles of medium sized leg o' mutton or gigot sleeves for coat jackets, etc., are here given as one pattern. No. 1, made of fancy cloth, is shaped with single seams, and can be gathered or plaited at the top. A single box plait is laid at the shoulder, forward and backward turning side plaits adjusting the remainder of the fullness. No. 2 is of mixed cheviot and is shaped with two seams, having a smooth under-arm portion. When linings are used they are shaped exactly like the sleeves, thus giving the necessary room for the dress sleeves. The wrists are plainly completed with inside facings. These sleeves can be made of silk, velvet or cloth, to contrast or match with the garment in which they are placed.

In remodeling top garments this pattern will be found useful and economical.

The quantity of material 44 inches wide required to make either No. 1 or No. 2 design is 2½ yards for a 36-inch size. To make these sleeves for a miss fourteen years of age it will require 1¼ yards of the same width material.

Two farmers in Christian County, Kentucky, had a suit about the ownership of a mule. The jury stood six to six, and they agreed to match pennies to decide the case. The verdict was in favor of the defendant.

Across the Way.

Across the way from me she kneels,
A dainty lass in sober gray,
Who will not lift her eyes to see
Her neighbor just across the way.

She bows her head in silent prayer,
In attitude devout and quaint;
She prays for all the world, while I—
I pray for her, my little saint!

Ah! little girl, though well you hide
Those long-lashed orbs of tender gray,
You know there prays, with open eyes,
A sinner just across the way!
—Florence A. Jones, in the New Bohemian.

HUMOROUS.

A masked ball—weeping behind your handkerchief.

The difference between firmness and obstinacy is merely a matter of sex.

Some men are so awful slow that the only time they get ahead is when they buy cabbage.

A paper advertises for sale a pew which "commands a view of nearly the whole congregation."

Bakers are bred to habits of early rising; but is that any reason why they should pan out so crusty?

It is a common saying that lovely woman cannot keep a secret, but who besides herself knows where her pocket is?

"Men'll do anything fur money," said Plodding Pete. "Yes," replied Meandering Mike. "Some fellers'll even work fur it."

She (in fifteenth story, encouragingly)—Supposing I were to fall, what would you do? He—I should—send for the undertaker.

She—Take care, Alfred. That isn't the remedy for sea sickness. Don't you see the bottle is marked "Poison?" He—That's the one I want.

"She killed herself because she couldn't cook." "How absurd!" "Well, she couldn't help it. She had to eat her own dishes, you know."

"Why was the bee selected as a model of industry?" asked Tillinghast. "Because business with him is always humming," replied Gildersleeve.

"Does the bicycle hurt your business?" "Yes. The junior partner and the confidential buyer are both in the hospital." And the man of affairs sighed heavily.

Tom—Jack, old man, why is it I never seem to be appreciated by my friends? Jack—Smith, old fellow, why is it your friends never seem to be appreciated by you?

Mistress—Anna, whatever has become of all your pretty curls? Maid—You see, ma'am, the regiment has left our town, and so I have had to give a lock of my hair to several of my acquaintances.

Emily (playing "house")—Now I'll be mamma, and you'll be papa, and little Ben and Bessie will be our babies. Willy (after a moment, anxiously)—Ain't it about time to whip the children?

Mrs. Wriggles—The rain is spattering right through this umbrella all over my new hat. Mr. Wriggles—I know it, I got badly fooled on that umbrella; but I picked out the best-looking handle in the rack.

Mrs. Skinner (the boarding-house keeper)—I can say this, my table always literally groans under the weight of the food upon it. Mr. Hall Rhume—You bet it does, Mrs. Skinner! Why the table would groan under the weight of these biscuits alone.

"What a grasping old creditor you are, Hawkins! You've bothered me about this bill fifty times in ten days." "You wrong me, Jarley. I'm not grasping. I've bothered you about the bill, I admit, but I haven't been able to grasp anything yet."

New Use for Bald Heads.

A clever Parisian has discovered a new use for bald-headed men. He selects one whose cranium is hairless, has an advertisement lettered on the pate, and then has the owner occupy a place in the parquet of the theatre during the performance. In many cases the animated advertisement has attracted more attention than the performers, but, as the cause of the trouble maintains a quiet demeanor the managers have found no excuse for ejecting him.

During the coronation ceremonies of Alexander II., at St. Petersburg thirteen years ago there was a gala performance of Italian opera. The stalls were reserved for military men of exalted rank, and they were so arranged that when the imperial party entered the building they saw the letter A outlined with bald heads. In this case the owners of the heads were ignorant of the use to which their infirmities were put.

Sir Arthur Sullivan is said to have realized $50,000 by his song, "The Lost Chord."