A WINTER IN GREENLAND.

When the little party of Lieut. Peary was left on the shores of McCormick Bay, July 30, 1891, to pass the winter of 1891–92 in northern Greenland, the keenest interest was everywhere felt in the novel method by which the new exploration of the far North was to be prosecuted, an interest which was heightened by the very smallness of the party and the fact that a lady was one of its members. Besides Lieut. Peary and his wife, there were five in the party: John M. Verhoeff, a mineralogist; Dr. Frederick A. Cook, surgeon; Langdon Gibson, ornithologist; Eivind Astrup, a Norwegian, and Matthew Heuson, colored. The lieutenant had been but recently married, and his young and accomplished wife resolved to share the hardships and dangers of the expedition with him. Our illustration shows the manner in which, every day when the weather was pleasant, Mrs. Peary and her husband took long walks on snow shoes in the neighborhood of their Arctic winter quarters.

The point selected for their winter home was a little north of Whale Sound, 77° 43' north latitude, and about a hundred miles south of the great Humboldt Glacier, at the head of which the overland journey to reach the north coast of Greenland was commenced in the spring. The wooden house to protect the party during the winter was inclosed by a stone and turf wall, and was styled "Red Cliff." It was substantially completed before the 1st of September, and a boat party sent out to visit the natives brought back a supply of birds, and an Eskimo hunter and his family, other natives with dog sledges subsequently arriving and settling around Red Cliff. Mrs. Peary says of the natives: "They were bright, merry, willing creatures, anxious to please. They enjoyed our coffee and biscuit, but cared little for sweets. The women were especially interesting to me, and many hours were spent in watching them at their work."

The beginning of the long night found the party with thirty-one reindeer, several seals and walrus, and hundreds of birds, in addition to the supplies which had been brought with them, and a warm, snug house to shelter them all. Of their time of waiting, Mrs. Peary writes: "The winter, although we had a hundred days of darkness, with temperature ranging from 30° to 50° below zero, passed pleasantly. Every day we took long walks on snow shoes, and often I indulged in a sledge ride, drawn by one of my Newfoundlands and one Eskimo dog, and yet cannot boast of a single frost bite. During one of our hunting trips we had a narrow escape from drowning by having our boat crushed by a herd of angry walrus, many of them wounded by us, but we killed seven and escaped without a scratch." The time did not hang

A WINTER IN GREENLAND—MR. AND MRS. PEARY AT RED CLIFF.

heavily, and in April the long night was over, and daylight lasted almost throughout the twenty-four hours. Mr. Peary then took his wife on a tour of some 250 miles in seven days, traveling on a sledge drawn by thirteen Eskimo dogs. They slept on the snow, without any shelter, after pulling themselves into deerskin bags, fastened lightly around the neck. They often made forty miles in a single march, and Mrs. Peary says: "It was a fine sight to see these thirteen beauties, with heads up and tails waving over their backs, dashing over the ice."

On May 3, Mr. Peary, accompanied by Astrup, took leave of his wife and the others of the party for his long northern journey, striking the northeastern coast of Greenland on July 4, in latitude 81° 37', longitude 34°, where he discovered a great bay, and named it Independence Bay. The return to McCormick Bay was commenced on July 9, the Kite with a relief party sent to his support arriving at the same destination but a few days before him. Mrs. Peary had been taken aboard the Kite. She writes: "On August 5, Professor Heilprin and a party left to make a reconnoissance of the inland ice, and at 3 o'clock on the morning of August 6, while lying in my bunk, I heard shouts from the returning party, and in a few minutes a quick, firm step on the deck, which I recognized as my husband's. The next instant he was before me. I then felt God had indeed been good to me. Good news from home, and Mr. Peary returned in health and safety after an absence of ninety-three days, during which time he traveled over thirteen hundred miles over this inland ice. So far everything had gone just as we had hoped." The Kite arrived at Newfoundland on her return trip on September 11.

A Remarkable War Ship.

The British battle ship Ramillies is an example of a class of new vessels now being completed that are likely to be more formidable and effective than anything of the kind afloat. We find in *Engineering* the following particulars:

The armor has a maximum thickness of 18 inches. The ram is a steel casting, some 25 tons in weight, and is of the conical shape, and not brought to a knife edge as in some earlier armorclads, the strength of the spur for ramming purposes being thus much increased. The ram is supported by a number of longitudinal plate girders, or, as they are called, breast hooks. It is also much strengthened by the fact that the steel protective deck is sloped downward at the fore end and abuts on the ram nearly at the level of the spur. This protective deck is 2½ inches thick and extends for 76 feet from the bow.

There is a similar deck aft, extending for 72 feet and terminating on the stern post. The latter is of cast steel and of the usual British navy type. The rudder, which also has a cast steel frame, is of the ordinary "barn door" type, and has an area of about 220 square feet. The rudder head extends only for a few feet within the vessel—high enough for the attachment of a steel crosshead giving connection to the steering tiller, so that the whole of the steering gear is entirely below the steel protective deck and some 8 feet below the water level. The propeller shafts are supported on cast steel A-frames, which are strongly riveted to the steel framing of the ship.

A very important feature in the protection of this type of vessel is the secondary armor plating, which is 4 inches in thickness, and extends for a length of 150 feet amidships. The depth of the belt is 6½ feet. The lower side rests on the top of the main armor belt, which is 3 feet above the water line, so that the secondary belt, in conjunction with the main belt, affords a protected freeboard 9½ feet in height above the water line for the central portion of the ship. This secondary belt is to afford protection to the men, as well as the material and guns, against the high explosive shells from quick-firing guns, which it is considered willform such an important factor in future naval wars. The protection of the machinery and vitals of the ship is further served by a belt of coals about 10 feet in depth, immediately behind the secondary belt and resting upon the 3 inch steel protective deck. At the level of the top of the secondary belt is the main deck, which extends unbroken for the whole length of the ship, and upon which the officers and men are for the most part berthed—the officers aft and the crew and seamen forward. Some of the junior officers are, however, berthed aft on the deck below, called the lower deck. Upon the main deck are placed four of the ten 6-inch quick-firing guns, which form the principal part of the secondary armament of the ship. These four guns are mounted in steel protective casemates, which are designed to protect the gun and gun's crews from fragments of shells and splinters. The outer portion of the casemates is formed of steel plates 6 inches in thickness, which have an opening with sliding shutter to admit of the guns being trained at an arc of 120 degrees. The inner portion of the casemates, which is not so liable to receive the direct impact of a shot, is formed of two thicknesses of plates, each 1 inch thick.

A noticeable feature on going on board the Royal Sovereign, the Empress of India, or any vessel of the class, is the two barbettes or redoubts, in which are mounted four 67-ton guns, two at each end of the ship. These redoubts may be described as huge cylinders formed of compound steel armor plates about 17 inches in thickness. On plan the redoubt is pear-shaped, the turntable for the two 67-ton guns being placed at the larger end, which has a radius of 20 feet, while the small end is used for the protection of the hoist for bringing up the ammunition from the magazines, which are situated directly below the barbettes. The steel cylinder extends in one piece from the belt deck to a height of about 2½ feet above the upper deck, the muzzle of the gun projecting over the top of it. In this way there is a continuous protection afforded, not only to the gun and gun carriage, but also to the turning gear and engines, and to the loading gear and ammunition from the belt deck upward. It is, therefore, impossible for any of these to be damaged without the 17 inch armor being pierced. This is a point in which the vessels of the Ramillies class may be considered superior to those of the Admiral class, as well as to those of many foreign navies, for in these latter the sides of the barbettes extend down to the level of the main deck only, the bottom part of the barbette being protected merely by a steel deck some 2 inches in thickness, so that a heavy shell exploding underneath the steel plating might inflict serious damage to the guns or loading gear, without even perforating the thick armor at all.

The turntable upon which each pair of 67-ton guns is mounted is constructed of steel plates and angles, and has a total weight of some 80 tons. It is supported on cast steel rollers, traveling on a cast steel roller path at the level of the main deck. A similar cast steel roller path is bolted to the base of the turntable. The beds for the roller path in all the ships have been accurately machined in place, a work of great importance and considerable difficulty, in view of the great weight of the turntable, which has to be temporarily supported in place while the bottom is being machined. Around the circumference of the turntable, at its lower edge, is bolted a strong gun metal rack, to which is geared a pinion carried on the vertical shaft and driven by hydraulic machinery. This hydraulic machinery, as well as the rams for lifting the guns, has been supplied in all cases by Lord Armstrong's firm.

The ammunition for the 67-ton guns is contained in two magazines, one immediately under each barbette. It is arranged in such a way that the shells can be moved by a hydraulic rammer on to the cage of the hydraulic hoists, while the powder can be simultaneouslymoved by hand on to the same cage, which is then raised to the level of the breech of the gun, the gun having been previously trained into the loading position. A second hydraulic rammer then moves the shot and afterward the powder into the breech of the gun. The weight of each shot is about 1,250 pounds, and the weight of powder in each charge about 630 pounds. The position of the powder and shot for the 6-inch quick-firing guns is one of some novelty, as it is contained in magazines which are situated at the middle line of the ship, between the two groups of single-ended boilers which have their backs turned to the walls of the magazines. In order to avoid damage to the bottom of the magazines in the event of the ship grounding or being otherwise injured, the depth of the double bottom immediately below the magazines is increased to 5 feet. In view of the importance of securing a rapid service of ammunition to the quick-firing guns, a broad passage has been provided for the whole length of the central magazines, above the magazines, and immediately below the protective deck. With this passage armored steel tubes communicate, by means of which the ammunition can be hoisted to the level of the main or upper deck as may be required.

Ascending to the upper deck, the first things that strike the eye are the two deck shelters, one immediately forward of the after barbette and another aft of the forward barbette. The deck shelters are merely short decks similar to the bridge deck of a mail steamer, and afford protection to the men from the weather, while they give a nice promenade and look-out for officers on the watch. On the forward deck shelter is placed the main conning tower, which is a cylinder of steel-faced armor, 14 inches thick and about 9½ feet in internal diameter. Within the conning tower is placed a compass, steering wheel, engine telegraphs, and a perfect network of voice tubes, by means of which the orders of the commander can be transmitted to the gun stations, engine rooms, etc. There is also to be placed in each ship, we understand, electrical firing keys, by means of which the commander will be enabled himself to discharge the guns if he so desires. Above the main conning tower again is situated a flying bridge, upon which is a chart house, steering wheel, and navigating requisites for maneuvering the ship on ordinary occasions. On the after deck shelter there is another conning tower, 3 inches in thickness, with bridge above, so that there are two independent positions for maneuvering the ship. Between the two deck shelters are placed the remaining six of the 6-inch quick-firing guns, mounted in the open on the central pivot principle, three on each side, and with no other protection beyond light shields, which revolve with the guns. There are twenty-one boats carried in each of the vessels of the class, and included in the number are two torpedo boats, 56 feet long and having a speed of 18 knots. The boats are carried on beams fitted at a height of 7 feet above the upper deck, so as to be quite clear of the men walking on the deck. Upon these beams is fitted a platform extending from one deck shelter to the other, affording access to the boats. Each vessel has two masts, which are upright, without rake. The fore mast is fitted with two military tops and the main mast with one, and also with semaphore signaling apparatus. Two 3-pound quick-firing guns are mounted in each military top. To the main mast is fitted a 20-ton steel derrick for hoisting in and out the torpedo boats and any other heavy weight required, and to the fore mast is fitted a wooden derrick. There are two funnels placed in the same athwartship line, which give the vessels a somewhat unusual and certainly not very handsome appearance when viewed end on.

It may be well to append the leading dimensions:

Length	380 ft.
Breadth	75 ft.
Draught of water, extreme	27 ft. 6 in.
Displacement (tons)	14,150
Indicated horse power	13,000
Speed (knots)	17·5
Armor (maximum thickness in inches)	18 (steel)
Coal endurance at 10 knots (knots)	5,000
Number of guns	14
Weight of broadside in pounds	5,500
Speed of fastest boat carried (knots)	18
Contract cost of hull and propelling engines	877,460*l*.

Armament: The main armament consists of four 67-ton breech-loading guns, of 13½ inches caliber, with a training of 120 degrees on each side of the center line. The auxiliary armament consists of the following, viz.: Ten 6-inch 100-pounder quick-firing guns, four in armored casemates on the main deck and six on the upper deck; sixteen 6-pounder quick-firing guns, four on upper deck and twelve on main deck; nine 3-pounder quick-firing guns, four in military tops and five for boats. Two 9-pounder rifle and muzzle-loading field guns, eight 45-inch five-barreled machine guns, and seven torpedo tubes, four on the broadside, one at the stern, and two submerged. The total weight of the main armament is 1,410 tons, and the weight of the auxiliary armament is 500 tons. As a protection against torpedo attack the vessel has torpedo nets on booms.

The vessels will be lighted throughout by electricity, with an installation of about 700 electric lamps, and will also be equipped with four electric search lights, of 25,000 candle power, each of which will be worked by dynamos under protection.

Clean Fruit Culture.

In a paper on fungous diseases and their remedies read lately by Professor J. E. Humphrey, before the Massachusetts Horticultural Society, he insists that the treatment of these diseases, to be efficient, must be preventive rather than remedial. He points out that it is not enough to take care that plants shall have abundant nourishment. No practice, he says, is more common among American fruit growers than to leave in the vinery and the orchard, lying on the ground or hanging from the branches, the dead fruits of the season, which have been rendered worthless by fungi. Nothing could produce more unhealthful conditions, for these dead fruits commonly furnish to the fungi which attack them precisely the most favorable soil for further and complete development. In the next spring the air is full of the spores of these fungi, which find lodgment on the new leaves and fruits of the very plants on which they grew last year, and so the story goes, year after year. "In a word," says Professor Humphrey, "keep your orchards and gardens and greenhouses clean. Allow no rubbish to be about on which fungi can breed. Remove and destroy all diseased fruits or plants as scrupulously as you preserve salable ones, and you will have more salable ones to preserve. It is surprising how far generous culture and clean culture will go toward preventing fungous diseases, without special treatment."

What the Electrical World Says.

In its issue of Nov. 5, *The Electrical World*, referring to the fact that the demand had been so great for the "Scientific American Cyclopedia of Receipts," as to require the issue of a second edition containing thirty more pages than the original one, adds: "The material is arranged by subjects alphabetically, and in it will be found thousands of items giving information upon matters of everyday interest to the engineer, the metal worker and the artisan. Among other subjects may be mentioned batteries, electro-metallurgy, alloys, rubber, tanning, varnishes, welding, etc., etc. A copy of this book should certainly be in the hands of every experimenter who is called upon to manipulate materials with which he is more or less unfamiliar. As a work of reference in the field it covers it is unequaled."

AT the university, Ann Arbor, Mich., there are now three thousand students. "Westward the course of empire takes its way."

Progress and Profits of Palace Cars.

The annual meeting of Pullman's Palace Car Company was held in Chicago, October 13, 1892, $22,500,000 of capital stock being represented.

The usual quarterly dividend of $2 per share from net earnings was declared.

The report of the president showed the following income account for the year ending July 31, 1892:

REVENUE.

From earnings of cars	$8,061,081.00	
From patents	21,751.07	
From manufacturing, rentals, dividends, interest, etc	1,919,523.97	
		$10,002,356.04

DISBURSEMENTS.

Operating expenses, including maintenance of interior furnishing of cars, legal expenses, general taxes, and insurance	$3,438,862.66	
Proportion of net earnings paid other interests in sleeping car associations controlled and operated by this company	947,504.30	
Interest on debenture bonds	65,600.00	
Dividends on capital stock	2,300,000.00	
		$6,751,966.67
Surplus for the year—being excess of revenue over ordinary disbursements, carried to credit of income account		$3,250,389.07

President Pullman supplemented his annual report with the following general information:

There have been built during the year 80 sleeping and dining cars, costing $1,332,906.50, or an average of $16,661.33 per car. Work is now progressing rapidly on 415 additional sleeping, dining, and parlor cars to supply the anticipated extraordinary demands of travel during the year 1893.

These cars are estimated to cost about $5,500,000.

The number of cars owned and controlled is 2,239, of which 1,985 are standard and 254 tourist or second-class cars.

The value of the manufactured product of the car works of the company for the year was $10,308,939.66, and of other industries, including rentals, $1,417,403.91, making a total of $11,726,343.57.

The total number of persons in the employ of the company in its manufacturing and operating departments is 12,809, and wages paid during the year $6,619,156.63.

The Pullman Loan and Savings Bank shows savings deposits at the end of the fiscal year of $531,005.00, a gain of $74,202.00 over the previous year. The number of depositors has increased during the year from 1,903 to 2,012, and the average for each depositor has increased from $240.04 to $263.92.

The entire enrollment of pupils in public schools for the fiscal year was 1,235, a slight increase over the previous year. The regular staff of teachers is 21, the same as last year.

The population of Pullman is 11,702, as shown by the last census. There are 2,246 employes living in the immediate vicinity of Pullman in houses not owned by the company.

Yawning as a Remedy.

According to current ideas, yawning in good society is an improper sign of weariness; according to the teachings of physiology, it is a long drawn, forcible inspiration followed by a shorter respiration; according to Dr. Naegeli, it is one of nature's many remedies, the proper application of which depends upon good judgment.

In yawning, not only the muscles which move the lower jaw are used, but also the breathing muscles of the chest, and he who yawns to his heart's content also raises and extends the arms. In the deepest inspiration the chest remains extended for a short time, the eyes are almost or entirely closed, the ears somewhat raised, the nostrils dilated. Inside the mouth, the tongue becomes round and arched, the palate stiffly stretched, and the uvula is raised, almost entirely closing the space between the nose and throat. At the beginning of the inspiration a cracking noise is heard in the ears, a proof that the duct leading to the hearing also succumbs to this stretching.

If the yawning has reached the deepest point, it will require from one to one and a half seconds for it to become noticeable to the hearing. In order to observe this, let one place himself at a sufficient distance from a clock, so that its ticking will not be easily heard, and yawn deeply. During this deep breathing the sound of the clock is not perceptible to the most careful listening. All this simply goes to show that yawning sets a number of muscles to work, and particularly those which are not directly subject to the will.

Although one yawning does not present a very agreeable appearance, it is very agreeable to himself, for the stretching of the muscles causes a feeling of comfort; it acts like massage, and is the most natural gymnastics of the lungs imaginable. Dr. Naegeli, therefore, advises people not to concern themselves with so-called decency, but every morning and evening, and as often as possible, to exercise the lungs and all the muscles of respiration by yawning and stretching, as many chronic lung troubles may thus be prevented.

Dr. Naegeli orders the patient troubled with too much wax in the ear, accompanied with pain, to yawn often and deeply. The pain will soon disappear. He also, in case of nasal catarrh, inflammation of the palate, sore throat, and earache, orders the patient as often as possible during each day to yawn from six to ten times successively, and immediately afterward to swallow. The result will be surprising. If one looks upon yawning as a natural massage for certain organs, he will reach a satisfactory explanation of its curative properties.—*Translated for Public Opinion from the German of Mr. Julius Stinde, in the Berlin Unsere Zeit.*

A FRENCH PATENT OF THE YEAR 1860 FOR A BARBED WIRE FENCE.

BY A. M. TANNER.

Several years ago the writer published in the SCIENTIFIC AMERICAN an article setting up Louis Francois Jannin as having patented a barbed wire fence in France in the year 1865; consequently antedating by two years the earliest United States patent granted for a similar invention.

This French patent apparently never figured in any of the numerous infringement suits brought under the original barbed wire patents of Hunt and Smith, 1867; Kelly, 1868; and Glidden, 1874; because as late as February 29, 1892, the United States Supreme Court says, in a decision sustaining the Glidden patent, that "prior to 1867, no one seems to have conceived the idea of arming wire fences with barbs or protecting devices."

The court had reference to the Hunt patent of 1867,

Fig. 9.

Fig. 11.

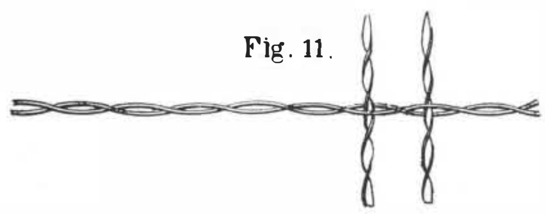
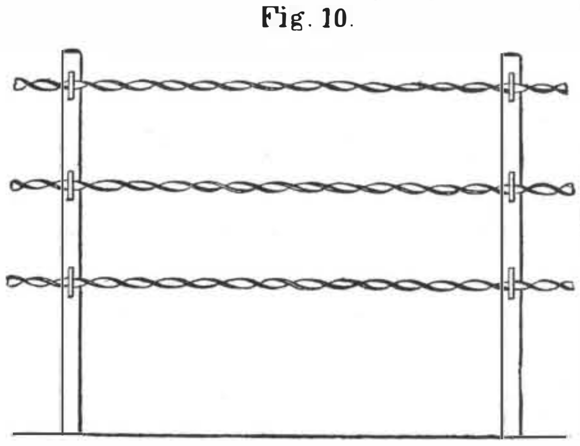


Fig. 10.



which has a fundamental claim for a wire provided with spurs or barbs. Obviously the Jannin patent having been obtained before the earliest date of invention set up by Hunt, it was at all times a statutory bar to the validity of the Hunt patent. The Glidden patent, as is well known, is for a twisted fence wire, having the transverse spur wire bent at its middle portion about one of the wire strands of said fence wire, and clamped in position and place by the other wire strand twisted upon its fellow.

The Jannin patent, being for sheet metal barbs strung upon twisted fence wires, is not like the construction patented by Glidden, but it is practically the same as Kelly's patent. The writer, at the time the Jannin article was written, was not aware of a prior French patent to Leonce Eugene Grassin-Baledans, dated July 7, 1860, No. 45,827. Now, in order that historical justice may be done, it is necessary to consider this French patent of 1860 as the earliest published and positively established instance of a barbed wire fence.

The Grassin-Baledans patent is chiefly for fencing and tree protectors made of twisted sheet metal strips, but it also sets forth fence wires made of twisted strands armed with wire barbs. The annexed figures from the patent drawing will enable the construction to be understood in connection with the following translation of the description pertaining to these figures:

"This tree protector is also made of double strips, which will permit small wire points to be attached, and when these double strips are twisted together the wire points will project in all directions, in imitation of natural thorny branches ordinarily used as tree protectors. The same result is also obtained by replacing the sheet metal strips by sufficiently strong iron wires, which, when twisted and provided with the small iron wire points, will present thorny points (Fig. 11).*

"Fig. 9 shows the form of the twisted sheet metal strip or twisted wire provided with its small iron wire points, making a thorny rod."

This kind of guard is applied to fences, at the top thereof, in order to make them less surmountable.

Fig. 10 shows a prairie fence made of twisted sheet metal strips held by iron stretchers. The advantages of this kind of barrier are: First, it is easily seen, thus preventing animals from throwing themselves on to the same, as would be the case with iron wires, which they can only see when too near to halt in their course.

Fig. 11 represents the fence made by twisted sheet metal strips held in twisted horizontal wires.

It will be seen from the foregoing description that the use of wire barbs was clearly contemplated by Grassin-Baledans, and that the same were held in double sheet metal strips, or wires twisted to hold the barbs in place. The description and drawing do not disclose the precise construction claimed by Glidden, and, in fact, it is not clear how the barbs are intended to be held in place, that is, whether by coiling around one or both fence wires, bending, or otherwise. As a reference, however, for wire barbs on double twisted wires or strips, there cannot be any possible doubt.

* Fig. 11 is an error, and Fig. 9 is evidently referred to.—*A. M. T.*

Engines of a Modern Battle Ship.

Says *Industry* (San Francisco), we applied to Mr. George W. Dickie, manger of the Union Iron Works in this city, for particulars respecting the number of steam engines on the battle ship Oregon. Mr. Dickie has sent the following list, set down from memory, which is here arranged in tabular form:

No. of engine cylinders.	Purpose of engines.	Character of engines.	Diameter of cylinders in inches.			Stroke in inches.
6	Main driving, 9,000 horse power.	Triple.	34½	48	75	42
4	For air pumps	Double.	6			12
4	For circulating pumps	Compound.	7	12		6
2	Hot well pump engines.	Single.	8			16
2	Fire and bilge pumps	Single.	10			16
2	Air and circulating pumps	Single.	10			16
4	Ventilating fans	Compound.	5	9		6
4	Barring engines	Double.	6			6
2	Reversing engines	Single.	14			18
4	Hydraulic steering gears	Double.	8			12
4	Main feed pumps	Single.	12			16
4	Auxiliary feed pumps	Single.	10			16
8	Ash hoisting	Single.	5			6
16	Fire room fans	Compound.	5	9		6
4	Steam cranes	Double.	8			10
12	Hydraulic pumping	Single.	20			30
8	Steam winches	Double.	8			10
2	Windlass engines	Double.	16			12
8	Dynamo engines	Compound.	7	12		6
2	Ice machines	Double.	12			16
8	Ventilation	Compound.	5	9		6
1	Distilling room, air	Single.	10			12
1	Water and brine	Single.	6			10

Besides this list, making 112 engines, counting each steam cylinder, there are some connected with the torpedo service, the dimensions of which are not yet determined. After looking over this list one will conclude that the steam machinery of a modern war ship is the principal part. She is, indeed, a great magazine of machinery, much of it of a delicate nature, and all requiring intelligent care.

Alcohol in Surgery.

Mr. Frederick Treves, the well-known surgeon of the London Hospital, in his "Manual of Operative Surgery," has some striking remarks on the risks attending operations on the bodies of drunkards. He says: "A scarcely worse subject for an operation can be found than is provided by the habitual drunkard. The condition contra-indicates any but the most necessary and urgent procedures, such as amputation for severe crush, herniotomy, and the like. The mortality of these operations among alcoholics is, it is needless to say, enormous. Many individuals who state that they 'do not drink,' and who, although perhaps never drunk, are yet always taking a little stimulant in the form of 'nips' and an 'occasional glass,' are often as bad subjects for surgical treatment as are the acknowledged drunkards."

"Of the secret drinkers," continues Mr. Treves, "the surgeon has to be indeed aware. In his account of 'Calamities of Surgery,' Sir James Paget mentions the case of a person who was a drunkard on the sly, and yet not so much on the sly but that it was well known to his more intimate friends. His habits were not asked after, and one of his fingers was removed because joint disease had spoiled it. He died in a week or ten days with spreading cellular inflammation, such as was far from unlikely to occur in an habitual drunkard. Even abstinence from alcohol for a week or two before an operation does not seem to greatly modify the result." Dwelling on the immense importance to an operator of cultivating "a surgical hand," the same writer points out that "a shaky hand" may be developed by irregular modes of living, by the moderate use of alcohol, and by smoking.—*Journal of Inebriety.*