

On the Bridge of a Battleship

THE modern battleship is a marvel of concentration and space economy. There is no room for things purely ornamental, but every foot of space is used to some purpose in connection with the storage or operation of the myriad adjuncts necessary for the work, the safety and the

comfort of the hundreds of men who crowd one of these floating fortresses. If one were to choose, however, the one section of a battleship which above all others is a veritable nest of wonders and surprises choice would unhesitatingly fall upon the "bridge"—that elevated structure which is so appropriately named and which extends the full width of the deck on the forward part of the ship—in front of the huge smokestacks, as a "land lubber" might designate its location.

For one thing, we find on the bridge an even greater array than anywhere else on the ship of those remarkable mechanical and electrical devices which do so much of the work on a battleship that would seem to require human intelligence. But the bridge has in addition a special significance which multiplies many times its importance and the interest of its equipment. It is the "nerve center" of the ship, the seat of authority and command which directs all the operations within the bounds of the big armorclad, and also the intelligence office through which this warship community communicates other vessels of the fleet and, indeed, with the entire outside world.

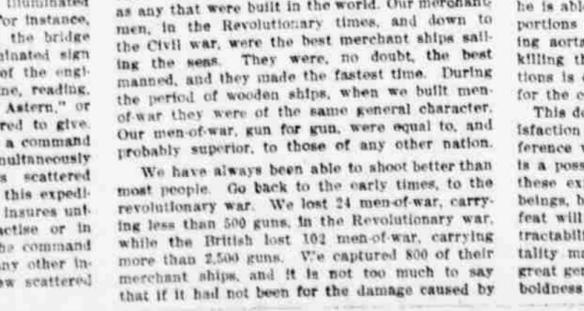
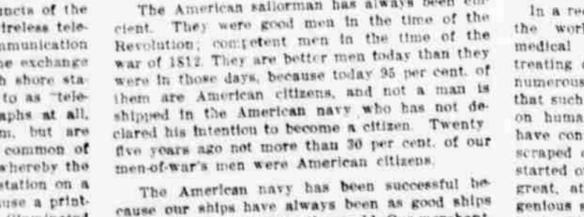
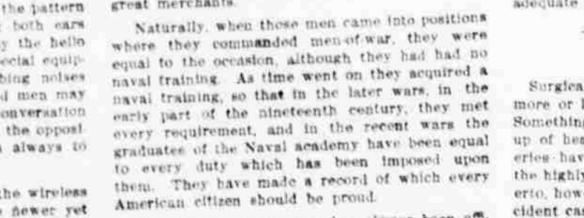
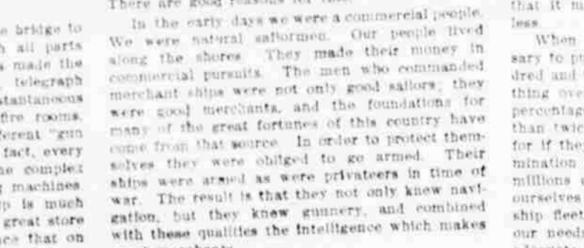
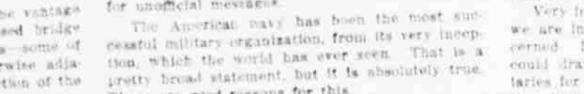
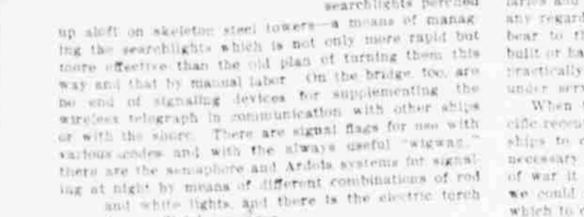
Under ordinary conditions when the battleship is cruising at sea, participating in battle drill or target practice or engaged in any of the other important functions of a sea warrior the captain commanding, the navigating officer and other responsible officials of the ship have their positions on the bridge. In time of actual battle those directing heads of the fighting machine would not expose themselves on the bridge, but they would not be far away. Sheltered by conning towers or some other protective screens,



they would be as near as possible to the vantage points to be found only on the exposed bridge and from those substitute observatories—some of them located directly behind or otherwise adjacent to the bridge—would direct the action of the battling armorclad.

In order to enable the officers on the bridge to be at all times closely in touch with all parts of the ship this elevated promenade is made the nerve center of elaborate telephone, telegraph and signaling systems that afford instantaneous communication with the engine and fire rooms, the ammunition magazines, all the different "gun stations" throughout the ship, and, in fact, every scene of activity that has part in the complex mission of one of these great fighting machines. The telephone system on a battleship is much like the private telephone system in a great store or manufactory, but with the difference that on shipboard most of the receivers are of the pattern which fit close to the head, covering both ears and strongly resembling those used by the helio girls in telephone exchanges. This special equipment is designed to shut out disturbing noises and is very essential when officers and men may be called upon to listen to telephone conversation when the guns are roaring or against the opposition of the various distracting noises always to be encountered on shipboard.

Near the bridge of a battleship is the wireless telegraph station which is one of the newer yet easily one of the most important adjuncts of the up-to-date battleship. However, the wireless telegraph is not used for interior communication aboard the battleship but solely for the exchange of messages with other ships and with shore stations. What are sometimes referred to as "telegraphs" on shipboard are not telegraphs at all, as the lay reader understands them, but are rather signaling systems. The most common of these communicative systems is that whereby the pressure of a button or lever at one station on a battleship—say on the bridge—will cause a printed command to suddenly appear in illuminated form in a distant part of the ship. For instance, the movement of a certain lever on the bridge of the battleship will cause an illuminated sign to suddenly appear before the eyes of the engineers, "way down below the water line, reading, "Full Speed Ahead," or "Full Speed Astern," or any other command which it is desired to give. By means of this method of signaling a command can, if need be, be communicated simultaneously to a number of different stations scattered throughout the ship. Indeed it is by this expedient that the captain of the battleship insures uniformity of action during target practice or in battle. In a twinkling he can send the command "Begin firing" or "Cease firing," or any other instructions to each and every gun crew scattered throughout the length of the ship.



the American navy we would not have won the Revolutionary war at all; that is, it might have been necessary later to have fought that war over again.

The same relative skill prevailed in the War of 1812. Our ships of the same class were superior to the ships of our opponents. This statement is confirmed when we study the exact figures. For instance, in the Hornet-Peacock contest the British ship lost five men killed and 37 wounded, out of a crew of 130, while the American ship had but three wounded—this in eleven minutes. In the Wasp-Prolic fight the British ship lost 15 men killed and 47 wounded, out of a crew of 110, while the American ship lost but five killed and five wounded from a crew of the same size.

I could mention a number of similar instances which demonstrate my statement that at that time we were able to shoot well, and we have been shooting better ever since. Not only the men of the north, but the men of the south, shot well during the Civil war, and we can shoot half a dozen times as well today as we could during the Spanish war.

Never has the American navy made such a record as it is making today, and never has there been a navy having a record exceeding the one which our navy is now making for capacity to hit the target. That is really the whole war problem—to hit what you are shooting at.

We have not in the past built homogeneous fleets. We built a surplus of battleships and then provide more than we have ships for. We built auxiliaries and torpedo boats. If we do it at all, without any regard to the relation which such craft should bear to the battleship fleet, and while we have built or have in construction 29 battleships, we have practically no means of furnishing tenders for them under service conditions.

When the battleship fleet was sent to the Pacific recently it was necessary to charter 40 foreign ships to carry coal for it. If it had been found necessary to send the fleet around the horn in time of war it could not have been attempted, because we could not have furnished American vessels in which to carry the coal.

Very few people realize the deplorable condition we are in, as far as our merchant marine is concerned. If we had a large merchant marine we could draw from it without having special auxiliaries for the navy, but we are so lacking in both that it makes our present situation almost hopeless.

When the Spanish war broke out it was necessary to purchase colliers and transports. One hundred and two vessels were bought at a cost of something over \$17,000,000, but they cost a very large percentage more than their market value, and more than twice as much as they could have been sold for if they had been put on the market at the termination of the war. In other words, we paid out millions of dollars because we had not provided ourselves with suitable auxiliaries for our battleship fleet. We should have a navy adequate for our needs; not only adequate in battleships, but adequate in every other respect.

Surgery on Heart

Surgical operations upon the heart have become more or less of a commonplace in medical history. Something approximating 100 cases of the sewing up of heart wounds are on record, and the recoveries have been considerable when one considers the highly dangerous character of such work. Hitherto, however, heart surgery has been limited to accident cases.

In a recent issue of the annals of surgery one of the workers at the Rockefeller Institute for medical research discusses the possibility of treating diseased hearts surgically. He has made numerous experiments on animals and believes that such operations will be successfully performed on human beings in the near future. His tests have convinced him that the heart can be opened, scraped out (cleaned), sewed up and started off on its "beating" path again without any great, at least insuperable, difficulty. By an ingenious system of side piping and new channeling he is able temporarily to cut out of the circulation portions of such important vessels as the descending aorta the largest artery in the body, without killing the animal. Among his suggested operations is one on the coronary arteries of the heart for the cure of angina pectoris.

This doctor has apparently proved to his own satisfaction on animals that successful surgical interference with the great vessels and the heart itself is a possibility. It is, of course, a long step from these experiments to actual operations on human beings, but there is every indication that the latter feat will be attempted in the near future. The intractability of cardiac affections and their high fatality make the proposed new surgery a thing of great general interest, and may justify the extreme boldness of the proposal.

COUNTRY AWAKE TO DANGER

Increase of Sanatoria and Hospitals for Consumptives is Most Gratifying.

The growth of the crusade against tuberculosis in the United States is shown to good advantage in the two directories that have been issued by the National Association for the Study and Prevention of Tuberculosis and the one in preparation. The first tuberculosis directory published in 1904, by the tuberculosis committee of the New York Charity Organization Society and the National Association listed 123 sanatoria and hospitals for consumptives in the United States, for some of which preliminary provision only has been made. The combined capacity of these institutions was only 8,000 beds. Thirty-two special dispensaries and thirty-nine anti-tuberculosis organizations summed up practically all of the fighting force enumerated in the first directory. The second directory was prepared by the National Association for the Study and Prevention of Tuberculosis and published under the auspices of the Russell Sage Foundation in August, 1908. This directory listed 240 sanatoria and hospitals, an increase of 107 from the former directory; 138 dispensaries, an increase of 126; and 135 associations, an increase of 156. The number of hospital beds listed in 1908 was 14,014. The new directory that will be issued soon, will list over 400 sanatoria and hospitals with a bed capacity of nearly 25,000; more than 200 special tuberculosis dispensaries; and fully 450 anti-tuberculosis associations and committees. Since the first directory was issued in 1904, the increase in the number of agencies fighting consumption aggregates nearly 500 per cent.

The National Association for the Study and Prevention of Tuberculosis would like to get in touch with all agencies engaged in the fight against tuberculosis, in order that they may be listed in the new directory.

EVER SINCE.



Virginia—I suppose you and Harry have been thrown together a good deal lately?

Grace—Yes, ever since he got his new automobile.

SICK, SOUR, UPSET STOMACH

Indigestion, Gas, Heartburn or Dyspepsia Relieved Five Minutes After Taking a Little Diapiesin.

Here is a harmless preparation which surely will digest anything you eat and overcome a sour, gassy or out-of-order stomach within five minutes. If your meals don't fit comfortably, or what you eat lies like a lump of lead in your stomach, or if you have heartburn, that is a sign of indigestion.

Get from your Pharmacist a 50-cent case of Pape's Diapiesin and take a dose just as soon as you can. There will be no sour risings, no belching of undigested food mixed with acid, no stomach gas or heartburn, fullness or heavy feeling in the stomach, nausea, debilitating headaches, dizziness or intestinal griping. This will all go, and besides, there will be no sour food left over in the stomach to poison your breath with nauseous odors.

Pape's Diapiesin is a certain cure for out-of-order stomachs, because it takes hold of your food and digests it just the same as if your stomach wasn't there.

Relief in five minutes from all stomach misery is waiting for you at any drug store here in town.

These large 50-cent cases of Pape's Diapiesin contain more than sufficient to thoroughly cure almost any case of Dyspepsia, Indigestion, Gastritis or any other stomach disorder.

A Sure Sign.

"I understand, Mr. Reuben," said the visitor, "that your son is devoted to the turf."

"Yaas, I reckon he is," said the old man. "Jabez Kin lay down on the grass for half hours 'thout makin' no complaint."—Harper's Weekly.

The average man would not perjure himself if he pleaded guilty to the charge of amounting to but little.

W. L. DOUGLAS
\$3 \$3.50 & \$4 SHOES FOR MEN & WOMEN
BOYS' SHOES, \$2.00, \$2.50 & \$3.00. BEST IN THE WORLD.
W. L. Douglas \$3.00, \$3.50 and \$4.00 shoes are positively the best made and most popular shoes for the price in America, and are the most economical shoes for you to buy.
Do you realize that my shoes have been the standard for over 20 years, that I make and sell more \$3.00, \$3.50 and \$4.00 shoes than any other manufacturer in the U.S., and that 100,000,000 PAID FOR DOLLARS FOR MY SHOES to hold their shape, look and fit better, and wear longer than any other \$3.00, \$3.50 or \$4.00 shoes you can buy? Quality counts. It has made my shoes THE LEADERS OF THE WORLD.
You will be pleased when you buy my shoes because of the fit and appearance, and when it comes time for you to purchase another pair, you will be more than pleased because the last ones wore so well, and gave you so much comfort.
None genuine without W. L. Douglas.
CAUTION! No cheap imitations. Some cheap imitations are being sold at low prices on the streets. If you desire cannot supply you with W. L. Douglas shoes, write for Mail Order Catalogue.
W. L. DOUGLAS, 145 Spring Street, Brockton, Mass.

Alleviating Circumstances.

"Did you say," asked a gentleman who was looking for rooms, "did you say that a music teacher occupied the next apartment?" That cannot be very pleasant," Harper's Bazar gives the landlady's reply.

"Oh," she said, eagerly, "that's nothing, sir. The music teacher has 11 children and they make so much noise that you can't hear the piano at all."

Strong Winds and Sand Storms

cause granulation of the eyelids. PITTIER'S EYE SALVE soothes and quickly relieves. All druggists or Howard Bros., Buffalo, N.Y.

There are lots of people who are afraid to sit down at a table with 13, but a hungry boy isn't one of them.

Mrs. Winslow's Soothing Syrup. For children teething, softens the gums, reduces inflammation, cures wind colic, soothes the stomach.

A conventional man is one whose action you can predict ahead of time.

Lewis' Single Binder, near Original Tin Foil Smoother Package, is straight.

One kind of a curiosity is a woman who can talk but doesn't.

Constipation Vanishes Forever

Prompt Relief—Permanent Cure
CARTER'S LITTLE LIVER PILLS never fail. Purely vegetable—act surely but gently on the liver.

Stop after dinner—distress—cure indigestion—improve the complexion—brighten the eyes. Small Pill, Small Dose, Small Price.

Genuine must bear Signature
Bread & Food

20 Finest Christmas Cards 10¢

Very Choice Gold Embossed



This grand assortment of 20 most beautiful Christmas cards, in lovely colors and exquisite gold embossed designs, all different, extra fine quality, printed and most attractive collection ever offered, so introduce our cards quickly we send these cards and latest price list prepaid for only 10¢. Seymour Card Co., Dept. 67, Toledo, Kan.

Suicide—

Slow death and awful suffering follows neglect of bowels. Constipation kills more people than consumption. It needs a cure and there is one medicine in all the world that cures it—CASCARETS.

Cascarets—No. 106—work's treatment. All druggists. Biggest seller in the world—million boxes a month.

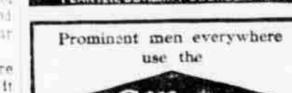
ROOSEVELT'S "AFRICAN GAME TRAILS"

and the best of all. It is a book of 200 pages, in a fine binding, and is a most valuable and interesting book. It is a book of 200 pages, in a fine binding, and is a most valuable and interesting book. It is a book of 200 pages, in a fine binding, and is a most valuable and interesting book.

KNOWN SINCE 1836 AS RELIABLE

PLANTEN'S C & C OR BLACK CAPSULES
SUPERIOR REMEDY FOR MEN ETC. ETC.
AT DRUGGISTS. TRIAL BOX BY MAIL, 50¢.
PLANTEN 93 N. 9TH ST. BROOKLYN, N.Y.

Prominent men everywhere use the



KNOWN THE WORLD OVER

PARKER'S HAIR BALMS

cleanses and beautifies the hair, promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cleanses and cures all scalp diseases. Sold by all Druggists.

Thompson's Eye Water

WATSON E. COLEMAN, Wash. D.C. Books free. High quality. Best results.

PATENTS

W. N. U., ST. LOUIS, MO. 46-1910.

PISO'S

the name to remember when you need a remedy for COUGHS and COLDS

