

# WIRELESS PHONES MAKE BATTLESHIP FLEET ONE GIGANTIC CHAIN

## NAVY MANEUVERS

### REVOLUTIONIZED BY SUCCESS OF NEW INVENTION

Every Admiral  
Can Now Hear  
"Bob" Evans'  
Voice Giving  
Orders, Altho'  
Miles Away.

THE dawning of the New Year finds its most notable new invention in operation on the high seas.

For the first time in history the wireless telephone is playing an important part in world events. The first genuine telephone central ever established on shipboard at sea is being operated on Admiral Robley D. Evans' flagship, the Connecticut, which is leading the famous "peace fleet" to the Pacific.

Marvelous as this is—it would have been almost beyond belief ten years ago—it has attracted little public attention. Yet think how much it means to the safety of those at sea.

In the fiercest gales, in storms at night, and in the densest fogs where the old-time signals are useless, ship may talk with ship or with a dozen ships at once as easily as if they were anchored along a city street.

VERY comforting will be a little talk, for instance, when Admiral Evans' armada is passing through the narrow and tortuous Strait of Magellan in South America, known and dreaded by all skillful navigators as the most dangerous and difficult passage in the world. During its entire length of 200 miles the tide rises over forty feet in six hours and falls twenty

again in the same time, while the current rushes torrent-like along at more than ten miles an hour.

Admiral Evans, however, can call up from his emergency cabin, for instance, the food supply ship Glacier, at the four-mile end of the trail, obscured by the winding waterways and the towering cliffs and canyons. "Hello, Glacier, how and where are you?"

Quickly, in a few seconds, from the distant vessel, the electrical voice waves come into the receiver.

"Just entering the first narrows of the straits. All well."

#### Twenty-eight Now Installed.

Twenty-eight of these wireless telephones are now installed on the various ships of the outgoing fleet, comprising the principal battleships and the supply ship Glacier. The result, says Peabody, and Admiral Evans' dispatch boat, the Yankton. The American Navy is the first to possess and employ the wireless telephone.

To maintain an unbroken and positive method of communication between the Commander in Chief and the rest of the fleet is a strategic problem of supreme importance, especially under conditions of warfare, as well as in the annual practice of fleet maneuvering. Toward this end the Government after some practical and satisfactory trials has decided to extensively adopt and try the possibilities of the new wireless telephone.

Under the conditions which prevail on a long cruise, such as the Atlantic fleet would make on its long journey to the shores of the Pacific, will offer exceptional opportunities in experimenting with the value and capabilities of the telephone.

#### Form Gigantic Chain.

While steaming miles apart, all the way from four to ten, the squadron will be like a gigantic chain, each link entirely separate from its fellows, and yet strung together by invisible bonds. By means of this device Admiral Evans will be enabled from his emergency cabin to direct the movements of the whole fleet with almost as much ease as he can give orders to the engineer of his own ship below by means of the speaking tube. Thus the tail end of the last ship maneuvering can understand perfectly what to do and obey instantly the orders, though five or six or more miles in the rear of his flag-ship.

After many official tests of the apparatus, the navy has adopted this instrument as most essential and advantageous in naval service, affording a safe and ready means of inter-ship communication and the transmitting of messages and orders along the entire line of vessels, or talking between sea and shore to lighthouses as the case may be; the latter will undoubtedly be equipped in the near future with the new instrument.

#### Advantage in War Times.

The two wireless phones which have been in use on the Connecticut and the Virginia have been employed long enough to demonstrate that it can be used to great advantage in naval strategy and warfare. When the fleet went to Provincetown, Mass., for maneuvering and gun practice last summer the wireless telephone was put on board the Connecticut and another on board the Virginia, and the instruments were subjected to all kinds of tests, and it was found that the wireless phone was of the utmost importance.

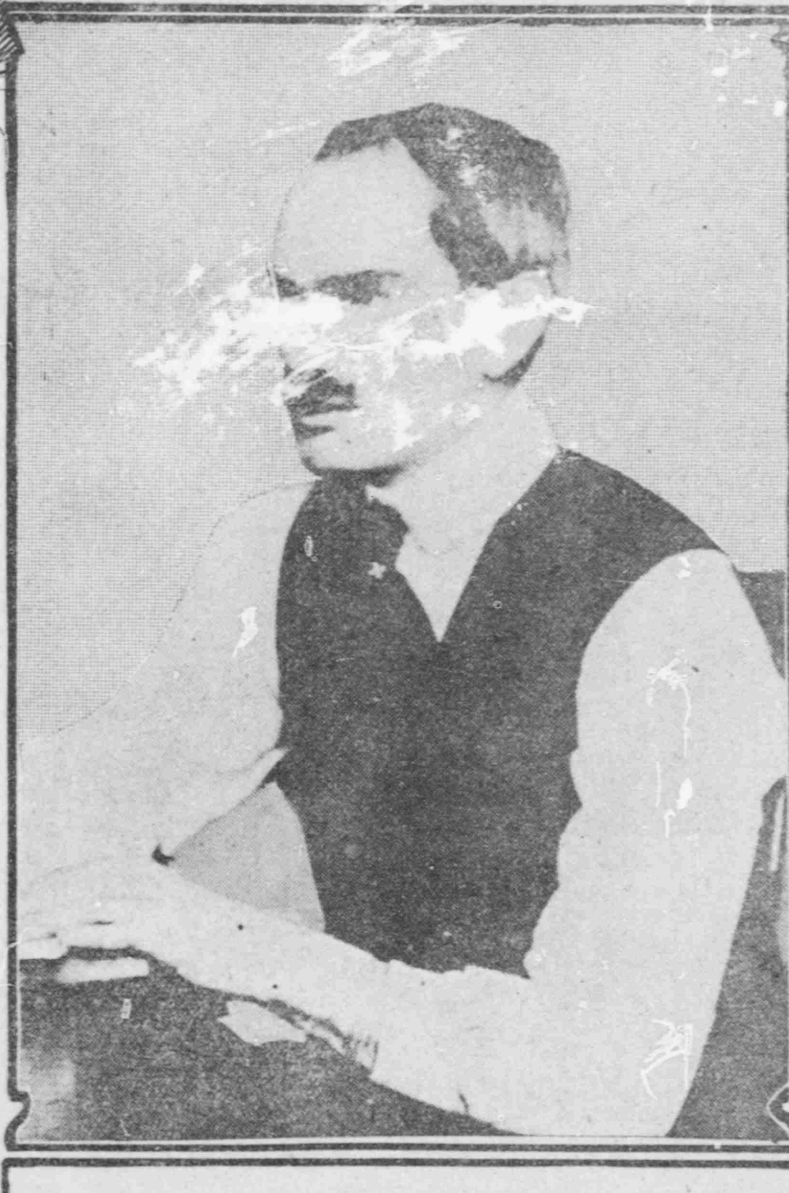
In addition some very successful trials were carried on with this new system by naval officers in connection with the inventor, at Norfolk, when both the tactical value and the practical working efficiency for command were conclusively demonstrated. When the fleet returned from its cruise the results of the experiments with the wireless phone, upon the recommendation of Admiral Evans, the Navy Department ordered that all the principal vessels going to the Pacific, twenty-eight in all, should be equipped with the apparatus. The instruments cost about \$1,500 each.

The fleet of six little torpedo destroyers, consisting of the Whipple, Truxtun, Hull, Hopkins, Stewart, and Lawrence, which left December 1 in advance of the main squadron, are to be equipped with the wireless phone. Owing to the lack of room on these



FIRST WIRELESS TELEPHONE INSTALLED ON AN AMERICAN BATTLESHIP.

## DEFIANCE HURLED AT FOG AND STORM BY LATEST WONDER



DR. LEE DE FOREST,

Inventor of the Wireless Telephone, Waiting for a Call.

tiny crafts, the set of instruments will be encased in a portable waterproof wrought iron box, nearly three feet square and suspended down below the bridge.

#### Will Conquer Many Difficulties.

The wireless telephone is destined to offset many dangers and difficulties which it was impossible to overcome with the old method of flag-signaling, which was accomplished by means of the stringing out of a number of flags or by wigwagging. But these methods, while well enough in fair weather and while the ships are in sighting distance of each other, have their disadvantages on dark, stormy nights and in times of dense fogs.

As is well known, the fog is the worst enemy with which the naval signal man has to contend, as even a light does not carry its rays ten feet. Oftentimes and on such occasions, of course, navigation has to be carried on with extreme caution, as the whereabouts of other vessels is a matter of doubt and collisions are at all times possible.

The navy contract calls for talking distance of only five miles with the wireless phone, though eleven has been officially accomplished, and twenty-five unofficially reported, the latter between a battleship in the Norfolk navy yard and a merchant liner of the Old Dominion Company.

Not only has the navy adopted the

apt on the flagship Connecticut, with one of his staff signal officers sending a message to a five-mile distant vessel, which will constantly be done during the coming cruise en route to the Pacific. To the right is the delicate receiving box, with the "tuning" device on top. In the center is the telegraph key, similar to the ordinary buzzer, which, by simply cutting out the microphone with a switch in front, enables the apparatus to be used for wireless telegraphy, sending the ordinary Morse signals. This is intended only as a special signal device, which, by the series of extra loud sounds, given to the particular call of a ship is designed to readily attract the ear of the wireless telephone operator of the ship.

The transmittive is shown at the left,

with the projecting mouth-piece. One of the features of this is the nickel arc or oscillator seen on the right, having an alcohol lamp beneath. This indicates when the proper oscillation or voice waves emitted from the speaker wire take place and causes a rapid incandescent pilot lamp to glow shown at the top of the transmitter box, when talking can be carried on. Increasing the range for talking is now going on by experiments, and it is only a matter of time until the wireless telephone can be used over as great distances of space as the ordinary long distance telephone on land. In fact, the inventor states that it is a technical and scientific possibility in the near future for the transmission of the human voice from America to Europe.

## Crime and Punishment Unknown in 2000 A. D.

A SOCIOLOGIST of international reputation, a member of the faculty of one of the world's greatest universities, stepped from a Pullman car at the Union depot the other day and walked briskly up and down the platform as briskly as the splintered old boards would permit. He was exercising. Beside him walked a companion. As they walked they talked. And this is a part of what the sociologist said:

"Blame? Punish? These hideous words are going to be obsolete some day. The working vocabulary of 2000 A. D. will not contain them. To the people of that year those two words and the ideas they embody will appear more barbarous than cannibalism now seems, or the staking, or the throwing of children into a molten furnace to appease the anger of a god."

"I hate prophecy—it is a fake. But I love prediction—it is science. Mine is a prediction, not a prophecy. If the astronomer can foretell distant events in the heavens with scientific accuracy; if the biologist, by looking at a formless embryo, can foretell what manner of organism will develop, why should not the sociologist also foretell accurately and scientifically? He can. And he tells us that a new industrial system is not far off. It is merely the tomorrow of evolution. Upon the heels of the new industrial era will come the new morality—the morality of the superhuman. In brief it will be: Blame nobody for anything—blame only the forces that impel him, blame his environment. Punish no one for anything. Cure him instead. Do this by removing the forces that impel him to do evil—change his environment."

"Society, scientists tell us, is an organism. If so, it follows that what one member does is as much the act of the whole body as the act of a man's hand or of his foot is the man's act. All the rest of us constitute the offender's environment. What he is and does we cause him, directly or indirectly, to be and, to do."

"There is no more reason, then, for punishing a criminal than there is for plucking your finger because it develops a sore. There is no more sense in imprisoning a thief or in hanging a murderer than there is

in beating a smallpox patient. A club will not cure smallpox nor will a penitentiary cure a thief. Both are diseases. The cause is the only cure."

"I predict just as disease is, that as health is a product, just as a good deed is a product, just exactly as happiness or a potato is a product. 'If you will examine into the history of vogue,' John Ruskin says, 'you will find they are as truly manufactured articles as anything else, and it is because our present system of political economy gives so large a stimulus to that manufacture that you may know it to be a false one.'"

"I have never been fined or imprisoned, but I never read of crime or suffering and I read of them every day without feeling that a share of the guilt is mine. Punishment begins at the wrong end. It punishes, but does not eradicate. It curses, but never cures."

"For obvious reasons the educator preferred that his identity be not divulged. 'The institution with which I am connected,' he said, 'draws much of its support from men of great means who might be shocked at the expression of views so radical. Nevertheless, they are my views. These things are certain. They are a destiny, not a theory, and they are well-nigh as imminent as tomorrow's sunrise.'"

#### SONG OF FALL.

The frost is on the pumpkin  
(But not here in New York).  
The corn is husked and cribbed  
And the hay in mows is high.

The chestnuts, brown are falling  
(But not here in New York).  
The fields are gray and golden,  
The pine groves moan and sigh.

The apple crop is gathered  
(But not here in New York).  
The fields are gray and golden,  
Our amber cure for "dry."

The wood-pile's daily growing  
The woodchuck, pump, is whirling.  
And the chipmunk dances by.

But not here in N. Y.  
And we know it's fall,  
For the gas bill's growing bigger,  
And the coal men wants our all.  
From an Exchange.

## PRIZED ANTIQUES ENDANGER HEALTH!

DR. REMLINGER, head of the Pasteur Institute in Constantinople, has been making an investigation of oriental rugs and carpets and has published a summary of his results in the German Journal of General and Applied Hygiene. He finds that the carpets of the better class, the highly prized antiques or near antiques, constitute a serious menace to health unless they are put through a radical cleansing and disinfecting process.

The real antiques which have been in use in oriental houses or bazaars for years or generations have been exposed to the contagion of countless disease germs. Their texture fits them in a peculiar way to gather and retain flies indefinitely.

These real antiques are far less objectionable than the counterfeit antiques which have been artificially mellowed. One of the least objectionable methods used to soften the colors in the degree that the European and American market calls for is to bury the carpets in trenches with

quantities of stable refuse. When taken up they are little likely to receive a thorough cleansing.

Sometimes the carpets are laid down in frequented places to be walked on thus accumulating the bacteria-laden dirt of the Eastern city streets. Or a rug is often lent to a beggar or street vendor, who keeps it and sleeps in it until it acquires the semblance of age.

Dr. Remlinger points out that tuberculosis, throat diseases, and catarrh are prevalent in the rug and carpet trade. He is of opinion that they are contracted from handling the fancies and breathing the air in which they are opened and agitated as they are shown to customers. The doctor also expresses the opinion that some otherwise unaccountable outbreaks of tropical enteric disorders that have taken place in Paris were due to infection from oriental rugs.

The most thorough and efficient process of cleansing would be disinfection by steam. This would do no harm to the rugs and it is an absolutely certain method of killing bacteria. He thinks that it should be generally adopted as a preliminary to the importation of Eastern fabrics into any occidental country.