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April

# THE WIRELESS AGE



# THE WIRELESS AGE

An Illustrated Monthly Magazine of  
**RADIO COMMUNICATION**

Incorporating the Marconigraph

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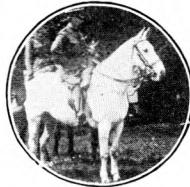
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# With the Signal Corps Service at the Front

By A British Army Officer

Editor's Note.—Like a peep behind the scenes of the European theatre of war is this story of wireless at the front, written by an eminent British army officer. With terse simplicity he has told what he saw of wireless on the firing line—told it so vividly that the reader, even as the author has done, will without difficulty be able to visualize a day spent with one of the wireless details of the Allies. ". . . the long Belgian road, the balloon high in the air, the crackle and sparks from the improvised table in the car and the tense faces and attitudes of the men who received the messages from those far above us who were seeing what we all hoped to view later—the trenches of the enemy"—in this way does the writer, who has been twenty months in the thick of the fighting, picture his visit to the radio corps. His remarks on preparedness are significant. "I got to know something of the service rendered by the wireless men," he says, "and the need for proper training ahead of the time when those services will be of the utmost value." The writer of this article is the author of "How Wireless Is Being Used in the War," which was published in the March issue of *The Wireless Age*. Circumstances born of the war require that his identity be kept secret.

WHEN I first saw Private Tommy Evans he was crawling along a very muddy ditch at the side of the highroad which leads from Ypres to Poperinghe. Just as my car came alongside him he yelled an inquiry as to whether there was anybody in the machine who could fix up his hand. He evidently saw the big red cross on the side of the automobile.



Tommy had torn his hand pretty badly with a piece of barbed wire and his first-aid package had already been used. After dressing his hand I asked him what he was doing. From the blue and white brassard on his left arm I knew he was attached to the signal division of the Engineers.

"Just tryin' to couple up these wires, sir," he answered, pointing to a number of telephone lines running along the ditch. "The shells have knocked out the line along here and the forward posts need communications."

A couple of days later I met Tommy again, when he came into one of the dressing stations to "borrow" a cigarette. I was sufficiently interested to question him regarding his former life and why he had taken up the branch of the service

he was now in, and as his case is somewhat of a lesson and a very good example of the need for training young men along proper lines it may be of interest to the readers of *THE WIRELESS AGE*.

Evans was the typical product of the English Board School. He had received a smattering of the "Three R's and with them a mass of partly digested ideas of various sciences. As he had to leave his school at the age of fourteen in order to assist in keeping together the souls and bodies of his mother and eight brothers and sisters, he went no further than the law demanded as regards education. One special course—imparted by a very bored teacher for the space of one hour a week—had impressed Tommy greatly. It was designated "Elementary Electricity" and to that sixty minutes a week Tommy Evans looked forward with intense fervor.

If, as it happened in the story books, a kindhearted millionaire had met Tommy just then, the latter would have been taken from his surroundings and would, in a very few years, have attained high rank as an electrical expert. How-

ever, as this was in real life nothing of the kind happened. I am aware of the fact that there are educational institutions which would have granted Tommy much technical instruction but—in the first place he knew little or nothing of them or how to enter such places and, which was of some importance, working from six o'clock in the morning until six at night in a wholesale shop checking parcels is rather tiring work and leaves small margin for study.

On the other hand, if by education in school and proper suggestion through his daily paper, he had been made to realize that he could master the study he had learned in such a short time to like, Tommy Evans, when his country needed his services, would have been a trained man and not merely an enthusiastic amateur.

This is about the way he described his ambitions and disappointments to me:

"You see, sir, when this 'ere wireless business began to be somethin', I wanted to take it up. I was always balmy about electricity anyhow. But I had to work and I thought the night schools were only for the toffs. It's only since I joined on that I heard that I could have joined the Territorials and got what I wanted. Seems to me that I lost a lot by not knowing just what a chance I had. I got some books from the library and they helped, but I wish I'd known I could have learned this work long ago."

I am glad to say that Tommy's ambi-

tions are now realized; that by the use of a little influence he was enabled to join the wireless branch. He is now a first-class man and many times I have seen him proudly displaying his sergeant's stripes and dashing along the Belgium roads in one of the automobiles detailed to the wireless service.

It was by keeping track of Evans and watching him at work that I got to know something of the service rendered by the wireless men and—the need for proper training ahead of the time when those services will be of the utmost value.

Thus it happened that I spent a day with one of the wireless details. It was shortly after the first big gas attack of last April (1915). In a clump of trees on the narrow muddy road from Poperinghe to Woesten I found the detail in charge of the wireless work and received a cordial invitation to accompany the men and watch them at work.

First of all, there was the balloon to send up, from which, five miles away the observers would be enabled to see the dim outlines of the German

trenches and—possibly—catch the flash of the guns bombarding our lines. The balloon, looking like nothing so much as a greatly magnified banana, was dragged out into the field and the observer and wireless operator climbed into the basket hanging beneath it. Up and up it went until it reached the desired height—about 1,500

*Somewhere in Flanders,*

*Feb. 14, 1916.*

*My Dear Mr. White:*

*Replying to your request for a few words on the wireless situation at the front I beg to send you herewith a short article descriptive of what I have observed. You are at liberty to use whatever portion of it you may find of value.*

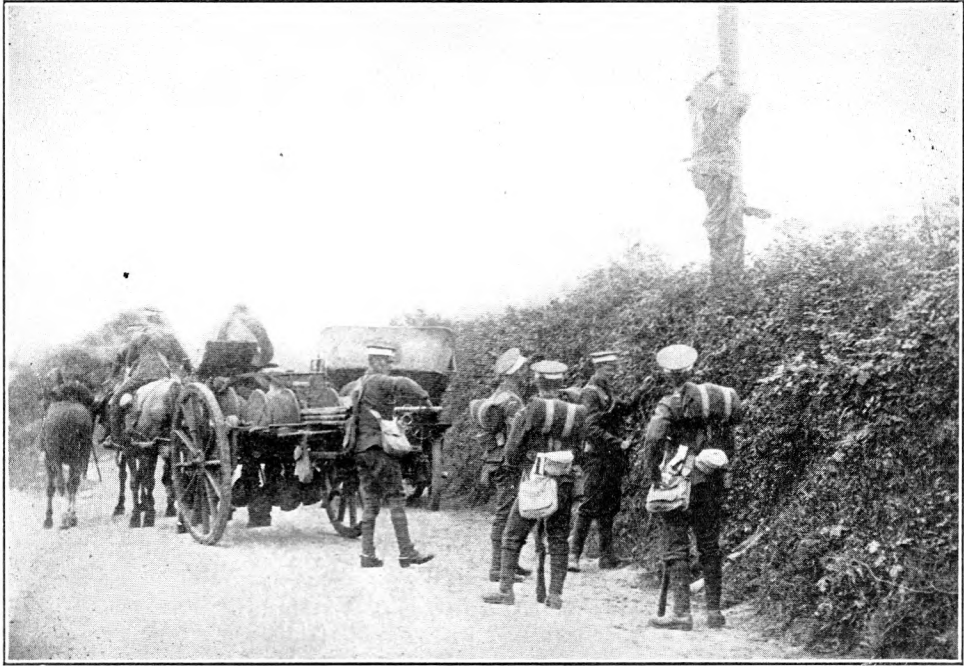
*As you will see, I am not able to write technically on the subject, but I have done my best to make it interesting. The little I know of what is being done in the line of improvements I cannot, of course, mention, but I am sure you will be greatly astonished and pleased to learn, in time, how much has been accomplished.*

*If anything I have written helps to make the young men of the United States realize the imperative necessity for proper training in advance of actual work in the field I shall feel that my labor has been well repaid.*

*Very sincerely,*

*.....  
Major, H. B. M., Ex. F.*

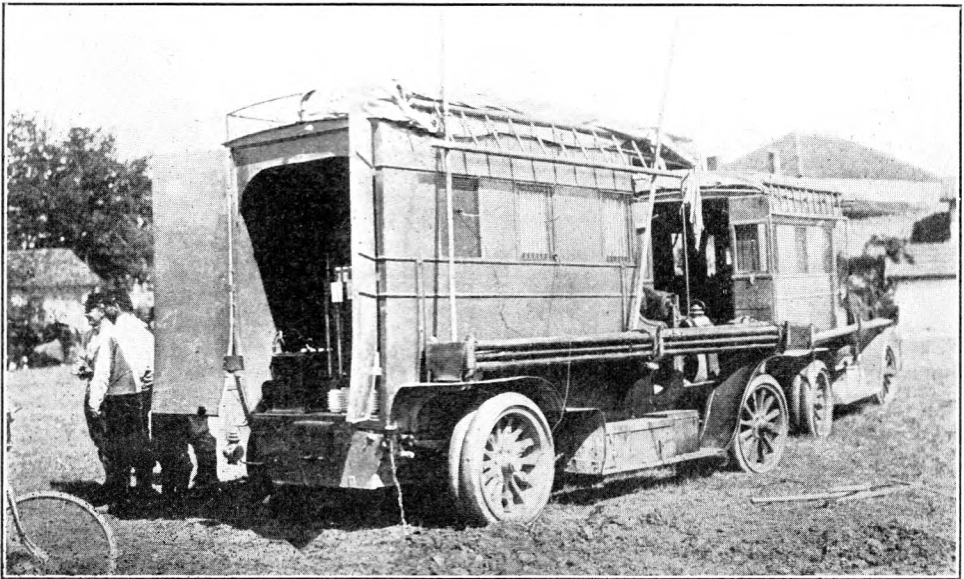
*The letter to the editor which accompanied this article, written from the first line of trenches*



*British signal corps troops in the field establishing communication lines from the military base to the trenches*

yards—and then it slowly drifted towards the enemy's lines, tugging at the cable which held it to the motor lorry beneath.

In the wireless car (once a fine high-class limousine but now changed over to such an extent that its former owner would never recognize it), were a radio



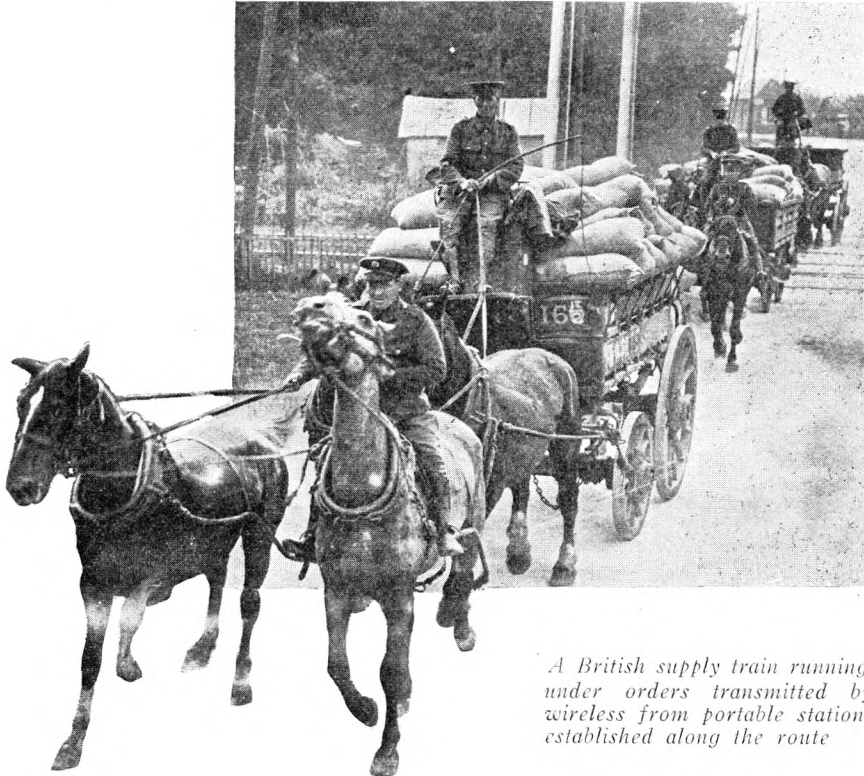
*French field wireless tractors used effectively as "mother stations" to communicate with the light portable sets*

operator and an officer. The operator received the messages as they were flashed from the sky, wrote them out and handed them to the officer.

On our thoughts of what was occurring a few miles ahead in the trenches, broke in the breathless voice of a motor-cycle orderly.

"Beg pardon, sir," he said, addressing the wireless officer. I've got to get a message to Colonel So-and-so, the Blankshires. My bally machine's broke. Can

curse loud and full of feeling regarding the Belgian mud which had caused his machine to skid with the result that it was thrown into a ditch and wrecked. The bearer of orders for more ammunition for Number Ten battery, he was on even more important service than the first orderly. The wires connecting the battery and the ammunition base were down all along the roads, but at headquarters, near the base, was a wireless station, and in a few minutes the needs of Number



*A British supply train running under orders transmitted by wireless from portable stations established along the route*

I get over your telephone to him?"

Unfortunately, there was no way of reaching the Colonel by telephone—but wireless came to the rescue. The message was sent through the air to the balloon operator who soon picked out the Blankshires' headquarters. By heliograph the message was sent in code and acknowledged—and another triumph was scored for wireless.

Later in the day we had another example of the value of the art. Again a motor-cycle orderly arrived, uttering

Ten were made known and attended to quicker than they would have been had the orderly's machine not gone out of commission.

Notwithstanding all the wonders of wireless which have come to my notice I have never lost the sense of awe due to the realization that from the air, messages are being picked up and sent and that information of priceless value, which could not be transmitted by any other medium, is being received. And hereafter when I step into a wireless room on a



*British motor supply train en route to the base of operations, accompanied by a motorcycle messenger to deliver orders from communication points to the officer in charge*

ship or into a receiving station on land, there will be instinctively added to this feeling the visualization of the long Belgian road, the balloon high in the air, the crackle and sparks from the instrument on the improvised table in the car and the tense faces and attitudes of the men who received the messages from those far above us who were seeing what we all hoped to view later—the trenches of the enemy.

Later that evening, after the balloon had descended and the night men had erected their masts and stood ready to receive and send messages to and from headquarters and observation posts in the trenches, I sat for a time with Tommy Evans, (now Sergeant Evans) discussing the day's work. I discovered then, to my great surprise, that most of the men had begun wireless work since they enlisted, and that, while all had been more or less interested in it, they had not taken it seriously until the necessity arose.

Among all those who have performed such excellent services for their country during this war none has excelled the men of the Signal Divisions. And this is particularly true of the members of the wireless branch. Of all nations England has paid least attention to the training of her young men in the radio art and it was only when the war broke out that the Government recognized the value of the enthusiastic amateurs who had "disfigured" the landscape by placing an-



*Mounted orderlies whose duties and experiences in signal corps work are vividly described in this article*

tennae on their houses and disturbed the nights with the crackle and spark of their instruments.

Every one interested in the radio art realizes that the European war has demonstrated the value of wireless telegraphy to no inconsiderable degree. After the history of this conflict has been written I am sure that due praise and honor will be given to the men of the service who have done so much in the face of big obstacles to make competent the wireless corps of the entente nations; for to train

relatives who had declared their intention of enlisting to enter that branch of the service. One is now at the front and the other is taking instruction in wireless and aviation, for the purpose of using the two in combination.

The British Government, which controls the entire telegraph and telephone service of the United Kingdom, has ordered that every telegraph operator be given a course in wireless work. For this purpose thousands of text-books have been ordered and promotion will



*The British field wire telephone in operation under the direction of the signal corps*

young men along serviceable military lines when their only asset was unbounded enthusiasm, has been far from an easy task. Nevertheless, this was done and to-day there is no more efficient force of wireless men than that of the Allies. It must not be forgotten, however, that to obtain this result required a good deal of training after the war began and that much valuable time was lost, because of the fact that enthusiasm and loyalty, no matter how great, will never offset lack of knowledge.

On my last visit to England from the front I was so impressed by the usefulness of wireless that I induced two of my

depend greatly upon a man's progress in this art. This, at least, serves to demonstrate that the British Government has learned to value wireless and sees the necessity for training men to be skilled in the art.

As fast as the radio education of these men is completed and they can be spared from the duties awaiting them in England, they will be detailed to army service at the front. The employment of mobile wireless stations with the supply columns is now being developed, but full information regarding what is being accomplished along this line cannot be made public now. However, at a future



date I may be able to give interesting details concerning this work and an explanation of how it is done.

I wish I could be in this country when Marconi returns to the United States and relates what he has accomplished at the front. He will give you the technical details of which I, unfortunately, am ignorant, and I am sure he also will be able to impress strongly upon you the necessity for a competent and thoroughly trained body of men, which will be ready and available at any time to handle the wireless work of the army.

How the art is used on the firing lines cannot, of course, be told of in detail as yet. When the war is over, however, if not before, the facts will be made public.

Just as it takes a crisis to develop a man, so it has taken this war to develop wireless telegraphy to a point which two years ago was undreamed of. And not the least of the many lessons learned in the war is that which has taught us that a well trained and competent body of wireless operators and signal men is one of the greatest assets an army can possess.

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### CHANGES IN CENSORSHIP REGULATIONS

Changes in the naval wireless censorship regulations have been announced by Secretary Daniels. A strict interpretation of the regulations as they were made when the Government placed naval censors at Sayville and Tuckerton prohibited the censors from passing for publication in the United States the German official statements if they made reference "to movements or locations of war or other vessels of belligerents." This operated to prevent Germany's statement of the result of naval operations being received

direct from Germany, although they were received by cable via London after having passed through the British censorship.

The regulations as now modified by Secretary Daniels provide: "The restriction as to movements of war or other vessels of belligerents shall not apply to messages received from belligerent shore radio stations. It applies only to Germany, as Great Britain is using the cable."

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### PRAISES THE ANCONA'S OPERATORS

Pietro Buffa and Nicola de Crecchio, Marconi operators on the steamship Ancona, which was recently torpedoed in the Mediterranean Sea, have received favorable mention from the Italian Ministry of the Navy as a result of their bravery in time of stress. A letter from the under-secretary of state for the navy follows:

"The Committee who had charge of investigating the circumstances attending the sinking of the s. s. Ancona have felt it their duty to make special mention of the efficacious and commendable work done by the two Marconi operators, Mr. Pietro Buffa and Mr. Nicola de Crecchio, by making timely important communications to the captain of the ship, by the rapidity wherewith they sent wireless signals of danger and help

so as to enable the French steamer Pluton to arrive at the scene of disaster only five hours after the sinking of the ship; and also because, not being in a position to continue their work on account of the wireless station being destroyed, they saved themselves only on the last lifeboat that left the ship.

"I am well pleased to bring to your notice the two operators, who in this disaster gave proof of serene energy and a high sense of duty.

"I therefore consider that they deserve special praise, which you will please give them in my name."

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In order to observe strict neutrality during the European war the Columbian Government has suspended the operations of two wireless stations on the coast of that country.