

# WIRELESS STATION FOR 30s

Amateurs Make Installations from Odds and Ends.

## LISTENING AT THE GATE OF THE WORLD

From Our Special Correspondent.

DERBY, Wednesday.

If you possess a few empty jam jars, a roll or two of copper wire, a rubbish drawer and 30s you can erect a wireless receiving station, and by spending another 30s you may also signal through space (if the Postmaster-General doesn't object) to anybody who has a similar installation within a radius of six miles.

This primitive plant will enable you to pick up messages from the Balearic Islands in the Mediterranean, about 1000 miles away, and-from Pola, in the Adriatic Sea.

At certain hours of the night you will be able to hear the whistling sound of the German wireless system sending information which will appear in the daily paper published in German liners on the following day; you may hear the droning of the Marconi installations sending out weather and time reports and news of the day to warships and lighthouses.

Norddeich, the Eiffel Tower, Cleethorpes, and Poldhu in Cornwall will all be linked up to you by invisible waves; you may hear murmuring messages across continents and seas; your ear is at the gate of the world.

Listening in your bedroom while your neighbours sleep you may hear the S.O.S. signal of distress from a liner, perhaps the first message of a disaster, which will shake civilisation to-morrow.

### **SEND A DISTANCE OF SIX MILES.**

Some twelve members of the Derby Wireless Club possess installations, which can pick up the World's news and also send messages a distance of six miles. All the instruments are practically homemade, and the average cost is under £3.

Some idea of the ingenuity shown by these amateur wireless men may be gained from a description of the installation at the clubhouse, which has been erected by all the members, each supplying a part of the equipment

Among the articles used are: ---

Bone rings from a baby's teat.

Handles of rubber stamps for switchboard.

Tuning coils made from cardboard linoleum-roll.

Brass stair-rods which act as sliders for the coil, and springs from electric globe holders for regulating the sliders,

Fixed condenser made out of broken bits of window glass and photograph frames.

Spark gap made from zinc of old batteries,

Wheels for adjusting insulator made from two wooden draughts men.

Some of the members have their aerial attached to poplar trees, thus doing away with a mast; another uses an old flagpole with a golf ball for insulator.

Still more ingenious was another member, who made a variable condenser out of two ordinary buckets. Another amateur used a tubular chocolate box covered with tinfoil foil the same purpose.

## **MADE FROM ODDS AND ENDS.**

All the instruments have been made from odds and\* ends and copper wire, the only part of the equipment which it has been found necessary to buy being the telephone headgear. This may be obtained second-hand at anything from 30s. to five guineas.

Primitive and ingenious as these installations are, they are the last word in equipment when compared with the outfit which practically started the' club- Mr. A. T. Lee, now the secretary, and his friend Mr. S. Taylor, the originators, attended a University extension lecture on Marconi's discovery, and began experimenting in a bedroom.

Their outfit comprised two wires, a motorcar ignition coil, two brass bedstead knobs, dry batteries and a Morse tapping key. They improved this apparatus until they were able to send messages across the town, and by studying the subject and improving their instruments they were able to pick up messages- from Cleethorpes, the Eiffel Tower and Poldhu in a little over a year. To day they are able occasionally to get messages it a distance of 1,000 miles.

## **FIRST WIRELESS CLUB IN ENGLAND.**

The club, which claims to be the first of its kind in England, has been entirely fitted up by the members. One man papered the walls, another put in electric light and gas fittings, another made the wooden fixtures, and at present all are engaged on an electric radiator, which they hope-will act as a resistance for charging accumulators, and heat the room at the same time.

The club possesses a small library, and every week one of the members "gives a paper on some question of wireless telegraphy.

So far it has been found possible to run the club on an annual subscription of five shillings, and there is a balance in hand.

The venture is all the more remarkable because the members include a doctor, a dentist, a solicitor, and others who are not either electricians or telegraphists.

After a look round the clubhouse I visited Mr. Lee's home, and seated at his receiver heard distinctly messages transmitted from Norddeich, Ushact, and some local stations.

While I was at the club one of the members was called to the gathering by wireless, a little incident which proved the efficiency of the sending part of the installation.