



RADIO SECTION

A MESSAGE

TO MECCANO USERS

For many months past I have been giving very close attention to the subject of Radio, and I have become firmly convinced of the importance and possibilities of this new and wonderful science. I am anxious, therefore, that every Meccano boy shall have his share in the pleasure that I am convinced Radio is destined to bring to the human race.

In America and Canada there are thousands of boys who are at the present time owners of their own Radio Receiving Sets. Every day they receive not only telegraphic messages in the Morse code, but also concerts, speeches, weather reports, etc., by wireless telephony. Every Meccano boy should make it his business to acquire as much knowledge as possible of radio matters. In my opinion, the discovery and development of wireless communication has conferred as much benefit on mankind as has any invention or discovery of modern times. Not only has it established throughout the world extremely rapid and certain inter-communication over both long and short distances, but it has made cheaper quick transmission of messages. In these, and in many other ways, its commercial value is inestimable.

Wireless telephony, the most recent development of this new science, enables clear and effective conversations to be carried on over great distances. This development has undoubtedly opened up a great new industry, devoted to the dissemination of both instruction and entertainment in a new and wonderful way.

Installations have already been set up at three hundred and sixty populous centres in America. These installations, called "Broadcasting Stations," are capable of transmitting wireless telephonic messages, and each one, at certain fixed hours each day, transmits a programme previously announced in the local daily press. This entertainment consists of orchestral music, singing, lectures in botany, astronomy and other interesting subjects, market reports, fashion reports, results of sporting events, speeches or dance music. Any one located within the radius and possessing a suitable

receiving set can enjoy these programmes seated comfortably at the fire-side.

A Radio receiving set is a comparatively simple instrument and I believe I am quite right in saying that considerably more than half the sets in use in this



OUR ILLUSTRATION SHOWS ONE OF THE TWO AERIAL TOWERS OF THE MOST POWERFUL BROADCASTING STATION IN THE UNITED STATES.

Its great height of over 180 ft. may be judged by noting the two derrickjacks at the top of the tower. The station is owned by the General Electric Company of Schenectady.

country and abroad are either home-made or have been assembled and fixed up completely by the persons who are using them. It is also fortunate that whilst the theory of Radio is abstruse and requires a good deal of study, the actual receiving of messages is not much more complicated than the installing of a gramophone in the home.

The first time I heard a wireless concert was with the aid of a simple receiving set, which, with the exception of ear telephones, a small inexpensive fitting called a Crystal, some ordinary electric wire, and one or two simple electric fittings—was made entirely from Meccano parts. The extraordinary efficiency of this simple receiving set, and the intense pleasure it gave, determined me to do all in my power to make it possible for every Meccano boy to receive Radio messages, and to share in the pleasure and instruction afforded by this remarkable new science.

In Great Britain the progress of Radio has been much delayed by the absence of broadcasting stations, but the difficulties in this matter have now been overcome. Shortly there will be powerful broadcasting stations installed in the most populous centres throughout the country. When this is done a tremendous impulse will be given to Radio and it is my desire to see all Meccano boys early in the field.

An Instruction Leaflet for the building of a Meccano Crystal Receiving Set is now available and you will find particulars of this on another page. You should apply for this Radio Leaflet at once.

Our Wireless Experts are at work on Meccano Valve Receiving Sets and full particulars of these will be announced in the *Meccano Magazine* as soon as they are ready. In the meantime I would urge every Meccano boy to keep in very close touch with all that goes on in the world of Radio by following the articles that will appear in future issues of the *Meccano Magazine*.

If you experience any difficulty in understanding the subject, or in constructing your Receiving Set, you should write to our Radio Editor who will solve your difficulties and make everything clear to you.

Frank Hornby

A Giant Aeroplane

A giant bombing aeroplane has been designed for the British authorities and will shortly undergo strenuous official tests.

This machine will be fitted with a 1,000 h.p. "Cub" engine, and will have two decks. The elaborate release gearing and instruments for the accurate dropping of bombs are fitted on the lower deck, whilst on the upper deck the pilot and the navigator will have their quarters.

The machine is designed to be a fighting bomber with an exceptional radius of action. Both decks are fitted with gun positions, so that the aeroplane can resist attacks from all sides.