

## The Knowledge Bank at The Ohio State University

### Ohio State Engineer

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# OHIO'S OWN

By ELBERT J. BOEBINGER

## III. RECENT DEVELOPMENTS OF WLW

**N**EVER in history has there been recorded an era in which more progress has been made industrially than the age in which we are living.

Let us take the automobile as an example. From a novelty or freak, known as a horseless carriage, it has become a product that has almost completely revolutionized the field of transportation and the automotive industry is one of the largest industries in the country. The radio, which was practically unknown before the World War, has become one of our major items of entertainment.

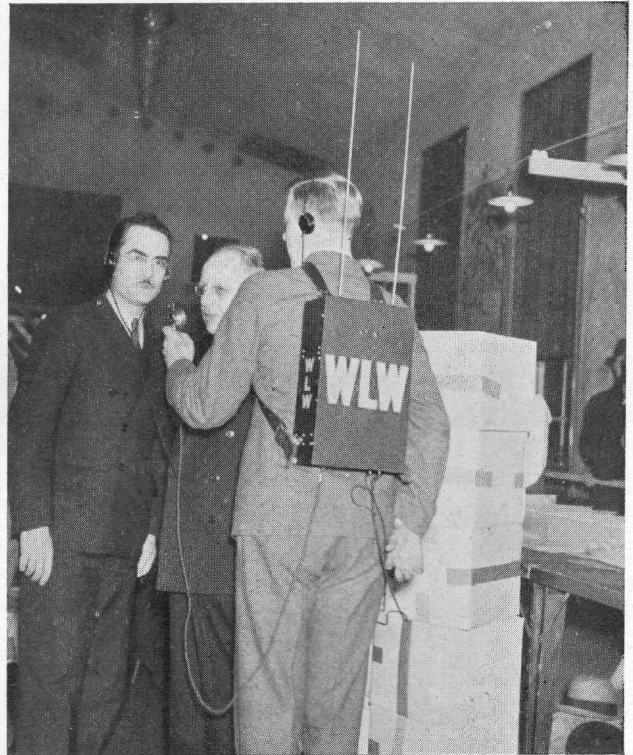
Another source of entertainment is the talking picture which has been used commercially for only the last few years. With this rapid development we can expect rapid changes in other fields within the next few years. All of these new wonders and inventions have brought about a change in habits of living. Instead of devoting our leisure time to reading, walking or social gatherings, more of it is spent in going to shows, taking rides in automobiles or listening to radio programs.

It is also necessary for all types of business to keep in step with the customs of the day and with so much competition it is necessary to use every progressive means possible to keep the public interested in what they have to offer.

An example of this progressive spirit is shown by Radio Station WLW. Even though this station has the reputation of being the most outstanding in the world it is still taking steps to retain this reputation.

Radio news reporters have become one of the major features on radio programs. In these news casts the reporter gives a brief synopsis of the current news events. The WLW engineers have devised a method by which the actual happening of the event is broadcast instead of having someone tell about it.

An example of this type of broadcasting was during the 1937 Ohio River Flood in which the refugees and radio announcers talked directly from the scene of interest. This type of broadcasting has also been done in the case of strikes, riots, and other similar catastrophies. In order to pick up these programs WLW has a special built automobile that goes to the scene from which it is desired to broadcast. This car is equipped with a transmitter which sends the program by short wave to the central control room of the station from which it is broadcast in the usual manner. The microphones have long wires attached

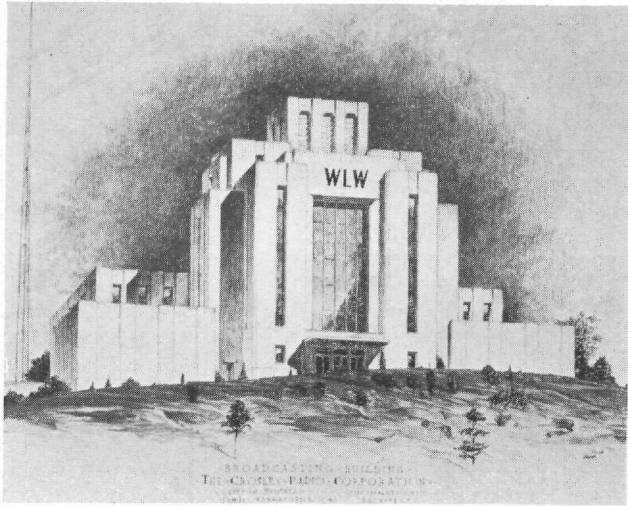


*One, two, three, four, testing.*

to them so that the announcer may get a considerable distance from the car if necessary in order to pick up the voices of those involved or sounds which may be of interest. In case the car is not able to reach the destination desired and it is impossible to take a microphone and extension cord the operator has a small short wave transmitter which he carries on his back. The broadcast is transmitted from this small transmitter to the mobile unit and from this car to the central control room of the station.

In addition to using this remote pickup equipment for news broadcasts it is sometimes used for entertaining purposes. Special programs are sometimes broadcast in which the mobile unit and a staff of operators will visit residences in the city and the announcer will go in and interview the people. An example of this was during the Christmas holidays when the announcer and a group of Christmas carolers went in various homes and serenaded the occupants.

For the broadcasting of most programs away from the studio such as athletic events, orchestras, etc., the program is sent to the station by telephone lines as



*The New Studio*

this method is much more efficient and will give a better program. However, it requires time to get the lines in order and the short wave is valuable when little advance notice is given that the broadcast will be made.

We are all familiar with the chimes that are heard over WLW every fifteen minutes except during continuous programs. The building of this clock originated from research along other lines of work and it was an idea of one of the sound technicians to build it. This idea was first thought of in 1936 and the WLW engineers spent three months working on it, testing here, adding there. The result was an exclusive studio program clock. Don Winget, Jr., chief sound technician, said that this clock is the only one of its kind that has been made.

The chime is a tiny steel reed amplified electrically. In case of a city power failure, the clock has its own batteries which insure continuous running. Should the city power go off, for any reason, the clock automatically switches to its own power and continues to operate.

Time is chimed by the quarter hour. For instance, at 8:15 the clock chimes eight times, pauses, then chimes once. For 8:30 the eight chimes are followed by two notes and for 8:45 by three notes.

The clock is set so that exactly twelve seconds before the time being given it starts to chime. For instance, at twelve o'clock noon the clock starts to chime at exactly 59 minutes and 48 seconds past eleven o'clock.

In order to put on large radio programs a station must have elaborate equipment of the latest type to give all the sound effect necessary. To keep the continuous interest of the public in these programs it is beneficial to invite them to visit the station and see an actual broadcast. We are always more interested

in hearing a dance orchestra broadcast after we have seen it in person or danced to it because we have seen and known some of the members who are outstanding.

Since WLW was one of the first stations in Cincinnati all of these facilities were not required at that time and the present studios, which are located on the eighth floor of the Crosley plant, have become more or less out of date.

In order to keep in step with the advances made in radio, the Crosley corporation have nearly completed plans, which have been in the process of execution for nearly two years, for the erection of a million dollar broadcasting center for Cincinnati. The new structure will be devoted exclusively to the activities of WLW and WSAI. It will be of modern architecture and one of the finest broadcasting plants in the United States.

The structure will be erected on Clifton Heights, overlooking downtown Cincinnati. The location is such that the building will be visible for miles throughout the Cincinnati and northern Kentucky areas.

The main part of the building will be three stories high, with a five story tower in front. Provision will be made in the new studios for the public to witness the broadcasting of major productions. The auditorium will seat at least 600 people and will have a stage at one end which will be capable of handling shows using sixty or seventy people.

In addition to this large studio the building will house eleven other studios of various sizes to meet the requirements of the different programs that are broadcast over WLW and WSAI. Two of the studios will each contain a pipe organ and most of the others will be equipped to handle electric organs. All of the studios will be located on the first and second floors. On the second floor will also be located the master control room, the news room, and the automatic news printer.

It is surprising to know the number of practically unheard of men that are required to operate a radio station. Among these are continuity writers, music copyists, special events directors, sales promotion and research personnel, musical directors, arrangers, copywriters, and many others. The offices for this large group will be located on the third floor. The WLW music library will also be on this floor. This is one of the finest music libraries that has ever been assembled by a broadcasting company.

The offices of the executives of WLW and the Crosley Corporation will be located on the fourth floor.

The fifth floor will be devoted to the technical department. Here will be found the research laboratories, the measurement laboratory, and the drafting room.

The completion of this building will mark another step in the rapid progress made by radio.