



LAYING DOWN THE LAW TO PROSPECTIVE AMATEUR OPERATORS

When the successful applicant in New York passes his test for an operator's license, he is given a talk by J. W. Swanson, Radio Inspector, who is seen at the left. The incipient ham is asked not to transmit during broadcasting hours, be on the alert for SOS signals, and generally maintain the best traditions of the amateur

from the New York station would sound like an echo from the San Francisco station. Since the test was not carried out, however, no one had the opportunity of hearing such a phenomenon.

The Telephone Company's Part in This Work

IT IS interesting to us that our guess as to the reasonable and probable development in radio broadcasting is so quickly being vindicated. That the development and execution of this new form of communication would undoubtedly be carried out by the great research and engineering staffs of our nation-wide communication organization—The American Telephone and Telegraph Company—seemed to us the only logical possibility. This company has spent a tremendous amount of money in training its research staff and in accumulating information essential in the field of speech transmission. Any other organization would

necessarily have to incur similar expense to be on an equal footing in the game, and even if this uneconomical step should be decided upon it would still be a long way behind the Telephone Company in the race for new and better accomplishment.

It seems assured that radio broadcasting must necessarily be completely interlinked with the wire network covering our country; we cannot conceive of it growing independently here and there over the land, in isolated spots. This is not the way it will really develop into a country-wide service. No matter how good the isolated stations may be they must still play a minor rôle in the tremendous field which radio is destined to fill.

It is a very good thing for the art that there are so many excellent stations operating independently of the Telephone Company; competition makes for greater progress and stimulates the engineers and managers to produce better and better programs, all of which ben-

efits the listening public. These independent stations cannot perform the same service, however, as a network of stations, scattered all over the country and interconnected for operation by the same voice. It is this possibility that gives to radio broadcasting its great potential value and importance; the Chief Executive addressing the country is no longer a dream, it can be accomplished to-day.

By using part of their transcontinental, high-quality, telephone line, the telephone engineers were ready to deliver, the President's voice all the way across the country with imperceptible distortion. At San Francisco, Omaha, Chicago, New York, and Round Hill, the modulators of the radio stations were regulated to function as well as though the speaker were personally in the studio. Three thousand five hundred miles of telephone line were to be tied up in the demonstration, a fact which shows at once how it is that radio broadcasting must become an integral part of the rest of the country's communication scheme.

Simplified Receiving Sets

DURING the past year, nearly every issue of a radio journal or newspaper has brought glad tidings of a new and more efficient receiving circuit. We long ago stopped trying to keep a record of these supposedly novel ways of using a vacuum-tube detector, because it seems that in the end, after all the required refinements are made, they amount to about the same thing. Experts tell us that it makes but little difference what circuit is used—that if sufficient skill and intelligence are displayed in properly proportioning the various parts, practically the same results can be obtained with any of the recommended circuits. This seems a logical conclusion to one understanding the principle of the vacuum tube, yet many times the enthusiast solemnly declares one circuit is incomparably better than the one he has been using (and which he recommended to us only a few days before) and which we haven't yet had time properly to try out. We have one ac-



THE FIRST THREE HEROES TO RECEIVE THE RADIO MEDAL

The award of this medal is restricted to wireless operators, and the first three were presented to the three operators of the *City of Honolulu* which burned and sank in the Pacific last spring. Mayor Cryer of Los Angeles made the presentation for the Radio Corporation of America. Left to right: N. C. Kumler, Mayor Cryer, Walter P. Bell (Chief Operator), and H. D. Hancock