

# TRADE MOVES FOR STANDARDS IN TELEVISION

Working toward early and orderly development of television, recommendations of television frequency assignments and engineering standards are being made by the Radio Manufacturers Association to the Federal Radio Commission for consideration at the International Communications Conference next May in Madrid. The engineering proposals were drafted at a recent meeting of the television committee, of which D. E. Replogle is chairman, and were transmitted to the Radio Commission at Washington by Dr. C. E. Bringham, chief of the association's engineering division.

## Summary of Proposals

Chairman Replogle has issued the following summary of the television engineering proposals:

"From data secured it is apparent that the present television wavelength assignments are inadequate to give satisfactory television broadcasting service.

"1st—Because of interference between stations at distant points.

"2nd—Because of phantom images and fading set up by reflections of television signals from the Heaviside layer. These reflections arrive at a different time from the ground wave of the transmitting station, which causes several images to appear and shift back and forth except in areas close to the broadcasting stations. These are quite annoying and when present entirely upset the detail of the received pictures.

"3rd—The narrow channels of 100 kc, while wide in comparison with voice channels, are still too narrow to permit satisfactory picture transmission.

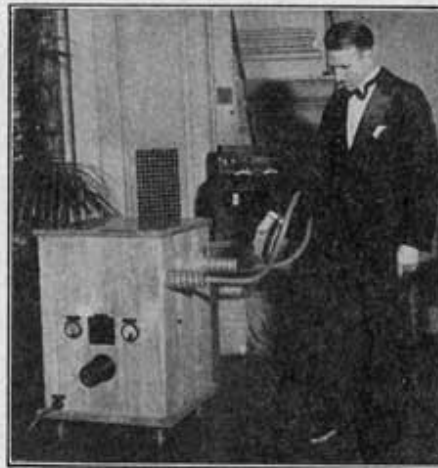
"4th—In the spectrum assigned to television there are too few channels to assign to sufficient television stations adequately to supply one city without considering the many cities that will want service. This has become quite apparent and there has been a definite search for other channels in the ether not now occupied that can be used for television.

## Spurred by Conference

"This search for new channels during the past year has brought to light sufficient data to make necessary the calling of a special meeting of the television section of the general standards committee to consider the request for television bands that can be expected to meet requirements in this art for the next five years. It was necessary to make these requirements at this time because of the start of the International Radio Conference in Madrid, Spain, next Spring, which will set the various international radio channels for the next five years.

"At the committee meeting the following television interests were represented: Radio Corporation of America, Jenkins Television Corporation, Philadelphia Storage Battery Co., U. A. Sanabria, Baird Television Corporation of England, Short-

## FEVER MACHINE



(Acme)

The treatment of rheumatism by short-wave radio was discussed during a symposium on electricity in modern medicine before the Science Forum of the New Electrical Society at the Engineering Auditorium in New York. A portable electric artificial fever producing machine constructed as a short-wave radio transmitter was exhibited by Albert B. Page (above).

wave & Television Labs., Radio Pictures, Freed Radio & Television Corp., Stromberg Carlson Telephone Manufacturing Co. and the Kolster Radio Company.

## Want to Use Higher Frequencies

"After a presentation of the facts the following recommendations were made to the Federal Radio Commission through the engineering committee:

"1st—The desirability of securing continuous band from 35 to 80 megacycles exclusive of the amateur band (56 to 60 megacycles).

"2nd—That sound be permitted on channels assigned for visual broadcast when and only when accompanying visual programs.

"3rd—That a channel width of 2,000 kc. be allowed for experimental television transmission because of the width of the sideband necessary to convey pictures of adequate detail and because of the space required for the synchronizing signal and associated sound programs and for a wide band between adjacent television channels to allow for inaccuracy in the maintenance of television transmitter frequency and to permit the easier construction of high fidelity receiving sets for television and sound.

## Calls Recommendations Important

"These recommendations are considered of greatest importance. They show first the trend of television development for the next few years, namely, toward the use of the shorter waves hitherto believed unusable and for the possibilities of sight and sound broadcasting. The discussion at the meeting also revealed the fact because of the non-interference of the transmitted wave on these frequencies, it will be possible to pass hundreds of transmitting stations throughout the United States without objectionable interference."