



2-WAY AMATEUR TELEVISION

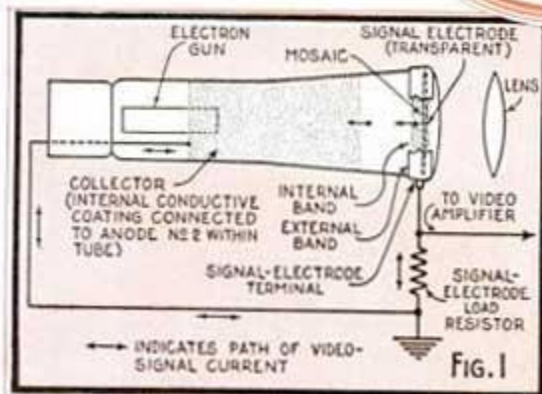
TWO-WAY "ham" television, with amateur phone voice accompaniment, is now a practical part of amateur radio as recently demonstrated with equipment of comparatively low cost. The first 2-way system was set up by the W2USA Radio Club between club headquarters at the New York World's Fair, and on the top floor of the 40-story Daily News building eight miles away in Manhattan. A similar demonstration was later given before a convention of the American Radio Relay League at Indianapolis.

This 2-way system provides 120-line television pictures on the 2½-meter band. Each transmitter is of 25-watt rating; simultaneous voice transmission and reception is conducted in the 56-60-megacycle band. In the New York demonstration shown in photo No. 1, the television pick-up camera is being operated by Wil-



liam Meissner, W2HYJ. The voice sending and receiving equipment is shown in the center with Arthur H. Lynch, W2DKJ, talking to, and looking at, Fred Cusick, W2HID, who is at the other end of the 8-mile radio path. These club demonstrations were made to show the possibilities of homemade amateur television

equipment. The picture shown in photo No. 2 was photographed at the Fair end of the circuit as it was televised in New York City. A functional diagram of the low-priced RCA type-1847 amateur television pick-up tube employed, is given in Fig. 1. The television transmitter and receiver used at each station can be duplicated by any amateur for less than \$300. This includes tubes but does not take the 5-meter voice channel into consideration as such equipment is already in common use.



RCA type 1847 Co