

TELEVISION



screen which folds down. A third development is a projection-type receiver which reproduces on the screen a picture about thirty-nine by forty-seven inches. Two other sizes of home receivers

PRACTICAL television receivers for the home are ready for Germany's radio fans as the result of extensive experiment with various types of apparatus necessary for transmission and reception. Latest developments include the announcement of a combination of television, radio and phonographic reproduction in a single cabinet. The radio is an all-wave receiver of the superheterodyne type. Another cabinet is a projection-type television receiver, which uses a very small cathode-ray tube and three mirrors and lenses to project a picture approximately thirteen by eighteen inches upon a ground-glass screen. One model has a



Top, preparing to shoot a scene for television. Center, photo and diagram of home receiver. Bottom, regulating the quality of television in broadcasting station by means of monitor panels

in GERMANY

provide for the picture to be viewed in a mirror. One employs a twelve-inch cathode-ray tube, the other a nineteen-inch tube. An outstanding development, from a standpoint of technique in transmission of television pictures, is a control board or mixing panel which enables the operator to "fade" a film television program into a direct pick-up. Thus, this control makes it possible to eliminate abrupt changes in fading from one program into another, adding to enjoyment of programs. Considerable progress in development of a fast film process is reported. In this process, the scene



first is photographed by an ordinary motion-picture camera. Then the film is developed quickly and the part intended for television is taken from the film and transmitted. The process employs the high technique of modern motion-picture camera and newsreel. One German company has perfected an intermediate film apparatus which is quite compact, the whole device, including the film-developing equipment, being enclosed in a box not much larger than a standard radio receiver.

Top, how television pictures are taken. Bottom, left, electron-tube camera for use in stage work. Center, receiver with nineteen-inch cathode-ray tube. Right, small, easily portable television camera for indoor and outdoor work

New film and chemicals for speedy developing have been brought out for use with the apparatus so that the lag between time of photographing the scene and of placing the development on the television transmitter is ninety seconds.