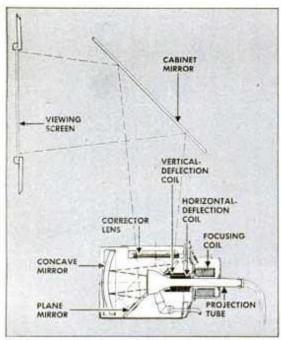
## New TV Sets Project Pictures

A PACKAGED projection unit made by North American Philips Co, is being incorporated in current models by more than a dozen manufacturers of home television receivers. Some of these new models will throw the video picture on a screen outside the unit, just like home movies. Main components of the Protelgram® are shown in the photo at right. The optical system is diagrammed below.

A 2½-in. picture tube, whose face is a lens as well as a fluorescent screen, forms the heart of the unit. A 25,000-volt power supply produces a picture of high brilliance on the tube face. The image is reflected by a concave mirror and another tilted at 45 degrees. Spherical distortion is removed as the image passes through a correcting lens.

The projector is a modification of the Schmidt-type optical system. Most of the receivers in which it will be used will employ 12- by 16-inch viewing screens in the cabinet; a few will use the projector to throw a three- by four-foot image onto an external screen.



"Folded" Schmidt optical system beams picture onto concave mirror. Corrector lens and two angled mirrors put it onto viewing screen.

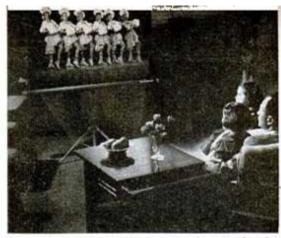
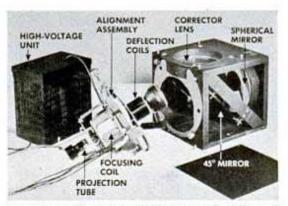


Image is thrown onto an external screen by the Ansley Tele-Movie<sup>®</sup>. Optical system is similar to unit shown below. Set costs \$795.



Protelgram<sup>®</sup> consists of power supply, left, and projector employing 2½-in. tube. Each set maker designs his own receiver chassis.



Cabinet type of projection set will be most common. In some the viewing screen folds into the cabinet. This Fisher model sells for \$795.

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