# A NEW TELESCOPE

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A new telescope of an unusual type has been installed in the new Harvard Observatory at Oak Ridge, Mass. It is a combination of a reflector and refractor type, or the mirror and the lens type, and is a development of the Schmidt camera idea. It is designed for a photographic survey of the heavens.

The mirror is a section of the surface of a sphere. In front of it is placed a thin plate, the surface of which is ground to a complex shape that brings the image to a focus on the surface of a slightly spherical but almost flat surface between the mirror and the plate where the photographic film is placed.

The telescope is the largest of its kind in the world. The mirror is 33 inches in diameter and the correcting plate 24 inches. These optical parts were made by the Perkins-Elmer Corporation of New York. All of the metal parts of the telescope, except the equatorial mounting, are made of a light aluminium alloy, Dowmetal. Most astronomical observatories have a rotating roof with a slot in it, but the entire building which houses the new camera rotates on its foundation. The instrument was exhibited for the first time at the recent meeting of the American Astronomical Society.