Lens Puts "Zoom" in Television

OUTDOOR television programs, long restricted by photographic difficulties, may soon rival studio techniques with a new varifocal lens that permits tricky changes from long shots to close-ups—formerly obtained only with moving dollies or booms.

Called the Zoomar lens, it is a combination of movable and fixed lenses that enables a photographer, using one stationary camera, to exert slight pressure on a lever or grip that will enable him to "zoom" from an over-all shot to a close-up.

In televising a large outdoor ceremony, for example, he will be able, without moving the camera or changing the lens, to shift from a long shot of the crowd to a spot pick-up of any individual.

Although not designed to replace standard lenses, the Zoomar will also aid studio shots, supplementing dollies and booms.

The Zoomar lens was invented by Dr. Frank C. Back for use with a 16-mm. movie camera, and has recently been developed for 35-mm. filming and television in association with Jerry Fairbanks, an independent movie producer.

A television camera's Zoomar lens. Pistol-grip handle on camera (not visible in photo) enables photographer to shift smoothly from extremely short to extremely long focal lengths in a continuous presentation, thus doing job of present battery of turret lenses.

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Lever action: Top drawing shows Zoomar lens with lever down for close-up shot. In bottom drawing it is in position for over-all shot. Zooming effect is obtained by shifting from one to the other. Note changed positions of the movable lens units. The Zoomar technique is ideal for newsreels, sports films, or where a shift to details or individuals is desirable.

Close-up of a 16-mm. Zoomar unit now on the market. The view finder (outside tube) operates in conjunction with the zoom lever, and shows exactly the same frame that the lens produces on the film. Television and 35-mm. units have not yet reached the production stage.