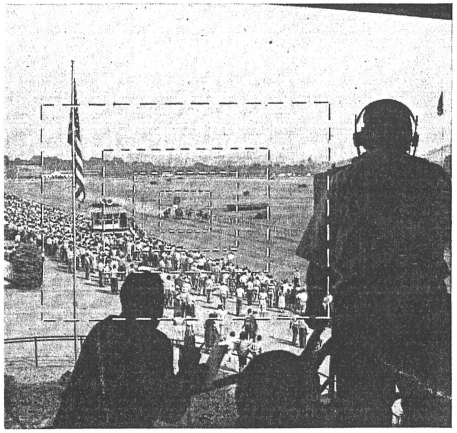
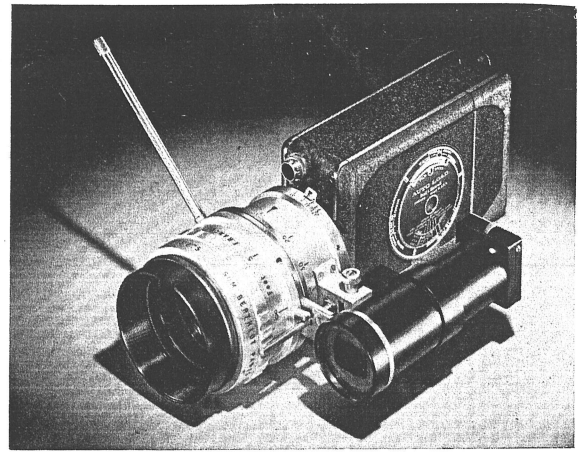


DOTTED LINES show picture area taken in by the Pan Cinor in a typical zoom shot of a horse race—recording the scene in a range from 20mm focal length down to 60mm.



THE PAN CINOR f/2.8 zoon lens mounted on a Bell & Howell 16mm Auto-load camera. The coupled finder shows the scene area covered at all times. Exposure is constant at all focal lengths.

The Pan Cinor—Variable Zoom Lens For 16mm Cameras

You can zoom in or out, or simply set it for any focal length from 20mm to 60mm and see exactly what you're filming with the new Pan Cinor lens.

By ARTHUR ROWAN

ONE OF THE MOST interesting lenses recently made available to 16mm cameraists is the Pan Cinor zoom lens, manufactured by SOM Berthiot in Europe and distributed in this country by Paillard Products, Inc., New York. When Paillard first announced it, the lens was available only for the Bolex H-16 camera, which the company also distributes. Last month, Paillard announced that the lens was now available for use also on the following 16mm cameras: Maurer, Mitchell-16, Auricon Cine-Voice, Bell & Howell 70, Keystone 16mm, Cine Special, Bell & Howell Autoload and Automaster, Morton Soundmaster, Revere Magazine, and the Pathe Super 16. It sells for about $447.00.

The 16mm Pan Cinor has a maximum aperture of f/2.8, a focal length variable from 20mm to 60mm, and has a coupled viewfinder that shows the exact field at each setting. The lens is not intended to *replace* lenses of fixed focal length (each of which realizes a higher degree of optical quality for its own focal length) but to offer effects which cannot be obtained with them, such as:

Zoom and dolly shots . . . from long or medium to closeup in one movement.

Travelling shots . . . that keep the subject in motion at a fixed size. Before the advent of the Pan Cinor, such effects were possible only with use of camera cranes or back-projection methods—obviously out of range of the amateur and 16mm professional.

Complete coverage . . . without switching lenses, catching every action of a sports event.

The Pan Cinor fits all of the above named cameras readily, although slight alterations are necessary on some. The Maurer drops its own finder, its regular C mount accepts the Pan Cinor without further modification. For the Mitchell-16, the Pan Cinor finder is removed and the lens mounted with a C mount adapter. It is also necessary to turn down diameter of the camera turret knob.

For use on the Auricon Cine Voice, it is necessary to obtain from the camera manufacturer a special door without its viewfinder. This may be purchased for $42.00. For use on the Bell & Howell 70, the regular door of this camera must also be replaced with one having no finder. This costs $35.00. The Cine Special Models I and II must have the turret drilled and tapped for C mount lenses by Kodak. The Morton Soundmaster drops its regular finder, and the Pan Cinor zoom lever must be shortened slightly to clear the film magazine. For the Pathe Super-16, no alterations to camera are necessary. However, the Pan Cinor coupled viewfinder is eliminated and the regular reflex finder of the camera used, which permits viewing scene through the lens as action is being filmed. The Keystone, B & H Autoload and Automaster, and Revere Magazine Camera mount the Pan Cinor with ease.

The focusing range of the Pan Cinor is 5 feet to infiinity at all focal lengths. To control composition, you simply turn the lever and check the desired picture through the coupled viewfinder. The exposure is constant at all focal lengths, and the f/2.8 aperture is fast enough for indoor color or black-and-white filming.

It is recommended that the camera, when shooting with a Pan Cinor, be mounted on a sturdy tripod. In general, the lens is used like any lens of fixed focal length. Simply set the diaphragm in the usual manner according to a light meter reading of the scene. A simple chart is supplied with the lens that indicates the depth of field for each focal length and aperture used. The Pan Cinor may be focused by setting its focusing scale to the distance measured, or through the Bolex eye-level focuser.

In 16mm photography, uses for the Pan Cinor are unlimited. For the serious 16mm amateur who can afford it, the lens greatly simplifies photography in that in most instances it obviates the need for switching from one size lens to another with the consequent setting of focus and lens stop when it is desired to cut quickly from a long-shot to a closeup. By the same token, its value to the 16mm professional is obvious. And for filming TV film commercials it is a most ideal tool.

Harry Pennington Jr., of San Antonio, Texas, one of the first to acquire a Pan Cinor for his 16mm Bolex, described the value of the Pan Cinor from the viewpoint of the experienced cam-

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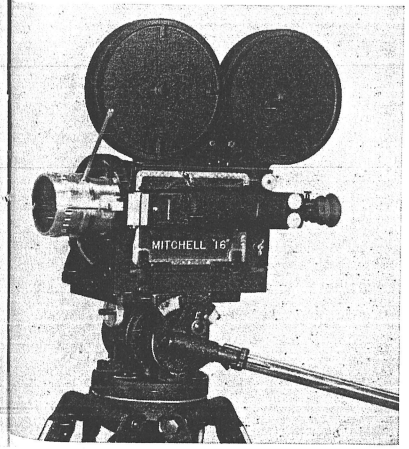
WHEN mounting the Pan Cinor on the Mitchell "16" camera, the coupled viewfinder is omitted. Lens is an ideal tool for use in production of 16mm industrial and TV films.



demonstrated and pronounced highly successful.

The Variscope is now in production by Pacific Optical Corp., Los Angeles. Sale and distribution is to be handled by National Theatre Supply Company, with Young drawing royalties from sales. MGM will not share in the profits in any way. The studio, notable for its efforts in aiding the nation's small film exhibitors, many of whom have been hard hit in the transitional period of wide-screen movies, is elated that this important exhibitor aid was developed at MGM. Officials see in it great new possibilities for the theatre owner. Not every movie house can equip for CinemaScope; but all can now show pictures in any one of the newer wide-screen formats, thanks to the Variscope lens attachment.

For the industry, and particularly its cameramen, the advent of the Variscope holds much promise. It means the producer of non-anamorphic type movies will be better able to compete with CinemaScope productions. The result may well be an early resurgence of wide-screen and 3-D film production, now somewhat curtailed, with consequent increasing assignments for cinematographers. Many of these men, incidentally, see in the Variscope a remarkable new projection tool that gives new scope and luster to their camera work.

PAN CINOR LENS

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eraman in a recent issue of the *Bolex Reporter*. Said Pennington: "One of the major problems confronting the small producer of motion picture films is his lack of facilities for camera movements. Panning the camera can be done with most any reasonably good tripod, but a dolly shot becomes extremely difficult except under the most exacting conditions. Dolly shots in the field can just about be written off as impossible, and even in the small studio many 'takes' must usually be made to get the desired smoothness in a dolly shot.

"The Pan Cinor lens completely solves this entire problem. The zoom action is smooth, either fast or slow. We find in practice the pictures made with the Pan Cinor are consistently as sharp as those filmed with the best available fixed focal-length lenses. Also the pictures are uniform in exposure and sharp over the entire area of the screen —all the way out to the corners and at any distance.

"Another problem often encountered in the field is to find a position for the camera exactly where you want it. A river, street, fence, runway, or people may be in the way. With the Pan Cinor the camera can be placed almost any reasonable distance from the subject so long as it is the angle wanted, and the focal length of the lens changed to take the exact picture wanted. You don't have to zoom the lens in every case.

"At first the Pan Cinor lens seemed tremendous but we soon found out it is not heavy or awkward in any way, nor does it require any unusual care. We are using this lens almost exclusively for our work in 16mm television, industrial and promotion films, both black-and-white and color. The only difficulty we have found is resisting the temptation to zoom every shot."

It should be pointed out that the use of filters, polarizing screens and diffusion discs is the same with the Pan Cinor as with ordinary lenses. Series VIII filters may be used, and two close-up lenses are available—one for distances between 60 and 30 inches, and another having a focal length of .75mm for distances between 30 and 20 inches.

SIMPLIFIED SINGLE-FILM SYSTEM FOR 3-D

(Continued from Page 485)

for permanent in-the-booth installation and the other for mounting outside the booth in front of the projector porthole, as shown in Fig 1. In use, the regular projector lens is eliminated and the projection lens of the Nord equipment is used. In projection, the film images are rotated 90°. Width and position of the sound track remains the same as for conventional or 2-D films.

The natural conclusion is to assume that by putting two images on a single frame of 35mm film, the images are reduced to just ½ that of a standard 2-D film frame. Roy Clapp explains why this isn't so:

"First we utilize the full silent picture frame area, minus the sound track area. By printing the images in the 1.75 to 1 wide-screen format, they fit perfectly into a single frame, as shown in Fig. 2, and the pitcure area used is just 7/8ths that of 1.75 to 1 pictures now printed in the conventional manner."

Acceptance of the Nord System must begin with the film producers themselves. Once the studios agree to print their 3-D features for Nord projection, it follows that an increasing number of theatres throughout the country will equip to show 3-D pictures by this method. The initial cost of equipment, said to be quite reasonable, will readily be recouped by consequent savings in booth operation, say Nord engineers.

Last month, Columbia Pictures Corporation became the first studio to complete arrangements to untilize the Nord System of single-strip 3-D film printing and projection. Following a series of meetings and demonstrations between Columbia Studio executives and Nord company representatives, the studio agreed to make immediately available to any exhibitor who so requests it prints in the Nord System of any of the studio's films which have been made to date, or which are to be made in 3-D.

Roy Clapp, who invented the Nord System, has been an expert on stereoptics for 25 years. He holds numerous patents, and has applied for patents on his new process. Associates with him are Harry Rathner of Minneapolis, and Nathan Supak, also of Minneapolis.