

INSTRUCTIONS
for
No. 10
Cirkut Camera



GRAFLEX, Inc.
Rochester 8, New York

Instructions for operating the **No. 10 Cirkut Camera**

THESSE instructions are for the No. 10 Cirkut Camera, fitted with a convertible lens with focal lengths of $10\frac{1}{2}$, 18 and 24 inches. These instructions are also applicable to the use of other lenses.

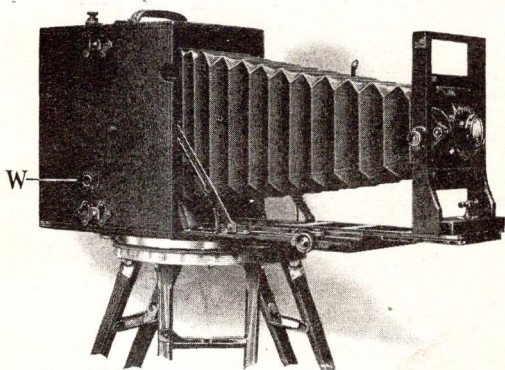


Fig. 1

Loading the Film Box

Unscrew the milled head A, Fig. 2, disconnecting the motor from the winding drum. Turn the small winding key B, Fig. 2, until the number 126 appears in the opening. Turn the lower milled head C, Fig. 2, until the white line is opposite number 6. Open the film box by pressing the

concealed buttons E, E, Fig. 2, and raise the panel, uncovering the winding drum, spool centers and exposure slot, Fig. 3. Press the locking bar F, Fig. 3, on the lower spool center,

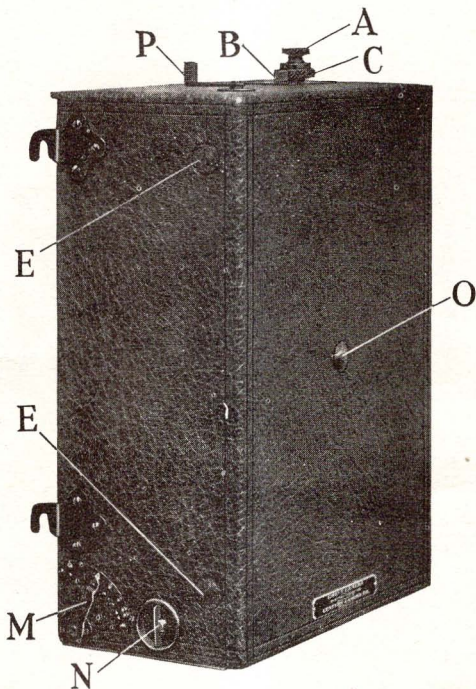


Fig. 2

forward, and push the center down far enough to admit the spool of film. Insert the lower center first and raise it until the web on the top spool

center fits into the slot in the end of the spool. When raising the lower spool center, the locking bar will fall into the slot, securing the center in the correct position. Release the clamp, for

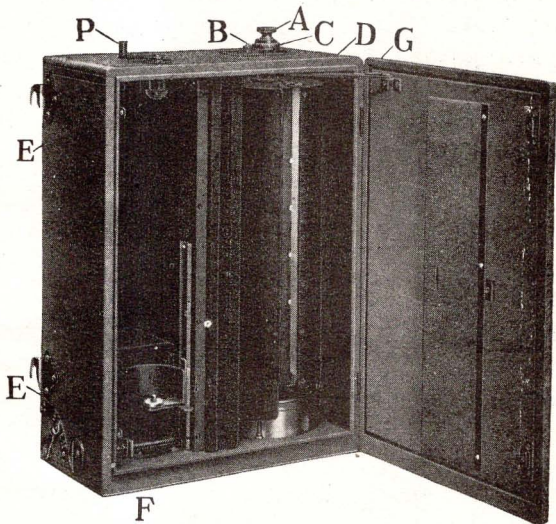


Fig. 3

holding the black paper on the drum, by pressing upward catch D, Fig. 3, and inserting the end of the black paper under the clamp, which should then be pressed firmly into position, allowing the projecting teeth to perforate the paper. Make sure that the catch at the upper end of the drum has engaged the clamp before closing the film box.

The paper must be started true and even; otherwise an unevenness of motion will be noticed, causing blurred portions in the negative. Close the cover of the film box by pressing down on the side arm G, Fig. 3. See that both the top and bottom catches are securely locked. Turn lower milled head C, Fig. 3, one and one-half revolutions, bringing the white line to zero and causing the key B, Fig. 3, to turn until O appears in the opening.

This last operation has wound the black paper from the receiving drum and brought the film into position for an exposure. The milled head A, Fig. 3, should now be screwed down firmly. This engages the motor with the receiving drum. Set the camera on the tripod, open the front by pressing the concealed button on the top near the handle, and draw down the bed. Level the camera carefully by the spirit level on the bed of the camera. Do not turn the tripod screw too tight or an unsteady movement will be caused, producing vertical lines in the negative.

To Focus with Doublet or Complete Lens

Draw out the lens standard until the pointer, at the left on the front standard, indicates 100 feet on the rear scale H, Fig. 4. Release the ground glass focusing back, by pressing the con-

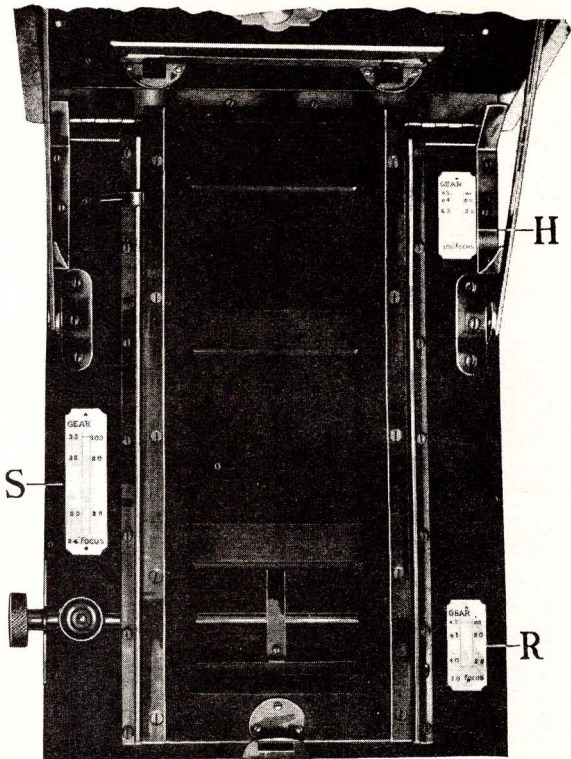


Fig. 4

cealed buttons J, J, Fig. 5, on each side of the camera, and draw it out as far as it will come, when it will lock in position.

The ground glass is divided so that the left

half swings out of the way, folding over the right half. When focusing, the hinged portion should be swung back until it catches, the camera is then focused in the usual manner by the milled

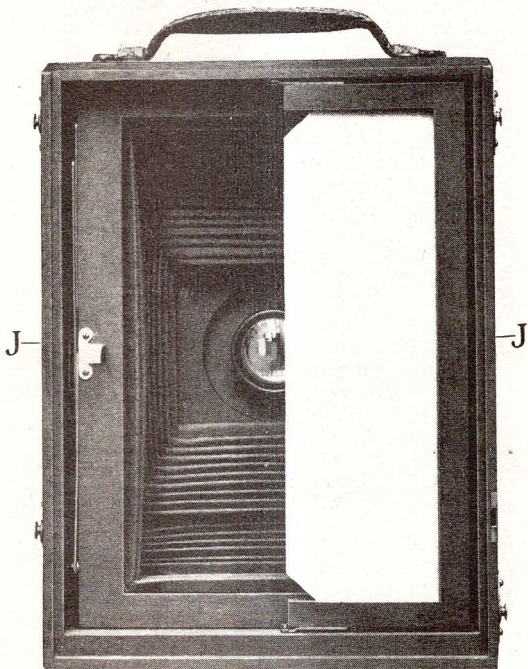


Fig. 5

focusing screw U, Fig. 9. The camera should be swung from side to side, to make sure that everything desired in the view is included. The rising

and falling front can be raised or lowered to secure a well balanced picture and include the required sky or foreground, by turning the milled screw head V, Fig. 9. The lens board may be

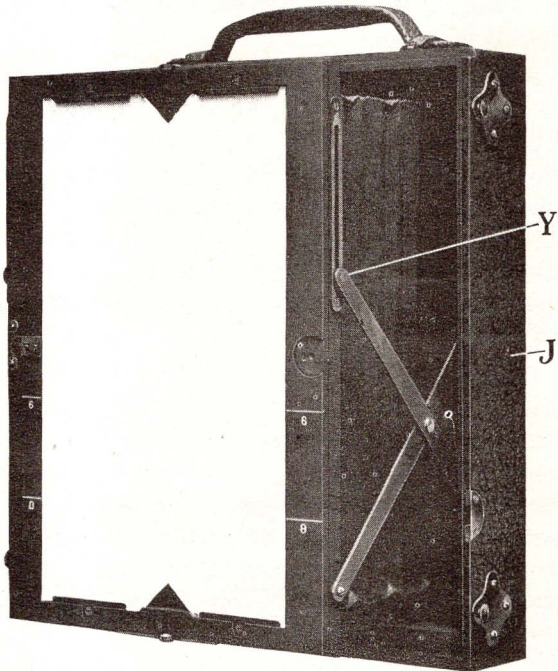


Fig. 6

tilted by releasing the set screw Z, Fig. 9, when photographing groups of several rows of figures.

When the subject is properly focused, swing the left half of the ground glass out of the way, leaving the left half of the camera open as in Fig. 5. Press in on the top of the two side arms Y, Fig. 6, holding the focusing panel, and push the focusing screen back into the camera body until it is held by the catches J, J.

Select the gear wheel indicated by the pointer on the rear left scale H, Fig. 4. If the pointer falls midway between two numbers, select the gear wheel indicated by the next higher number. Screw the shaft of the gear selected firmly into the *round* opening K, Fig. 10, on the bottom of the film box. Insert the key into the *square* opening L, Fig. 10. Be sure to wind the motor spring fully.

Place the film box on the back of the camera making sure that all four hooks are engaged. Turn the camera until the lens points to the extreme left of the subject, and slide it forward on the tripod top until the gear wheel engages the rack on the tripod head. Do not mesh the gears too closely, about half way is sufficient. If the gears are meshed too closely the camera will vibrate and cause vertical and irregular lines in the picture.

Exposure

The scale and pointer M, Fig. 2, page 2, indicates speeds from $1/2$ to $1/12$ of a second.



Fig. 7

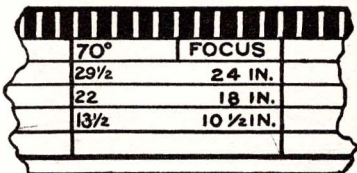
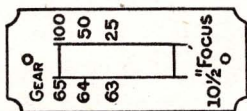


Fig. 8



Focusing Scale H

NOTE—The numbers on the gears vary as the focal length of the complete lens fitted to the camera and its single combinations vary in focal length. The fitting of the lens to the camera and the calculation of the correct gear to use with each focusing distance is mathematically exact. *The use of any other gear than the one indicated by the focusing pointer will result in loss of sharpness in the negative.*

Estimate the exposure required and set the pointer at the nearest figure on the scale to the estimated exposure. Open the lens shutter and

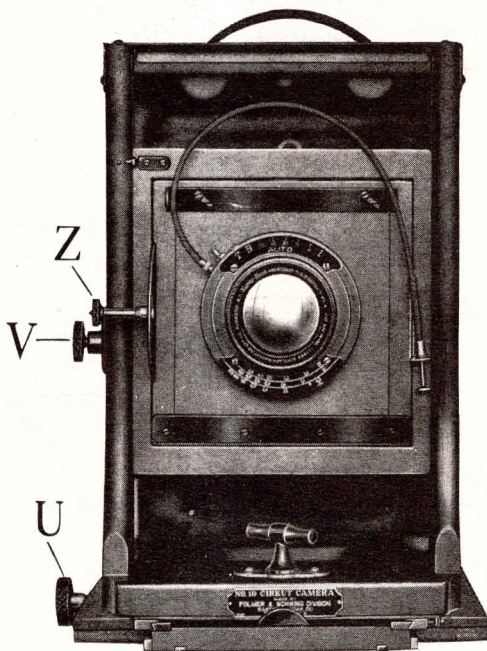


Fig. 9

set the diaphragm at the required opening. The scale, Fig. 7, shows the relative value of the stops when used with the different lens combinations.

To start the camera turn the depressed key N, Fig. 2, page 2, near the speed indicator; this

opens the exposure slot and simultaneously starts the motor. When the camera has revolved a sufficient distance to include the required view, give the key another turn; this closes the exposure slot and stops the motor.

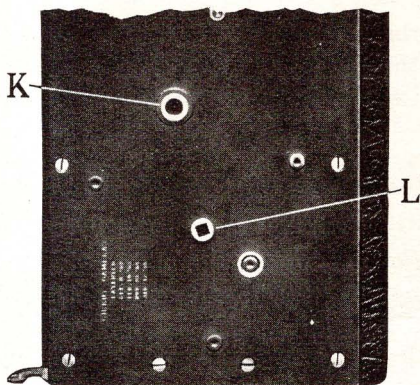


Fig. 10

In the center of the back of the film box there is a concealed button O, Fig. 2, page 2, which, when pressed at the termination of the exposure, perforates the film, showing where to cut it apart, when more than one negative is made on the same roll of film.

To Remove the Film

Loosen the milled head A and turn the small crank P, Fig. 2, page 2, at the top of the film box, in the direction indicated by the arrow.

This will rewind the film from the receiving drum and bring the black paper into position. The film may now be removed from film box in daylight.

To Remove Film Box from Camera

Press backward the metal button on the right side of the film box W, Fig. 1, and at the same time raise the box which can now be readily removed.

Focusing with Rear Single Lens (18 inch)

Draw out the front of the camera to the 100-foot mark on the forward, left scale, R, Fig. 4, page 5. Unscrew the front cell of the lens and remove it from the shutter. Focus on the ground glass panel, as previously directed, and select the gear wheel indicated on the front left scale R (18 inches) and proceed with the exposure, following instructions on page 8.

To Focus with Front Single Lens (24 inch)

Remove the front and the rear cells of the lens from the shutter. Place the *front* cell in the *back* of the shutter. Draw the lens standard out to the edge of the bed, and rack it forward until the pointer indicates the proper gear on scale S (24 inch), Fig. 4, page 5, on the right of the bed.

To Determine Amount of Film Required

The scale around the top of the tripod, Fig. 11, indicates the amount of film required, in inches, for the different number of degrees that the view will embrace. When focusing, the lens should be pointed to the extreme left of the subject to be photographed and the black tab, by which the scale is moved around the tripod top, should be moved until it is directly under the center of the back of the camera, as indicated by the black line T, Fig. 11, on the revolving platform.

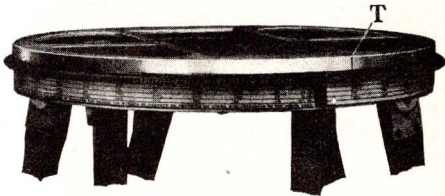


Fig. 11

The lens should then be pointed to the extreme right of the subject, permitting the sliding scale to remain in position. The black line T will then indicate the number of degrees the picture will include, and also the length of film, in inches, with either the $10\frac{1}{2}$ -, 18- or 24-inch lens, as shown in Fig. 8, page 9.

To determine the amount of film used, by the indicator on the top of the Film Box, add to the

number appearing in the small opening, the number indicated by the white line on the milled head C, Fig. 2, page 2. This will give the total amount of film used at any time.

Sequence of Operations

1. Level the camera.
2. Adjust the ground glass focusing screen.
3. Focus the camera.
4. Open the ground glass focusing screen.
5. Attach the film box.
6. Wind the motor.
7. Attach the proper gear.
8. Set the speed indicator.
9. Adjust the diaphragm or lens stop.
10. Make the exposure.
11. Stop the motor.
12. Puncture the film.
13. Note the amount of film used, and amount remaining.
14. Rewind film or make other exposures.

Cirkut Film

When ordering film for the No. 10 Cirkut Camera, be sure to specify "White Label Cirkut Film for No. 10 Cirkut Camera." Both Verichrome and Super XX Pan Film may be ordered in the following sizes:

6 in. x 5 ft.

6 in. x 10 ft.

8 in. x 5 ft.

8 in. x 10 ft.

10 in. x 4 ft.

10 in. x 6 ft.

10 in. x 10 ft.

For Prices See Your Regular Film Dealer.

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