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INSTRUCTIONS
FOR OPERATING THE
FILM PREMO
No. 1



EASTMAN KODAK CO.

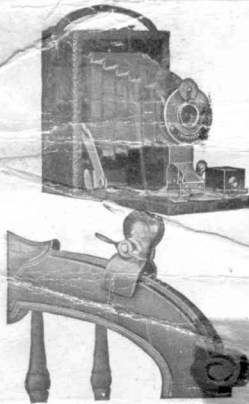
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INSTRUCTIONS
FOR OPERATING THE
FILM PREMO
No. 1
(WITH DOUBLE OR SINGLE LENS)

PRICE TEN CENTS

PUBLISHED BY THE
EASTMAN KODAK CO.
SUCCESSOR TO
ROCHESTER OPTICAL CO.
ROCHESTER, N. Y.

Before Loading

BEFORE taking any pictures with the Film Premo No. 1 read the following instructions carefully and make yourself perfectly familiar with the instrument, taking especial care to learn how to operate the shutter. Work it for both time and instantaneous exposures before loading the camera.

The first and most important thing for the amateur to bear in mind is that the light which serves to impress the photographic image upon the sensitive surface in a small fraction of a second when it comes through the lens, can destroy the film as quickly as it makes the picture. After the films have been developed and *all developer thoroughly washed out*, they may be quickly transferred in subdued white light to the fixing bath without injury.

EASTMAN KODAK COMPANY,

Successor to

ROCHESTER OPTICAL Co.,

Rochester, N. Y.

February, 1914.



Premo Film Pack

of the camera.

Press up on the two metal catches at the top of Camera and open hinged back.

Break or cut the small white slip on face of the Film Pack (Fig. 1) being careful that no part of it is overhanging or it will show in the picture, and place Pack in Camera so that the black paper tabs protrude from the top and the large direction label on the Film Pack is toward the back of the instrument, (Fig. 2.)



FIG. 1

PART I

SECTION 1

Film Premos Nos. 1, $3\frac{1}{4} \times 4\frac{1}{4}$ and 3A ($3\frac{1}{4} \times 5\frac{1}{2}$) are adapted to the use of the Premo Film Pack. As the cameras differ practically in size only, these instructions apply equally well to all.

To Load Camera

Procure a Film Pack of the proper size, $3\frac{1}{4} \times 4\frac{1}{4}$ or 3A ($3\frac{1}{4} \times 5\frac{1}{2}$) depending upon the size

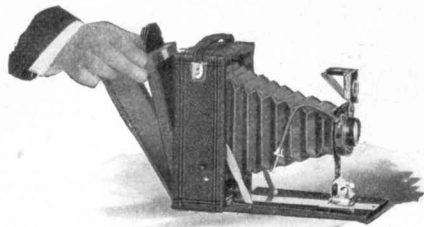


FIG. 2

Close the back and the catches will engage automatically.

The Camera now being loaded, proceed as follows:

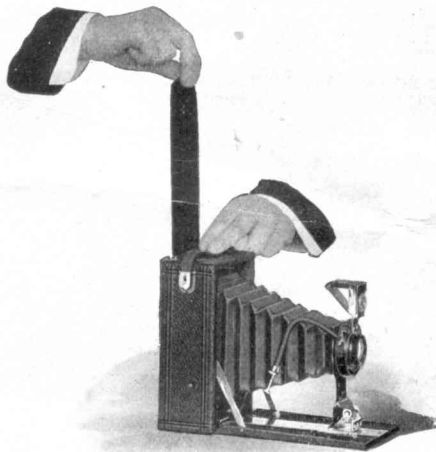


FIG. 3

SECTION 2

Operation of the Premo Film Pack

For the first exposure gently pull out tab marked "Safety Cover," holding the remaining tabs under the finger and thumb of the other hand to prevent the possibility of pulling out more than one tab at a time. (Fig. 3.)

When the red cross line appears, tear off from left to right by bending tab backward over the metal straight edge.

The first film is now presented for exposure.

Having made the exposure, pull out in a similar manner the black paper tab marked "No. 1" and tear off. Film No. 2 is now presented for exposure. Repeat the operation of pulling out and tearing off the black paper tabs one at a time, as often as additional exposures are to be made.

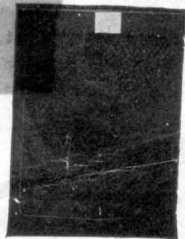


FIG. 4
Upon pulling out and tearing off tab No. 12 the pack is rendered light-tight (Fig. 4) and may be removed from the camera, reversing the operation as shown in Fig. 2, and a fresh one substituted.

NOTE—It is well to make a rule of always pulling out the tab immediately after each exposure, so that there will be no uncertainty when making the next exposure as to whether you have or have not pulled out the tab.

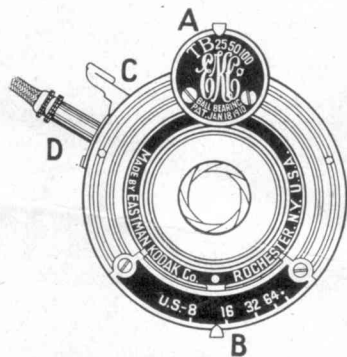
PART II

The general instructions in this Film Premo No. 1, manual apply equally well to the camera, whether fitted with SINGLE or DOUBLE LENS.

The only difference lies in the timing of exposures and the use of the diaphragm, inasmuch as the DOUBLE LENS will work at a larger stop or opening than the SINGLE LENS.

Making the Exposures

Before making an exposure with the Film Premo No. 1, either time or instantaneous, be sure of four things.



FIRST — That the shutter is adjusted properly..

(For time, instantaneous or bulb exposures as desired.)

SECOND — That the diaphragm stop is set at the proper opening.

THIRD — That the camera is focused.

FOURTH — That an unexposed film is in position.

NOTE—Exposures are made by pressing push-pin at end of cable release D or pushing down on release C.

SECTION 1

Operating the Shutter

Perfect familiarity with the shutter is essential to successful picture taking with any camera. The following directions should, therefore, be carefully

read and the shutter operated several times before attempting exposures.

Instantaneous Exposures—"Snap Shots"

In taking instantaneous exposures the object should be in the broad open sunlight, but the camera should not. The sun should be behind the back or over the shoulder of the operator. If it shines directly into the lens it will blur and fog the picture.

Operating the Shutter

Instructions when your Camera is fitted with SINGLE LENS.

(If fitted with DOUBLE LENS disregard and use instructions on page 9.)

"Snap Shots"

For all Ordinary Instantaneous Exposures.

FIRST—Set the lever A at 25, 50 or 100 according to the time of instantaneous exposure desired.

NOTE—In bright light, set the lever at 100, the highest speed. In more subdued lights set at 50 or 25, but do not attempt to make any instantaneous exposures in very dull light.

SECOND—Set lever B at No. 8. Lever B controls the iris diaphragm and No. 8 is the proper opening for ordinary instantaneous exposures.

NOTE—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows, such as in views on the seashore or on the water, use diaphragm No. 16. With light clouds or slightly smoky atmosphere use No. 8 at 25. With heavy clouds do not attempt instantaneous exposures.

THIRD—Press push-pin or push down the release C. This makes the exposure.

NOTE—Press push-pin with a firm, quick movement, at the same time be sure to hold the Camera rigid, as a slight jarring will cause a blurred negative.

Time Exposures

FIRST—Set the lever A at the point T (time). This adjusts the shutter for time exposures.

SECOND—Set the lever B at No. 16, 32, 64 or 128 (which is indicated by a dot.) See instructions for use of stops, page 20.

THIRD—Press the push-pin. *This opens the shutter.* Time exposure by a watch. Again press the release. *This closes the shutter.* Shutter may be opened by pressing release C, and closed by a second pressure, if bulb exposure is not desired, but great care should be taken not to jar the camera.

Bulb Exposure

When it is desirable to make a very short time exposure this is best accomplished by making a "bulb exposure."

FIRST—Set the lever A at the point "B" (bulb). This adjusts the shutter for bulb exposures.

SECOND—Set the lever B controlling the stops at No. 16, 32, 64 or 128 (which is indicated by a dot) as desired. See page 20.

THIRD—Press push-pin to open the shutter, and release it to close the shutter. *This makes the exposure.* The shutter will remain open as long as the push-pin is under pressure.

Do not oil any part of the shutter.

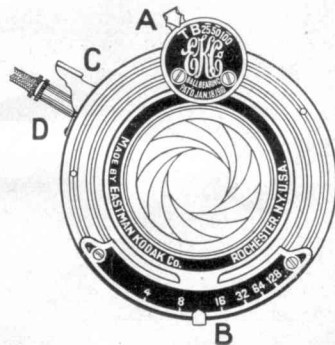
In case of accident return shutter to your dealer or to us for repairs. As a general rule, make exposures with the cable release instead of with the release C, as the cable release is less likely to jar the camera.

SECTION 2

Instructions for the use of the Film Premo No. 1, when equipped with the DOUBLE LENS.

"Snap Shots"

For all Ordinary Instantaneous Exposures.



FIRST—Set the lever A at 25, 50 or 100 according to the time of instantaneous exposure desired.

NOTE—In bright light, set the lever at 100, the highest speed. In more subdued lights set at 50 or 25, but do not attempt to make any instantaneous exposures in very dull light.

SECOND—Set lever B at No. 8. Lever B controls the iris diaphragm and No. 8 is the proper opening for ordinary instantaneous exposures.

NOTE—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows, such as in views on the seashore or on the water, use diaphragm No. 16. With light clouds or slightly smoky atmosphere use No. 4. at 100 or No. 8 at 50 or 25. *With heavy clouds do not attempt instantaneous exposures.*

THIRD—Press push-pin or push down on release C. This makes the exposure.

NOTE—Press push-pin with a firm quick movement, at the same time be sure to hold the Camera rigid, as a slight jarring will cause a blurred negative.

Time Exposures

FIRST—Set the lever A at the point T (time.) This adjusts the shutter for time exposures.

SECOND—Set the lever B at No. 16, 32, 64 or 128. See instructions for use of stops, page 20.

THIRD—Press the push-pin. *This opens the shutter.* Time exposure by a watch. Again press the push-pin. *This closes the shutter.* Shutter may be opened by pressing release C and closed by a second pressure if desired.

Bulb Exposure

When it is desirable to make a very short time exposure this is best accomplished by making a "bulb exposure."

FIRST—Set the lever A at the point "B" (bulb). This adjusts the shutter for bulb exposures.

SECOND—Set the lever B controlling the stops at No. 16, 32, 64 or 128 as desired. See page 20.

THIRD—Press push-pin to open the shutter, and release it to close the shutter. *This makes the exposure.* The shutter will remain open as long as the push-pin is under pressure.

Do not oil any part of the shutter.

In case of accident return shutter to your dealer or to us for repairs. As a general rule, make exposures with the cable release instead of with the release C, as the cable release is less likely to jar the camera.

SECTION 2



FIG. 1 Opening the Front

Extending the Front

Grasp the springs at lower part of front board and pull out front of Camera (Fig. 2) until the little pointer on lower section of front board is directly over the figure on the scale corresponding nearest to the distance of the subject you wish to photograph.

Except when photographing at distances of 15 feet or less it is not necessary to estimate the distance with any more than approximate

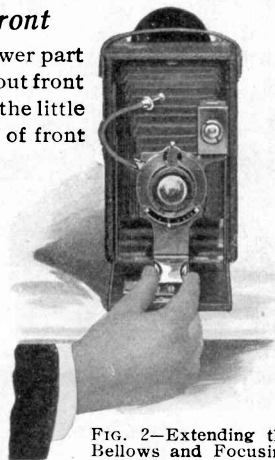


FIG. 2—Extending the Bellows and Focusing

accuracy; for instance,

if the focus is set at 25 feet (the usual distance for ordinary street work) the sharpest part of the picture will be the object at that distance from the camera, but everything from 15 to 35 feet will be in good focus. For general street work the focus may be kept at 25 feet, but where the *principal object* is nearer or farther away, the focus should be changed accordingly. The focusing scale is divided for 6, 10, 15, 25, 50 and 100 feet. Everything beyond 100 feet is in the 100 feet focus. Nothing nearer than 6 feet can be focused without using the portrait attachment.

Use Stop No. 8

For all ordinary out-door work when the sun is very bright use stop No. 8. If a smaller stop be used, the light will be so much reduced that it will not sufficiently impress the image on the film and failure will result.

In views on the water when the sunlight is *unusually strong* and there are no heavy shadows, diaphragm No. 16 may be used.

If a smaller stop opening than No. 16 be used for snap shots *absolute failure will result.*

Locate the Image

Aim the camera at the object to be photographed and locate the image in the finder. (Fig. 3.) For a horizontal picture with the Film Premo No. 1 hold the camera as shown in Fig. 4 reversing the finder as indicated. Always look into the finder from directly over it, *not at an angle.* The finders



FIG. 3

give the scope of view and show a facsimile of the picture as it will appear, but on reduced scale.

Any object that does not show in the finder will not show in the picture.



FIG. 4

It will be noticed that the top of the finder is notched as shown in Fig. 5. This is done so that the one finder will correctly show the view included when the camera is held in either horizontal or vertical position. As the pictures taken with the Film Premo No. 1 are oblong it will readily be seen that unless the finders were made in this

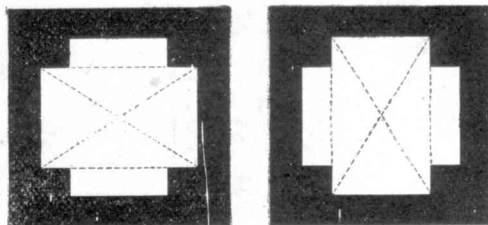


FIG. 5

manner they could not correctly show the exact view intended when held in either position.



FIG. 6

Fig. 6 shows how to hold the camera when making exposures without the use of the cable release. Grasp the bed of the camera firmly with the left hand, steady it with the right and with the thumb of the right hand lightly press the exposure lever.

Hold it Level

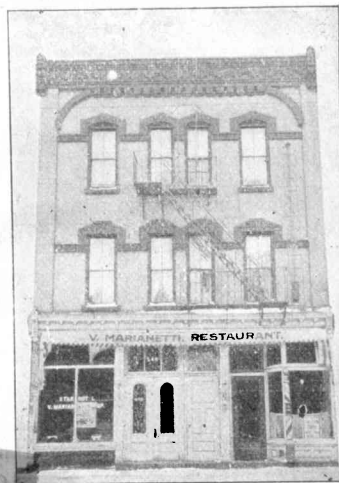


FIG. 7

The camera must be held level.

If the operator attempts to photograph a tall building while standing near it, by pointing the camera upward (thinking thereby to center it) the result will be similar to Fig. 7.

This was pointed too high. This building should have been taken

from the middle story window of the building opposite.

The operator should hold the camera *level*, after withdrawing to a proper distance, as indicated by the image shown in the finder.

If the object be down low, like a small child or a dog, the camera should be held down level with the center of the object.

To Make Exposure

HOLD THE CAMERA STEADY,
HOLD IT LEVEL AND
PRESS PUSH-PIN

This makes the Exposure.

SECTION 3

Time Exposures—Interiors

Set camera in such a position that the finder will embrace the view desired.

The diagram shows the proper positions for the instrument. It should not be pointed directly at a window, as the glare of light will blur the picture. If all the windows cannot be avoided, pull down the shades of such as come within range of the lens.

To make a time exposure, place the camera on some firm support like a table or tripod, and focus as before described.

Fig. 1 shows the camera in position for a vertical exposure. The camera is also provided with tripod sockets and may be used on a tripod.

When it is desired to make a horizontal time exposure with the Film Premo No. 1, reverse the camera so that the tabs of the Film Pack will draw from the side instead of from the top.

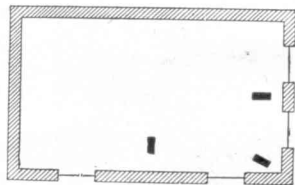


Diagram showing positions of Camera



FIG. 1

Adjust the shutter for a time exposure as described on pages 8 and 10.

All being in readiness, press the push-pin or lightly press the lever, once to open and again to close the shutter. Time the exposure by a watch. (See Fig. 1)

Time Needed for Interior Exposures

The following table gives the time of the exposure required under varying conditions of light with the stop No. 16 in the lens. If the stop No. 8 is used give only one-half the time, if the stop No. 128 (which is indicated by a dot, on the model equipped with the SINGLE LENS) is used give eight times the time of the table. The smaller the stop the sharper the picture. The No. 16 stop gives the best results for interiors:

White walls and more than one window:

bright sun outside, 4 seconds;
hazy sun, 10 seconds;
cloudy bright, 20 seconds;
cloudy dull, 40 seconds.

White walls and only one window:

bright sun outside, 6 seconds;
hazy sun, 15 seconds;
cloudy bright, 30 seconds;
cloudy dull, 60 seconds.

Medium colored walls and hangings and more than one window:

bright sun outside, 8 seconds;
hazy sun, 20 seconds;
cloudy bright, 40 seconds;
cloudy dull, 80 seconds.

Medium colored walls and hangings and only one window:

bright sun outside, 12 seconds;
hazy sun, 30 seconds;
cloudy bright, 60 seconds;
cloudy dull, 120 seconds.

Dark colored walls and hangings and more than one window:

bright sun outside, 20 seconds;
hazy sun, 40 seconds;
cloudy bright, 80 seconds;
cloudy dull, 2 minutes, 40 seconds.

Dark colored walls and hangings and only one window:

bright sun outside, 40 seconds;
hazy sun, 80 seconds;
cloudy bright, 2 minutes, 40 seconds;
cloudy dull, 5 minutes, 20 seconds.

The foregoing is calculated for rooms whose windows get the direct light from the sky and for hours from three hours after sunrise until three hours before sunset.

If earlier or later the time required will be longer.

To Make a Portrait

Place the sitter in a chair partly facing the Camera (which should be located slightly higher than an ordinary table) and turn the face slightly towards the instrument, having the eyes centered on an object at the same level with the lens.

Center the image in the finder. For a three-quarter figure the camera should be from 6 to 8 feet from the figure, and for a full figure from 8 to 10 feet, the background forming a contrast with the sitter.

Premo Portrait Attachment

The attachment is simply an extra lens slipped on over the regular lens and in no way affects the operation of the lens except to change the focus.

By means of the Portrait Attachment large head and shoulders portraits of various sizes may be obtained. With the Attachment in position and the focus set at 6 feet the subject should be placed exactly 2 feet, 8 inches, from the lens.

At 10 feet focus, place subject 3 feet from lens.

At 15 feet focus, place the subject 3½ feet from the lens.

At 25 feet focus, place subject 4 feet from lens.

At 100 feet focus, place subject 4½ feet from lens.

Time Exposures in the Open Air

When the smallest stop is in the lens the light admitted is so much reduced that time exposures out of doors may be made the same as interiors, but the exposure must be much shorter.

WITH SUNSHINE— $\frac{1}{3}$ second.

WITH LIGHT CLOUDS—From $\frac{1}{2}$ to 1 second will be sufficient.

WITH HEAVY CLOUDS—From 2 to 5 seconds will be required.

The above is calculated for the same hours as mentioned above and for objects in the open air. For other hours or for objects in the shadow, under porches or under trees, no accurate directions can

be given; experience only can teach the proper exposure to give.

Time exposures cannot be made while the Camera is held in the hand. Always place it upon some firm support, such as a tripod, chair or table.

For exceedingly "short time" exposures, as above described, use the "bulb exposure." See pages 8 and 10.

Diaphragms

For the model equipped with the SINGLE LENS use the following instructions:

The stops should be used as follows:

No. 8—For all ordinary instantaneous exposures when the sun shines.

No. 16—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows; such as in views on the sea shore or on the water; also for interior time exposures, the time for which is given in the table on page 17.

No. 32 and 64—For interiors. *Never for instantaneous exposures.*

No. 128—(Which is indicated by a dot.) For time exposures outdoors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with smallest stop will range from 1-5 second to 5 seconds, according to the light. The smaller the stop the sharper the picture.

Absolute failure will be the result if you use the smallest stop for instantaneous exposures.

For the model equipped with the DOUBLE LENS, use the following instructions:

The stops should be used as follows:

No. 4—For instantaneous exposures on slightly cloudy days.

No. 8—For all ordinary instantaneous exposures when the sun shines.

No. 16—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows; such as in views on the sea shore or on the water; also for interior time exposures, the time for which is given in the table on page 17.

No. 32, 64—For interiors. *Never for instantaneous exposures.*

No. 128—For time exposures outdoors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with smallest stop will range from 1-5 second to 5 seconds, according to the light. The smaller the stop the sharper the picture.

Absolute failure will be the result if you use the smallest stop for instantaneous exposures.

"F." and "U. S." Systems.

A lens is said to work at a certain "speed," this means that the lens will cut sharp to the corners, with an opening a certain proportion of its focal length. It should be borne clearly in mind that this speed depends *not* upon the size of the opening but upon the size of the opening *in proportion to the focal length of the lens* (distance from lens to plate when focused on infinity). The lens that will cut sharp with the largest opening is said to possess the greatest speed.

Such openings are termed stop or diaphragm openings, and for convenience in estimating and timing exposures are arranged according to two systems, the f. system and the Uniform System, or U. S. system, as commonly abbreviated.

In the f. system, the proportional size or "value" of the stop opening is designated by "f.," and is the quotient obtained by dividing the focal length of the lens by the diameter of the stop.

Taking, for instance, a lens of 8 inch focus with a stop 1 inch in diameter and we find that $8 \div 1 = 8$; hence, 8 is the f. value of the stop and would be designated f.8. Suppose the stop is $\frac{1}{4}$ inch in diameter we would then have $8 \div \frac{1}{4} = f.32$.

For convenience, the uniform system of marking stop openings has been adopted by nearly all manufacturers of iris diaphragms. Such convenience is at once apparent when we understand that each higher number stands for an opening having *half* the *area* of the preceding opening, each smaller stop (or higher number) requiring double the time of the one next larger.

With the f. system, each stop is a certain proportion of the focal length and not arranged with reference to the other openings, so that estimating exposure is much more complicated by this system.

As a number of exposure meters and similar devices for determining the proper exposures are based upon the f. system, we append the following table showing the "f." value for each of the uniform system openings:

U. S. 4=f. 8	U. S. 32=f. 22.6
U. S. 8=f. 11.3	U. S. 64=f. 32
U. S. 16=f. 16	U. S. 128=f. 45.2

SECTION 4

Flash Light Pictures

By the introduction of Eastman Flash Sheets, picture taking at night has been wonderfully simplified. A package of flash sheets, a piece of cardboard, a pin and a match complete the list of essential extras, although an Eastman Flash Sheet Holder is a great convenience.

With flash sheets, no lamp is necessary; there is a minimum of smoke and they are far safer than any other self-burning flash medium, besides giving a softer light that is less trying to the eyes.

Many interiors can be taken with the flash sheets that are impracticable by daylight, either by reason of a lack of illumination or because there are windows

in a direct line of view which cannot be darkened sufficiently to prevent the blurring of the picture.

Evening parties, groups around a dinner or card table or single portraits may be readily made by the use of our flash sheets, thus enabling the amateur to obtain souvenirs of many occasions which, but for the flashlight, would be quite beyond the range of the art.

PREPARATION FOR THE FLASH.—The camera should be prepared for time exposures, as directed on pages 8 and 10, of this manual (except that stop 8 must be used), and placed on some level support where it will take in the view desired.

Pin a flash sheet by one corner to a piece of cardboard which has previously been fixed in a perpendicular position. If the cardboard is white it will act as a reflector and increase the strength of the flash.

The flash sheet should *always* be placed two feet behind and two or three feet to one side of the camera. If placed in front, or on a line with front of camera, the flash would strike the lens and blur the picture. It should be placed at one side as well as behind, so as to throw a shadow and give a little relief in the lighting. The flash should be at the same height or a little higher than the camera. The support upon which the flash is to be made should not project far enough in front of it to cast a shadow in front of the camera. An extra piece of cardboard a foot square placed under the flash sheet will prevent any sparks from the flash doing damage. However, by using the Eastman Flash Sheet Holder

all these contingencies are taken care of, and we strongly advise its use.

The Eastman Flash Sheet Holder

This holder may be held in the hand, *always between you and the flash sheet.* Or, it may be used on any Premo tripod, being provided with a socket for this purpose. The sheet is placed in position in the center of the larger pan over the round opening which has a raised saw-tooth edge extending half way around it. Press with the thumb on the sheet, so slight break is made and a portion of the sheet projects partially through the opening. Then to insure the sheet being more securely fastened, press around the notched edge,

forcing this portion of flash sheet firmly into position on the pan.

Then to set off the flash, merely insert a lighted match, from the back, through the round opening.

Taking the Picture

Having the camera and the flash sheets both in position and all being in readiness, open the camera shutter, stand at arm's length and touch a match from behind through the round opening in the center.

NOTE—If you are not using the Eastman Flash Sheet Holder, place the match in a split stick at least two feet long.

There will be a bright flash which will impress the picture on the sensitive film. Then push the lever to close the shutter and pull up tab ready for another picture.

The Flash Sheet

The size of the sheet required to light a room varies with the distance of the object farthest from the camera and the color of the walls and hangings.

TABLE

For 10 feet distance	light walls and hangings	use	1 No. 1 sheet
" 10 "	dark "	" "	" 1 No. 2 sheet
" 15 "	light "	" "	" 1 No. 2 sheet
" 15 "	dark "	" "	" 1 No. 3 sheet

NOTE—Never use more than one sheet at a time in the Eastman Flash Sheet Holder.

TO MAKE A PORTRAIT.—Place the sitter in a chair partly facing the Camera (which should be located slightly higher than an ordinary table) and turn the face slightly towards the instrument, having the eyes centered on an object at the same level with the lens. The proper distance from the instrument to the subject can be ascertained by looking at the image in the finder. For a three-quarter picture this will be from 6 to 8 feet, and for a full figure from 8 to 10 feet.

The flash should be on the side of the camera away from the face, that is, the sitter should not face it. The flash should not be higher than the head of the sitter.

For using Portrait Attachment, see page 19.

TO MAKE A GROUP—Arrange the chairs in the form of an arc, facing the Camera so that each chair will be exactly the same distance from the instrument. Half the persons composing the group should be seated and the rest should stand behind the chairs. If the group is large any number of chairs

may be used, but none of the subjects should be seated on the floor, as sometimes seen in large pictures, because the perspective would be too violent.

BACKGROUNDS.—In making single portraits or groups, care should be taken to have a suitable background against which the figures will show in relief; a light background is better than a dark one, and often a single figure or two will show up well against a lace curtain. For larger groups a medium light wall will be suitable.

The *finder* on the camera will aid the operator in composing the groups so as to get the best effect. In order to make the image visible in the finder the room will have to be well lighted with ordinary lamplight, which may be left on while the picture is being made, provided none of the lights are placed so that they show in the finder.

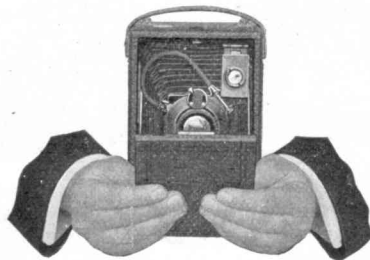
Eastman Flash Sheets burn more slowly than flash powders, producing a much softer light and are, therefore, far preferable in portrait work; the subject, however should be warned not to move, as the picture is not taken *instantaneously*, about one second being required to burn one sheet.

Eastman Flash Cartridges

Eastman Flash Cartridges may be substituted for the sheets if desired. We recommend the sheets, however, as more convenient, cheaper and capable of producing the best results. The cartridges are only superior when absolutely instantaneous work is essential.

Closing the Camera

When through using the Camera fold the bellows by reversing the operation shown in Fig. 2, page 11, and press down on arm locks on each side of bed, as shown below. The bed will now close readily.



Closing the Camera

Before closing the bed of the camera, be careful to see that the front board has been pushed in to the limit of motion. If it is in proper position it will not interfere with the bed in closing.

Keep Dust Out of the Camera

Defective negatives are often caused by particles of dust which have collected on the inside of the camera and settle upon the film in particles that produce small dark spots upon the prints.

It is therefore well to wipe out the inside of camera and bellows occasionally, with a slightly damp cloth. In Summer weather or after the camera has remained idle for any length of time, this needs special attention.

Dimmed Finders and How to Make Them Bright Again

For some cause which is not thoroughly understood, glass will sometimes "sweat" to such an extent as to cover it with a sort of film, which, of course, makes it very dull whether it be used as a lens or mirror.

Whatever the cause, the result is the occasional dimming of finders and lenses. With finders the trouble is sometimes in the mirror, which necessitates wiping it by means of a soft cotton cloth. To clean the mirror in the finder on the Film Premo No. 1, wind the end of a handkerchief around the end of a lead pencil and pass between lens and mirror.

Clean Lenses



CLEAN LENS

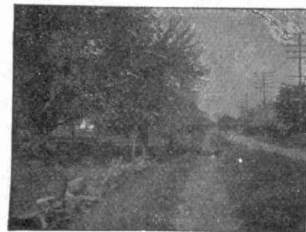
good order. To produce the picture on page 29,

Dirty or dusty lenses are frequently the cause for photographic failures. These pictures illustrate this point clearly. The sharp, full-timed picture on this page was taken with the lens clean and in the effect shown in the operator lightly

touched the face of the lens with his thumb, which was slightly damp with perspiration.

Lenses should be frequently examined by looking *through* them, and if found to be dirty, should be wiped, both front

and back, with a clean, soft linen handkerchief. In [REDACTED] weather this needs special attention. Large spots of dust or dirt on the lens will cause defects in the picture, while if the lens is evenly covered with a film of dust, dirt or moisture, the effect will be to cut off a great deal of light and make the picture undertimed.



LENS SLIGHTLY DIRTY

PART III

SECTION 1

Developing Premo Film Pack Films in Premo Film Pack Tank

When using the $3\frac{1}{4} \times 4\frac{1}{4}$ or 3A ($3\frac{1}{4} \times 5\frac{1}{2}$) Film Premo No. 1, provide a No. 2 Premo Film Pack Tank, a box of No. 2 Premo Tank Developing Powders, and a pound of Kodak Acid Fixing Powder.

To Prepare the Developer

Remove the cover of the tank by turning it to the left. The cage or holder for the separate films can then be removed from the tank.

Empty a pair of powders into eight ounces of lukewarm water, stir well, and when thoroughly dissolved, pour into tank; then fill tank with a sufficient amount of water to bring it even with the embossed ring at the top which shows the proper level for the developing fluid. *If the tanks are not filled to this point, any portion of the film which projects will remain undeveloped.*

The temperature of the developer when ready for use should be about 65 degrees Fahrenheit.

To Prepare the Fixing Solution

Dissolve the package of Kodak Acid Fixing Powder as per directions on page 41. (This solution may be bottled and used over and over until it loses strength).

At this point all white light should be excluded from the dark-room. See page 38. If no dark-room is available, this work can be done at night in any room in which there is a tap of running water, care being taken that there is no white light in the room during the few minutes when the films are being transferred from the pack to the cage.

How to Remove Films from Pack for Development

When all exposures in the film pack have been made it is light tight, and may be taken from the

camera in daylight. Provided exposed films have previously been removed, as described below, the Film Pack should be resealed immediately after removing it in daylight from the Camera after the twelfth exposure has been made, by moistening the inside of the corner flaps, when they may be stuck firmly to the sides.

When ready to develop, break the red seal at the sides and pull down bottom flap. (See Fig. 1.)

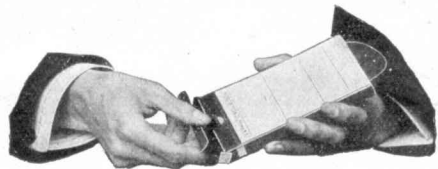


FIG. 1

This gives access to exposed film which may be removed as shown in Fig. 2.

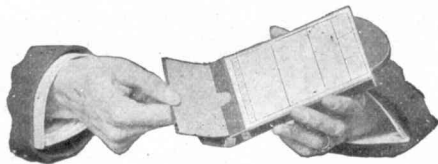


FIG. 2

To remove one or more films for development before the entire package is exposed:

Take the camera to the dark-room, remove the pack and break the red seal as above. After removing the exposed film, the pack can be replaced without sealing in the camera before leaving the dark-room and everything is ready for additional exposures.

Important—When removing any films for development before all are exposed, do not remove papers of safety cover but leave same to protect top film after all have been exposed and the pack removed in daylight.

To Load the Films into Cage

When all is ready load each film into its respective compartment of the cage *without detaching the black paper*. This is readily done by holding the film between the thumb and fingers with the black paper toward the hand, and doubling the edges together as shown in Fig. 3. Slide them carefully down to

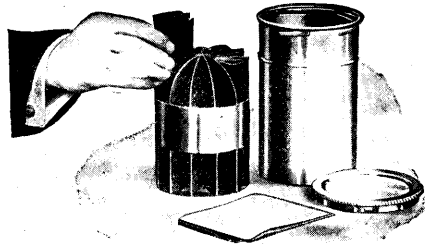


FIG. 3

the bottom of each compartment, with torn edge up, and see that the center piece protrudes between the edges of the film, preventing them from coming together during the process of development.

When all the films are loaded, place cage into developing tank (Fig. 4) and raise and lower it slightly below the surface of the developer, two or three times, to expel air bubbles. Replace the cover of the tank by dropping it on and turning it to the right as far as possible.

The white light may now be turned on and the time noted. The time may be marked on the dial which appears on the face of the container that comes with the developing powders.

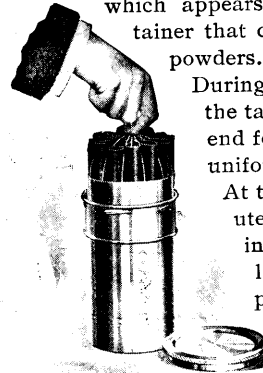


FIG. 4

During the process of development the tank should be turned end for end four or five times to procure uniform and even development. At the expiration of twenty minutes the top may be removed in dark room or very subdued light and the developer poured off. When removing cover of solution cup, place cup in palm of hand so as to obtain a firm grip on bottom of can. Then grip cover with other hand and turn slowly to left when cover will loosen readily. The tank should now be held under a tap of running water or immersed for a few seconds in a vessel of clear water. The films are then ready for fixing.

The fixing bath may be prepared in a tray or other vessel, the cage taken from tank—the metal hook being intended for this purpose, and the films

removed from the cage, the duplex papers pulled off and films placed in the bath, leaving the tank and cage available for the next pack. The films should be moved about, two or three times, to insure evenness of fixing.

After the films have been fixed a sufficient length of time so that all the shadows are perfectly transparent and no yellowish spots appear, they should be placed in a tray under running water and washed for half an hour. Before washing be sure black papers are all detached. If running water is not available they should be left in the water about three-quarters of an hour and the water changed six or eight times to remove all trace of hypo.

After this process is completed, the films are taken from the tray and pinned up by the corner, preferably to the edge of a shelf or some projecting surface which will not permit either side of the film to come in contact with any object, as otherwise the film will stick and ruin the negative. Or you may hang the negatives on a stretched string by means of a bent pin, running the pin through the corner of film to the head, then hooking it over the string.

The above instructions, if carefully followed, will produce the most satisfactory results, provided anything like proper exposures have been given. We recommend the use of the regular Premo Developing Powders in these tanks, as they have been compounded from the purest chemicals for this purpose. For those who wish to mix their own solutions, we give the following formulæ:

NOTE—Avoirdupois weight is the standard used in compounding Photographic Formulæ.

Stock Developing Solution

Pyro Formula

Pyrogallic Acid Solution

Pyrogallic Acid.....	1 Oz.
*Sulphuric Acid.....	20 Minims.
Water.....	28 Ozs.

*If Eastman Permanent Crystal Pyro is used, the acid should be omitted.

Soda Solution

E. K. Co. Sulphite Soda (desiccated)*.....	3 Ozs.
E. K. Co. Carbonate Soda (desiccated)*.....	3 Ozs.
Water.....	30 Ozs.

*This solution is based on the strength of E. K. Co. Sulphite and Carbonate, and if possible, these chemicals should be used.

NOTE—If other brands of desiccated Carbonate of Soda are used a greater quantity will be required. If crystal sodas are used, take about three times the quantity of Carbonate and double the quantity of Sulphite.

For No. 2 Film Pack Tank—52 Ozs., take:

Pyro Solution	3 Ozs.
Soda Solution.....	3 Ozs.
Water.....	46 Ozs.

Develop 20 Minutes

Fixing Solution

Water.....	16 Ozs.
Hyposulphite of Soda.....	4 Ozs.
E. K. Co. Sulphite of Soda, (desiccated)* ...	¼ Oz.

When fully dissolved add the following hardener:

Powdered Alum.....	¼ Oz.
Citric Acid.....	¼ Oz.

*If crystals are used, double the quantity.

This bath may be made up at any time in advance and be used so long as it retains its strength, or is not sufficiently discolored by developer carried into it to stain the negatives.

Time and Temperature

It sometimes happens that the amateur is not able to obtain or maintain the standard or normal temperature of 65 degrees Fahr. when using the Premo Tank and Premo Tank Powders. In such cases the following table will be found of value:

Temperature	Time—One Powder	Time—Two Powders
70 Degrees	15 Minutes	8 Minutes
89 "	16 "	"
88 "	17 "	9 "
87 "	18 "	"
86 "	19 "	"
85 " NORMAL	20 " NORMAL	10 " NORMAL
84 "	21 "	"
85 "	22 "	"
82 "	23 "	11 "
81 "	24 "	"
80 "	25 "	"
89 "	26 "	12 "
88 "	27 "	"
87 "	28 "	"
86 "	29 "	13 "
85 "	30 "	"
84 "	31 "	"
83 "	32 "	14 "
82 "	33 "	"
81 "	34 "	"
80 "	35 "	15 "
49 "	36 "	"
48 "	37 "	"
47 "	38 "	16 "
46 "	39 "	"
45 "	40 "	17 "

Temperature of Developer must not exceed 70 degrees Fahr., as above that point there is danger of the film frilling. 45 degrees Fahr. is the lowest temperature at which the developing powders can be dissolved and even at this temperature the powder must be finely crushed and added slowly to the water.

It is best to use the normal temperature (65°) when possible as the use of a developer that is colder than normal has a slight tendency to increase the contrast in a negative, while the use of a developer warmer than normal slightly flattens the resulting negative.

SECTION 2

Developing Premo Film Pack Film by the Dark-Room Method

If you are to develop the contents of a 3¼ x 4¼ Film Pack, an Eastman A B C Developing and Printing Outfit will be found most economical.



A B C Developing Outfit

The Outfit Contains :

1 Kodak Candle Lamp.....	\$.25
4 Developing Trays.....	.40
1 4-oz. Graduate15
1 4 x 5 Printing Frame25
1 4 x 5 Glass for same.....	.05
1 Stirring Rod.....	.05
1 Box (5 tubes) Eastman Special Developing Powders.....	.25
½ Pound Kodak Acid Fixing Powder	.15
2 Dozen Sheets 4 x 5 Velox Paper..	.50
1 2-oz. Bottle Nepera Solution.....	.10
1 Package Bromide Potassium.....	.05
1 Instruction Book.....	.10

\$2.30

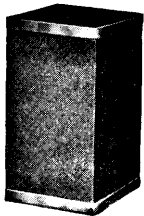
Price, complete, neatly packed, \$1.50.
This outfit cannot be shipped by mail.

If to develop the contents of a 3A ($3\frac{1}{4} \times 5\frac{1}{2}$) Film Pack an Eastman 3A Developing and Printing Outfit will be found convenient.

The outfit is similar to the A. B. C. (described on page 37) except that the Velox paper, printing frame and trays differ as to size.

Also, provide a dark room having a shelf or table, and a pitcher of cold water (preferably ice water), and a pail for slops.

By a dark-room is meant one that is wholly dark—not a ray of light in it. Such a room can easily be secured at night almost anywhere. The reason a dark-room is required is that the film is very rapid, and therefore, extremely sensitive to white light, either daylight or lamplight, and *would be spoiled if exposed to it, even for a fraction of a second.*



The Lamp

Having provided such a room or closet, where, when the door is closed, no ray of light can be seen, set up on the table or shelf the Kodak Candle Lamp.

The lamp gives a subdued red light which will not injure the film unless it is held too close to it. Set the lamp on the table at least eighteen inches from the operator.

Never use a yellow light or fog will be the result.

1. Fill one of the trays nearly full of water (first tray).
2. Open one of the developer powders, then put the contents (two chemicals) into graduate and fill it up to the 4 ounce mark with water. Stir until dissolved, with the wooden stirring rod, and pour into second tray.

For removing Film from Film Pack, see page 30.

After removing the exposed Films from the Pack, the black paper to which they will be found attached should be removed and each film placed, emulsion side down, in the tray of water. (The emulsion side, or face, is the dull side.) They should be allowed to stand two or three minutes and then each film should be placed separately in the developing tray, still face down. The tray should be rocked gently from time to time, the films never being allowed to mat together, and the progress of development ascertained by holding the film up to the light of the lamp.

NOTE.—When making an examination of the film, do not hold it close to the lamp for any length of time, as it would be liable to fog.

Complete development, giving sufficient length of time to bring out what detail you can in the thinnest negatives. Do not check the development too soon, or the detail will be lost and the negative will be void of contrast, weak and flat; neither continue it too long, as fog and flatness will result.

It usually requires a longer time to develop instantaneous exposures, as they are rarely fully timed, and a film or plate which has not had full exposure requires longer time for development.

There is no harm in having your negatives of different density. This can be set right in the printing. The difference in density does not affect the difference in contrast.

After completing development transfer to the third tray and rinse two or three times with clear, cold water, and transfer to fixing bath (see page 41).

Developing Formulae for Dark-Room Development

We recommend using Eastman Special Developer Powders, which are furnished in packages and are compounded by simply adding the amount of water marked on each package. The following formulae will also be found satisfactory:

Elon-Hydrochinon SOLUTION A

Elon.....	60 Grains
Hydrochinon.....	30 "
E. K. Co. Sulphite of Soda (desiccated)*	¼ Oz.
Water.....	20 Ozs.

SOLUTION B

E. K. Co. Carbonate of Soda (desiccated)*	½ Oz.
Water.....	20 Ozs.

To Develop

Take Solution A 1 oz., Solution B 1 oz., Water 2 ozs.
Add one or two drops of a 10 per cent. solution of Potassium Bromide to each ounce of developer.

Pyro Formula SOLUTION A

Pyrogallic Acid.....	1 Oz.
Sulphuric Acid.....	20 Minims.
Water.....	28 Ozs.

SOLUTION B

E. K. Co. Sulphite of Soda (desiccated)*	3 Ozs.
E. K. Co. Carbonate of Soda (desiccated)*	2 "
Water.....	28 "

To Develop

Take Solution A 1 oz., Solution B 1 oz., Water 8 ozs.

*If crystals are used, double the quantity.

NOTE—If other brands of desiccated Carbonate of Soda are used a greater quantity will be required. If crystal sodas are used, take about three times the quantity of Carbonate and double the quantity of Sulphite.

NOTE—Temperature of all developing solutions should be 65° Fahr.

Fixing

We recommend the use of Kodak Acid Fixing Powder, or the following formula:

Water.....	16 Ozs.
Hyposulphite of Soda.....	4 "
E. K. Co. Sulphite of Soda (desiccated)...	¼ Oz.

When fully dissolved add the following hardener:

Powdered Alum.....	¼ Oz.
Citric Acid.....	½ Oz.

This bath may be made up for future use and may be used as long as it retains its strength.

Fixing

The Kodak Acid Fixing Bath should be prepared as per directions on the package. Put this into a fourth tray or wash bowl. When the powder has thoroughly dissolved add to the solution as much of the Acidifier, which you will find in a small box inside the large one, as directions call for. As soon as this has dissolved the Fixing Bath is ready for use. Any quantity of the bath may be prepared in the above proportions.

After the negatives have been placed in the Fixing Solution, keep them separated a part of the time. This insures the solution reaching every part of the Film. Allow the negatives to remain in the solution two or three minutes after they have cleared or the milky appearance has disappeared, then remove for washing.

Washing and Drying

All negatives must be thoroughly washed so as to remove every trace of Hypo and other foreign substance. Where running water is accessible the films

may be placed in a tray or washing box and left under a tap from which runs a gentle stream, for about an hour. Films should be moved about from time to time, so that a complete and thorough washing may be had. Do not crowd too many films in too small a tray during this process. When running water is not accessible, the negatives may be placed in a tray or bowl of cold water, and left to soak for five minutes, when the water should be changed and the process repeated five or six times. After carefully washing, the film can be pinned up by one corner to an overhanging ledge or frame, as it is imperative that the surfaces touch nothing until perfectly dry; otherwise they would stick and the negatives would be ruined. After negatives are thoroughly dry, they are ready for printing.

Defective Negatives

By following closely the foregoing directions, the novice can make seventy-five per cent. or upwards, of good negatives. Sometimes, however, the directions are not followed, and failures result.

To forewarn the camerist is to forewarn him, and we therefore describe the common causes of failure:

Over-Development

Over-development may be caused by a mistake in leaving films or plates in the developer too long, by using solution too warm or by those who mix their own developer in getting the developing agent too strong.

In this case the negative is very strong and intense by transmitted light and requires a very long time

to print. The remedy is to reduce by the use of Eastman Reducer or the following method:

Reducer

First, soak negatives 20 minutes in water, then immerse in:

Water.....	6 Ozs.
Hypo-sulphite of Soda.....	½ "
Ferricyanide Potassium (saturated solution)	20 Drops

Rock tray gently back and forth until negative has been reduced to the desired density, then wash ten minutes in running water or in four changes of water.

Negatives may be reduced locally by applying the above solution to the dense parts with a camel's hair brush, rinsing off the reducer with clear water occasionally to prevent its running onto the parts of the negative that do not require reducing.

Under-Development

An under-developed negative differs from an under-exposed one, in that it is apt to be thin and full of detail, instead of harsh and lacking in detail.

This defect would be caused by a mistake in removing film from the developer too soon, by using solution too cold or by an error in compounding chemicals. It is obvious that neither of these defects will occur in Tank Development if instructions are properly followed.

Intensification by Re-Development

There are a number of different processes for intensifying under-developed negatives, the most

common being by means of Bichloride of Mercury, and Sodium Sulphite or Ammonia.

This method, though simple to use, has its disadvantages, as it builds up the highlights out of proportion to the weaker portions of the negative, and also, unless carefully handled is apt to produce iridescent stains, or granular markings that are impossible to remove.

While the method of intensification by re-development is only comparatively new, the now common use of Velox and Royal Re-developer for Sepia tones on Velox and Bromide prints will make this the most effective means of intensification.

Velox or Royal Re-Developer may be used in exactly the same manner as for producing Sepia tones on developing paper.

Negatives intensified by re-developing are built up evenly, without undue contrast and without the chance of staining.

The advantage of being able to use the chemicals for two different purposes (Sepia toning prints or intensifying negatives) is obvious, the result in either case being all that could be desired.

PART IV

Printing on Velox Paper

Manipulation

Velox prints may be successfully made, using daylight for exposure. Select a north window, if possible, as the light from this direction will be more uniform. *Owing to its sensitiveness the paper should be handled in subdued light, otherwise it will be liable to fog.* Proper precautions should be taken to pull down the window shades and darken the room sufficiently during manipulation. If the light is too strong for printing it should be subdued or diffused by the use of several thicknesses of white tissue paper. Owing to the varying intensity of daylight uniform results are not as certain as when using artificial light. In the following instructions for manipulating Velox, it must be understood that artificial light, preferably gas with a Welsbach burner, will be the light used. A kerosene lamp, fitted with a round burner (known as Rochester burner), may be used, but owing to the decidedly yellow light this affords, a considerably longer exposure will be necessary than when using a Welsbach light.

The comparative exposures with Velox using various sources of light is as follows:

Size of Negative	Distance from Light	Welsbach Burner	32 C. P. Elec. or 6 ft. gas Burner	16 C. P. Elec. or 4 ft. gas Burner	Average Oil Lamp
4 x 5 or Smaller	7 inches	10 Sec.	20 Sec.	30 Sec.	40 Sec.

Having provided a suitable light and a convenient place to work, arrange three trays before you on your work table in this order:

1 oz. Nepera Solution 4 ozs. Water 1	Clean Water 2	X Towel	Kodak Acid Fixing Bath as directed on page 41 3
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Proper temperature is important and for best results the developer should be 70 degrees Fahr. and the fixing bath and wash water 50 degrees Fahr. If the developer exceeds 70 degrees the prints are liable to fog and the emulsion soften. If too cold, chemical action is retarded, resulting in flat, weak prints.

Printing

Velox may be safely manipulated ten feet from the ordinary gas flame.

Having everything in readiness, open the printing frame of your outfit and lay the negative back down upon the glass—(the back is the shiny side). Place upon the negative a sheet of the Velox paper face down.

The paper curls slightly, the face or sensitive side being concave; an absolute test is to bite the corner of the sheet; the sensitive side will adhere to the teeth.

The paper not used must be kept covered in its envelope.

Place the printing frame the correct distance from the artificial light used, holding the frame away from the burner a distance *equal to the diagonal of the negative*. See exposure table, page 45.

We suggest before making the first exposure the cutting of a piece of Velox paper into strips about an inch wide and placing one of them over an important part of the negative, make the exposure, using your best judgment as to the distance from the light and the time of printing. Develop it, and if not satisfactory try another strip varying the time as indicated by the first result. When the desired effect is secured, you can make any number of prints from the same negative, and if the time of exposure, distance from light as well as the time of developing are identical, all the prints should be equally good. By comparing your other negatives with the one you have tested, you will be able to make a fairly accurate estimate of exposure required by any negative.

After taking the exposed piece of paper from the printing frame, in a safe place previously selected, it is ready for development. The dry print should be immersed face up in the developer (Tray No. 1) and quickly and evenly covered with the solution. Regular Velox should be developed not to exceed twenty seconds, Special Velox about twice as long; no exact time can be given, as the strength of developer used would make a difference in the time.

As soon as the image has reached the desired depth remove from the developer to the second tray and rinse for a moment, turning the print several times, then place it in the acid fixing bath (Tray No. 3) keeping the print moving for a few seconds, the same as was done when rinsing, so as to give even and thorough fixing, preventing stains and

other troubles. Leave the print in this solution until thoroughly fixed; this will take about fifteen minutes. When fixed, remove from the fixing bath and wash thoroughly for about an hour in running water, then dry. After drying, prints may be trimmed and mounted.

Do not use a fixing bath that has been used for fixing films.

You should be systematic in working, remembering that cleanliness is essential in photography. Care must be taken to prevent the Hypo fixing bath in any way getting into the tray containing the developer. Have a clean towel when beginning the work and wipe your hands each time after you have handled prints in fixing bath.

Details

CLEAN DISHES: CLEAN HANDS: The faintest trace of Hyposulphite of Soda will spoil the prints if it gets into contact with them before the proper time. Great care should therefore be used to have both hands and trays clean.

DEVELOPER once used should not be carried over and used the next day or subsequently.

Don't

Don't use a tray for developing which has previously been used for hypo solution, pyro developer or final washing.

Don't use an old fixing solution, it is liable to cause trouble.

Difficulties, their cause and Remedy

VEILED WHITES: Caused by forcing development, fogged paper.

REMEDY: Give more time, screen light. Also, caused when image flashes up in developer by too much exposure, in which case give less time.

MUDDY SHADOWS: Caused by developer being used for too many prints. Remedy, use fresh developer.

CONTRASTY PRINTS. Caused by insufficient time or negative too harsh. Remedy, give more time; make softer negatives.

FLAT PRINTS: Caused by overtiming or negatives flat. Remedy, give less time in first instance, and if trouble is with negatives, give negative less time, develop further.

STAINS. Caused by forcing development, or chemically dirty dishes or hands, insufficient fixing, foreign chemicals. Remedy, do not allow chemicals other than those given in formulae to come in contact with paper; use fresh fixing bath; keep prints in constant motion the entire fifteen minutes they remain in fixing, and if due to forcing development give more time in printing.

ROUND, WHITE SPOTS: Caused by air bells which form on face of print when developer is first flowed on. Remedy, use more developer, break air bells with finger.

*Ask your dealer, or us, for a copy of the
Velox Book*

PART V

Mounting

The most satisfactory method for mounting prints is by the use of Kodak Dry Mounting Tissue, as by the use of this tissue the print lies perfectly flat in absolute contact even on the thinnest mount and absolutely without curl.

The tissue comes in flat sheets, dry, not sticky, and easy to handle and being water proof protects the print from any impurities in the mount stock. The process of mounting is as follows: Lay the print on its face and tack to the back a piece of the tissue of the same size as the print by applying the point of a hot flatiron to small spots at opposite ends. Turn the print face up and trim to size desired, place in position on mount and cover the print with a piece of smooth paper and press the whole surface with a hot flatiron. *Press, don't rub.* The iron should be just hot enough to siss when touched with the wet finger. If the iron is too hot the tissue will stick to the mount and not to the print, if too cold the tissue will stick to the print and not to the mount.

Remedy: Lower or raise the temperature of the iron and apply again.

When mounting with the ordinary paste, prints should be mounted wet. After the prints have been trimmed to correct size, immerse in clean water for

a few moments, then place in a pile face down on a sheet of clean glass and squeegee off all surplus moisture, apply the paste with a bristle brush, working in the paste thoroughly, then lift the print by the opposite corners, turn it over and place it in proper position on the mount.

Cover with a sheet of clean blotting paper and press into contact with squeegee or rubber print roller.

Coloring Velox Prints

The various surfaces of Velox are particularly well adapted for coloring, and prints may be made extremely interesting through the many beautiful effects obtained by the use of Velox Transparent Water Color Stamps. No experience is necessary when using these colors and any amateur can secure excellent results as full directions accompany each set of stamps.

Put up in book form, they will be found most convenient. Each book contains twelve colors, arranged in perforated leaflets, making twenty-four stamps of each color.

The stamps will also be found most desirable for the coloring of Bromide enlargements, lantern slides, etc., and in fact for all work where perfect blending and transparency of color is required.

See price list.

EASTMAN KODAK CO.,

Successor to

ROCHESTER OPTICAL CO.,

Rochester, N. Y.

PRICE LIST

Film Premo No. 1, 3¼ x 4¼, equipped with Single Lens and Kodak Ball Bearing Shutter	\$ 8 00
Do., 3A (3¼ x 5½)	10 50
Film Premo No. 1, 3¼ x 4¼, equipped with R. R. lens and Kodak Ball Bearing Shutter	10 00
Do., 3A (3¼ x 5½)	12 50
Sole Leather Carrying Case for Film Premo No. 1, 3¼ x 4¼	1 50
Do., for 3-A. (3¼ x 5½)	2 00
Premo Film Pack (12 Exposures) 3¼ x 4¼ ..	70
Do., 3A (3¼ x 5½)	80
Premo Film Pack Tank No. 2 for developing 12, 2½ x 4¼, 3¼ x 4¼, 3A (3¼ x 5½), or 4 x 5 films	3 50
Premo Tank Developing Powders, No. 2, per package ½ dozen pairs	25
Kodak Acid Fixing Powder, pound package ..	25
Do., per ½ lb.	15
Do., per ¼ lb.	10
Eastman Eikonogen Developer Powders (for dark room development), per doz. pairs.	50
Do., per ½ doz. pairs	25
Eastman Hydrochinon Developer Powders (do not stain the fingers), per doz. pairs.	50
Do., per ½ doz. pairs	25
Eastman Pyro Developer Powders (for dark room development), per doz. pairs	50

Do., per ½ doz. pairs	\$ 25
Eastman Hydrochinon, Eikonogen, Pyro and Special Developer Powders, in sealed glass tubes, per box of 5 tubes	25
Glass Stirring Rod Thermometer	60
Velox Paper, per doz. 3¼ x 4¼ or 3¼ x 5½	15
Velox Transparent Water Color Stamps, complete Booklet of 12 colors	25
Velox Transparent Water Color Stamp Outfit, consisting of Artist's Mixing Palette, three special Camel's Hair Brushes, and one book of Velox Transparent Water Color Stamps, 12 colors	75
Nepera Solution for develop'g Velox, 4 oz. bot.	20
Solio Paper, per pkg. 2 doz. 3¼ x 4¼	20
Do., 3¼ x 5½	25
Eastman Printing Masks No. 6, for use with 3¼ x 4¼ Film Pack Negatives, each	06
Do., No. 11, for 3¼ x 5½ Negatives, each ..	10
Combined Toning and Fixing Solution for Solio, per 8 oz. bottle	50
Do., per 4 oz. bottle (in mailing case including postage, 50c)	30
Eastman Reducer, per box, 5 tubes	25
Royal Re-developer, per package, 6 tubes ..	75
Eastman Flash Sheets, No. 1 per package of ½ doz.	25
Do., No. 2, per package of ½ doz	40
Do., No. 3, per package of ½ doz	60
Eastman Flash Sheet Holder	1 00
Kodak Dry Mounting Tissue, per package of 3 doz. sheets, 3¼ x 4¼	10

Do., 3¼ x 5½, 2 dozen sheets.....	\$ 10
Eastman Photo Blotter Book, for blotting and drying prints.....	25
R. O. C. Tripod, for cameras 5 x 7 or smaller	1 70
Kodak Metal Tripod, No. 0.....	1 60
Do., No. 1.....	2 50
Do., No. 2.....	3 25
Leather Carrying Case, for Nos. 0, 1 or 2.....	1 50
Kodak Autotime Scale, for Ball Bearing Shutter	1 00
R. O. C. Tripod Truck No. 1.....	1 00
Eastman Kodak Dark Room Lamp No. 2, ½ inch wick.....	1 00
Eastman Film Negative Albums, to hold 100, 3¼ x 4¼ or 3¼ x 5½ film negatives...	1 00
Kodak Trimming Board No. 2, capacity 7 x 7 inches.....	60
Bevplane Mounts, for pictures 3¼ x 5½, per 100.....	90
Do., per 50.....	45
Do., 3¼ x 4¼, per 100.....	85
Do., per 50.....	45
The Arena Album, 50 black or sepia leaves sizes 7 x 10.....	1 50
Premo Portrait Attachment (specify Camera when ordering).....	50
Kodak Color Screen, No. 3, for use with Film Premo No. 1, 3¼ x 4¼ for either Double or Single Lens.....	75
Do., No. 5, for use with Film Premo, No. 1, 3A (3¼ x 5½), for either Double or Single Lens.....	1 00
Universal Clamp for attaching camera to chair, fence, etc.....	75

Eastman Printing Frame, 4 x 5.....	\$ 25
Do., 3¼ x 5½.....	25
Do., 5 x 7.....	35
Developing Trays, Bull's Eye Composition, 4x5	15
Do., 5 x 7.....	25
Premo Optical Outfit, contains 6 supplementary lenses.....	6 00
Developing, printing and mounting (on Velox,) 12 exposures, 3¼ x 4¼ Premo Film Pack	1 50
Do., prints unmounted.....	1 38
Developing, only.....	70
Printing only, on Velox, unmounted, each....	07
Do., mounted, each.....	08
Developing, printing and mounting (on Velox) 12 exposures, 3¼ x 5½ Premo Film Pack	1 80
Do., prints unmounted.....	1 68
Developing only.....	1 00
Printing only, on Velox, unmounted, each...	09
Do., mounted each.....	10

No orders executed for less than 25 cents.

For prices on all Premo Cameras and other accessories, write for complete Premo Catalogue.

EASTMAN KODAK CO.,
 Successor to ROCHESTER OPTICAL CO.,
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Be Sure to Use Pure Chemicals

To get the best negatives from your films—to get the best prints from your negatives—it is imperative that the chemicals which you use be absolutely pure.

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EASTMAN KODAK COMPANY,

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For Better Pictures

We want all the users of our cameras to make good pictures. To help them secure such pictures we not only publish this manual, but for their further aid in photography we publish a little magazine—"Kodakery"—which will be sent monthly free, for one year to every purchaser of one of our amateur cameras. We propose to make it both elemental and entertaining, full of practical hints and illustrations of how to get more out of photography. The purchaser of the camera that this manual accompanies, is entitled to "Kodakery" for one year from date of such purchase, without charge, provided this blank is filled out and sent to us within thirty days of the purchase of said camera from a dealer in photographic goods.

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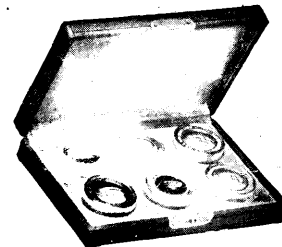
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LENS, A WIDE ANGLE LENS, TEL-
EPHOTO LENS, PORTRAIT LENS,
RAY FILTER AND A DUPLICATOR.



Price in Leather Case as Illustrated, \$6.00

EASTMAN KODAK CO.

Successor to Rochester Optical Co.

ROCHESTER, N. Y.