

PICTURE TAKING
WITH THE
STEREO
KODAK

MODEL No. 1

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ROCHESTER, N. Y.

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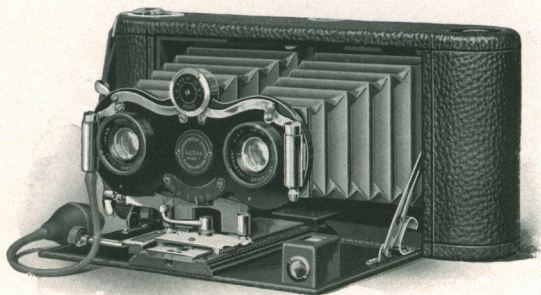
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ROCHESTER, N. Y.

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Stereo Kodak
Model No. 1

May, 1917

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For Stereo Pictures

Before loading or attempting to take any pictures with the Kodak read the following directions carefully and become thoroughly familiar with the instrument, taking special care to learn the construction of the shutter; work it for both time and instantaneous exposures, before threading up the film.

A most important thing to be remembered is that no white light (including gas or lamp light) should reach the film for a fractional part of a second until it has been developed and fixed. Therefore extreme care must be used to keep the duplex paper wound tightly on the spool so as to protect the film while loading and unloading the Kodak. It is best to select some place where the light is not too bright to insure safety.

To Load

Before loading, try the shutter and see that it works properly.

The film for the Stereo Kodak, Model No. 1, is known as No. 2 Bull's-Eye cartridge, size $3\frac{1}{2} \times 3\frac{1}{2}$, No. 101, and is put up in light-proof cartridges so that the camera can be loaded and unloaded in daylight. It is best that the operation be performed in subdued light, not in bright sunlight. After the seal is broken, it must be borne in mind that care must be taken to keep the duplex paper tight so no light can reach the film.

To insure against all dangers, it is advisable to select a place where the light is not strong, as this work should never be performed in the glare of bright sunlight.

First, to open the Kodak, grasp the instrument with the left hand, and remove the back by pressing in simultaneously with the thumb and second finger of the right hand on the two metal catches, then lift up the back.

Second, the Kodak now being opened, an empty winding reel with a slit in it will be seen. This is the reel onto which the film is wound after exposure. The full spool of film is placed in the chamber at the opposite end of the Kodak.

Pull out spool centers at each end of empty chamber until the inside ends are flush with the inside of the spool chamber.

Third, place the film cartridge into the chamber so the duplex paper unwinds from the outside or off the top.

Be careful to get the top of the spool at the top of the camera. The top is the winding side of the camera. Each cartridge is marked, the word "Top" will be found printed on the red paper near the top of the spool. If the cartridge is inserted wrong end up the duplex paper will come toward the lens, resulting in the loss of the pictures.

Fourth, push the spool center pins back to their original positions. The center pins now act as an axis for the spool to turn on. Break the seal and pass the duplex paper over the aluminum rollers at back of Kodak and thread into the slot in the winding reel. Turn the key one or two slight turns—just enough to bind the paper on the reel—and no more.

Be careful that it is started straight, for should one edge bear against the flange harder than the other, it will not wind evenly and will cause trouble. See that it is perfectly centered. After the film is secured, replace the back of the Kodak, being careful to put it on right side up (the wide catch at the top), and snapping the springs at the top and bottom fully into place.

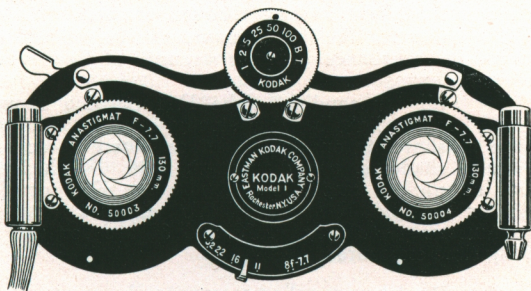
Throughout the foregoing from the time the seal is broken until the Kodak is closed, see that the duplex paper is wound tightly on the spool. If the paper is allowed to loosen the film will be fogged.

Turn the winding key slowly until the figure 2 appears exactly in the center of the red window in the back of Kodak, which signifies that the film is in position for the first exposure.

For *all* exposures use even numbers, i. e., 2, 4, 6, 8, 10, 12, as each Stereo negative has two separate negatives.

Shutter Used on Model No. 1

The scale at the bottom of the shutter indicates the opening of the iris diaphragm, according to the F sys-



tem. The graduated disc at the top of the shutter indicates the different speeds that can be used when making exposures. The round hole in the movable disc is to be placed over the speed desired, this is done by revolving the movable disc with the fingers.

When the indicator is placed over the letter "T," time exposure of any duration is obtained by pressing the bulb or finger release to open the shutter, and pressing it again to close it.

Bulb exposures are obtained by placing the indicator opposite "B." By pressing the bulb or finger release the shutter will then remain open as long as the pressure is applied. The other graduations, 1, 2, 5, 25, 50 and

100, are graduations of from 1 second up to $\frac{1}{100}$ of a second. If the indicator is set on 100, 50 or 25, instantaneous exposure is obtained, although, of course, the 25th is a longer exposure than the 100th. Five is about $\frac{1}{5}$ of a second, 2 about $\frac{1}{2}$, and 1 approximately 1 second.

The shutter works automatically and is arranged for either bulb or finger release.

Stops or Diaphragms

The stop or diaphragm is the opening which regulates the amount of light passing through the lens.

The opening for the lens aperture can be reduced or enlarged in accordance with the strength of light when making an exposure.

Under ordinary conditions the F.11 opening should be used. If the light be very strong, such as in views on the seashore or on the water, or where there are no heavy shadows, use diaphragm F.16. With *light* clouds or *slightly* smoky atmosphere use F.7.7 or F.8 at $\frac{1}{50}$ or $\frac{1}{25}$. *With heavy clouds do not attempt instantaneous exposures.* F.22 and 32 are for use in making time exposures.

To Focus the Kodak

When preparing for an exposure the lens must first be placed in focus.

To open the bed press the hidden button on top of the Kodak. Pull the bed down until the side brace springs lock it so it is firm. Draw out the standard, grasping the clamp lever.

Do not allow the sun to shine directly on the lenses with the bellows folded—this will cause a white spot or moon on the center of the print.

Model No. 1 is fitted with rack and pinion. Pull out the front standard to the limit of motion and clamp it by pushing the lever to the left. The indicator will

then be in a position over the 100 foot mark. When focusing on subjects that are closer, use the pinion controlled by the milled head at the edge of the bed of Kodak, and rack front forward until the indicator is over the distance on the scale which corresponds to the distance from which the principal subject is to the lenses. Before closing the Kodak see that the pinion is turned back to the limit of motion, as otherwise the bed of Kodak will not close properly.

NOTE—The subjects for stereoscopic views are always best when they have some figure close in the foreground, say from ten to twenty feet away.

The lenses furnished in the Stereo Kodak are of a quality which when stopped at 16 diaphragm and set at 25 feet on focusing scale, will cover sharp any subject as close as eight feet up to any distance. Generally speaking, this rule is the best one to follow out for stereoscopic views unless you particularly wish some one subject close in the foreground to come out strong and have the rest fade away.

Instantaneous Exposures or Snap Shots

Never use diaphragm smaller than 16. Usually F.11 is preferable, especially for short range pictures.

Instantaneous exposures, better known as "snap shots," are usually made with the camera held in the hand. The light therefore should be bright sunshine and exposures made from about three hours after sunrise to three hours before sunset. Earlier or later than these hours time exposures should be made. See "Time Exposures in Open Air," page 11.

Always photograph from the sun, never toward it; that is, the sun should come from behind operator or over the shoulder, shining directly on object to be photographed. If it shines into lens the picture will be blurred.

Do not try to photograph moving objects at less distance than twenty-five feet. Endeavor to catch them at an angle or coming toward camera. In photographing a tall building at close range and pointing camera upward, lines in photo will be found very irregular and to converge towards the top, on account of top being a greater distance from the camera. When possible, you should obtain a position as near as you can to the horizontal line of the center. The same rule applies to small objects, such as a dog, when the camera should be lowered to center of object to be taken.

When ready for making the exposure hold the camera firmly, and as nearly level as possible so the picture will be true. Locate the object in the finder by looking squarely down into it, and release the shutter, using care not to jerk the camera. This will uncover the lens a fractional part of a second, thereby making the impression upon the sensitive surface of the film.

After making the exposure, turn the winding key until the next even number appears exactly in the center of the red window in the back of the camera.

It is advisable to get into the habit of winding the film as soon as an exposure is made, which will avoid the possibility of making two exposures on the same surface.

Time Exposures

In making time exposures some judgment must be used as to the length of time the lens should remain uncovered. This is governed by the amount of light upon the object to be photographed and varies at different times.

The following rule should be observed: Place the camera upon a tripod, table or some firm support where there will be no danger of moving it during the time the exposure is made; center the object in the finder, set the shutter on time as described on page 7, then one pressure to open and when sufficient time has elapsed one to close,—using care, of course, not to jar the camera either in opening or closing the shutter.

Time Exposures in Open Air

In making time exposures out of doors the shutter can hardly be worked too quickly.

WITH SUNSHINE—Smallest diaphragm, open and close as quickly as possible.

WITH LIGHT CLOUDS—Smallest diaphragm, one-half second to one second.

WITH HEAVY CLOUDS—Smallest diaphragm, two to five seconds.

The foregoing is calculated for open air exposures; for objects in shadows or under porches no accurate directions can be given, only experience can teach the proper exposure.

Never try to make a time exposure while holding the camera in the hand, as it is impossible to avoid a movement, which will cause a blurred negative.

Time Needed for Interior Exposures

The following table gives the time of the exposure required under varying conditions of light with the stop F.16 in the lens. If the stop F.11 is used, give only one-half the time, if the stop F.32 is used give 4 times the time of the table. The smaller the stop the sharper the picture.

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.

Rising Front

The Stereo Kodak is provided with a rising front, which may be utilized in cutting out an undesirable foreground or to assist in taking in the top of a high building, etc.

The front may be raised by turning the key to the left, which is located under the shutter and directly over the pinion used when focusing the Kodak. When through using, center the lenses by turning the key to the right, to the limit of motion.

Experience alone can teach the many ways in which the rising front may be used for composing artistic pictures.

N. B.—Do not fail to center front before closing Kodak as otherwise there is danger of ruining bellows when folding.

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 a Kodak 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 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 flash light, would be quite beyond the range of the art.

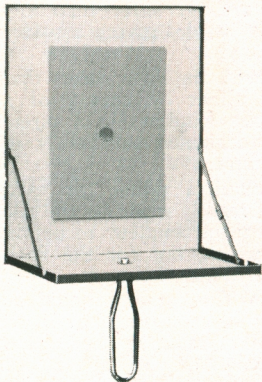
PREPARATION FOR THE FLASH—The camera should be prepared for time exposures, as directed on page 10 of this manual (except that stop F.11 must be used), and placed on some level support where it will take in the view desired.

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 Kodak, 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 Kodak. 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 Kodak Flash Sheet Holder, all these contingencies are taken care of, and we strongly advise its use.

The Kodak 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 Kodak 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 behind, through the round opening in the center.

Taking the Picture

Having the Kodak 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 Kodak 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 close the shutter and turn a fresh film into place with the key, 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
For 10 feet distance dark walls and hangings use	1 No. 2 sheet
For 15 feet distance light walls and hangings use	1 No. 2 sheet
For 15 feet distance dark walls and hangings use	1 No. 3 sheet

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

TO MAKE A GROUP—Arrange the chairs in the form of an arc, facing the Kodak, so that each chair will be exactly the same distance from the camera. 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 is 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 background 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.

Removing the Film

The danger of light reaching the sensitive surface of the film when unloading is the same as at the loading, and to insure against any possibility of fogging the edges, it had best be done in a subdued light.

When No. 12 has been exposed, continue to turn the winding key until the duplex paper is all wound onto the winding spool. This you can tell as the key will turn very much easier after the paper has left the supply spool.

Next, open the camera, the same as when loading, and take hold of the end of the duplex paper with thumb and finger of the left hand, turning the winding key so as to draw the paper evenly down around the spool. Use the sticker furnished with each spool for fastening the end of this paper. After this is done, the spool may be taken out by pulling out the spool center the same as when loading. Next, draw out the winding key center held in position by a spring—the film spool will then be free and can be removed. The empty spool should then be placed in this recess and adjusted in position for winding the next roll of film.

After all the exposures have been made and the film removed, the negatives must next be made and the pictures finished.

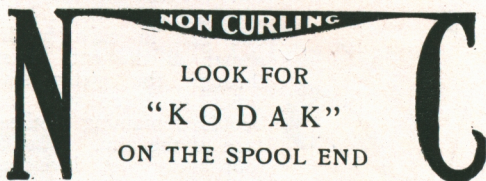
We recommend that the amateur do the work complete as it will be found very interesting and the process is very simple.

When sending film to us for finishing, pack securely and mark as follows:

EASTMAN KODAK CO.,
Rochester, N. Y.

Do not neglect to put your own name and address upon the wrapper; also write us under separate cover stating what you are sending, advising if you wish the film developed, or developed and printed. For price list of this work, see page 27.

Load Your Kodak with Kodak Film
Look for this trade mark on the box



Developing the Film

Provide an A. B. C. Developing and Printing Outfit, also a pair of shears, pitcher of cold water (preferably ice water), a pail for slops, darkroom having a shelf or table. By “dark-room” is meant a room or closet in which no white light can enter. It is imperative that not the least ray should enter, for should the sensitive surface of the film be lighted for a fraction of a second it would be completely ruined. A light from the ruby lamp furnished with the Developing and Printing Outfit, will not affect the film if it is not held closer than 18 inches.

Arrange three trays—one of them filled with water, the second filled with sufficient amount of Developer to

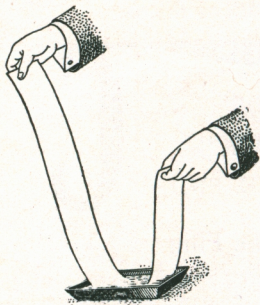
flow over the film, and placing in the third Fixing Bath made from Kodak Acid Fixing Powder.

NOTE—Proper temperature is important, and for the best results the developer should be at 65 degrees Fahr., and the fixing bath and wash water should be kept between 50 and 60 degrees Fahr. If the developer is too warm, the negatives are very liable to fog, and in many cases the support will be softened and the surface will be very much more liable to injury through scratching. If the developer is too cold the chemical action is retarded, resulting in flat, weak negatives.

Unroll the film carefully, not allowing the fingers to come in contact with the emulsion side, which is the dull side, and detach the entire strip from the duplex paper. Pass the film through the tray of clean cold water, holding one end in each hand, as shown in the cut. Pass it through the water several times so there will be no bubbles remaining on the surface of the film. When it is thoroughly wet development may be commenced.

Now pass the film through the Developer in the same manner as described for wetting it, keeping it constantly in motion. Dark spots will soon appear, which are termed "highlights" and soon the objects will be discernible.

The process of development can be ascertained by removing the film occasionally and holding it in range with the ruby light. If the negatives are all of the same exposure development can be completed without cutting the negatives apart. If, however, one or more of the negatives flash up more quickly than others, they should be cut out of the strip with a pair of shears and transferred back to the tray of clear cold water where they



may remain until the balance of the strip has been developed, and then they can be developed one at a time. It takes usually from 5 to 10 minutes for development, according to the amount of exposure.

When sufficient density has been obtained, wash the negatives thoroughly and place them in the Acid Fixing Bath made from Kodak Acid Fixing Powder, until the milky appearance has disappeared. This usually requires from 5 to 10 minutes. It is advisable to leave them in the Fixing Bath five or ten minutes after the milky appearance has disappeared in order to insure complete fixation, and to avoid stains. Then remove and wash them thoroughly in clear cold running water for one hour. It is very important that all traces of hypo be removed or stains will appear after drying and ruin the negatives.

Drying N. C. Film Negatives

If negatives have been cut apart they should not be allowed to mat together, but should be separated a part of the time in order that they wash thoroughly.

When thoroughly washed, snap an Eastman Film Developing Clip or a Kodak Junior Film Clip, on each end of the strip and hang it up to dry, or pin it up. Be sure, however, that it swings clear of the wall, so that there will be no possibility of either side of the film coming in contact with the latter. In drying, after tank development, N. C. Film should be cut up into strips of *not more* than six exposures in length.

But in tray development, when the film has been cut up, pin by one corner to the edge of a shelf, or 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.



Drying
with Clips

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 forearm him, and we therefore describe the common causes of failure.

Over-Development

Over-development may be caused by a mistake in leaving film in the developer too long; by using solutions 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 use of Eastman Reducer or the following method:

Reducer

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

Water	6 ounces
Hypo	$\frac{1}{2}$ ounce
Potassium Ferricyanide (saturated solution), poison.....	20 drops

Rock tray gently back and forth until negative has been reduced to the desired density, then wash 10 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 solutions 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 redevelopment is only comparatively new, the now common use of Velox and Royal Redeveloper for Sepia tones on Velox and Bromide prints will make this the most effective means of intensification.

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

Negatives intensified by redevelopment 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.

Developing in Daylight

There is no necessity of working in a darkroom or waiting until night to develop film. It can be done in daylight at any time and place. And the daylight method of developing film gives better results than the dark-room way.

Film may be developed in daylight by the Kodak Film Tank method. Detailed directions for developing will be found in the manual which accompanies the goods. For use with the Stereo Kodak, provide a 3½ inch Kodak Film Tank.

We recommend the Kodak Film Tank method particularly for its simpleness and the uniformly good negatives which it gives.

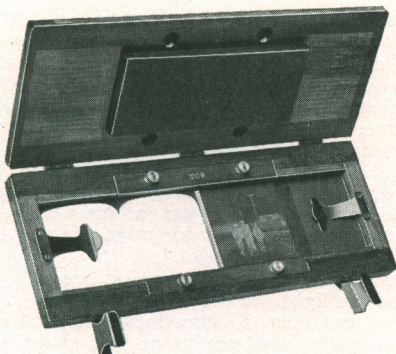
The Kodak Film Tank consists of a wooden box, a lightproof apron, a "transferring reel," a metal "solution cup" in which the film is developed, and a hooked rod for removing film from solution. There is also a dummy film cartridge with which one should experiment before using an exposed cartridge. The various parts of the outfit come packed in the box itself.

Printing Stereoscopic Negatives

In making stereoscopic pictures the aim is to convey the idea of perfect perspective. This is accomplished by transposing pictures as taken in the Stereo camera and viewing the transposed picture through an instrument called a Stereoscope, which consists of two oblique lenses which diverge the two pictures into one and give the same visual impression as though looking at the subject itself.

It is necessary to transpose the pictures for the reason that all negatives are made upside down in the camera and when these are turned right side up you can readily see that the one taken with the right lens assumes the position of the one taken by the left lens, and as these two pictures are taken from different points of view they are from different angles; therefore they must be transposed in order to get them in the same relative position as subject which is photographed.

The most convenient way of making Stereo prints is by means of the Stereo Self-Transposing Printing Frame. With this frame neither the prints nor the negatives have to be transposed, as the frame is so constructed that it accomplishes this by moving the



Stereo Self-Transposing Printing Frame

For Use with Developing-Out Paper—Price, \$2.00

paper first to one side and then to the other, protecting from the light the portion which has already been printed. This Self-Transposing Printing Frame gauges the distance so that the separation is proper, and when the print is viewed through the stereoscope it is properly separated, so as to get perfect perspective.

Stereo Prints on Azo Developing-Out Paper

Azo paper is furnished in Stereo Die Cut size and makes very satisfactory prints for Stereo views. The method of preparing the negative and the placing of the paper in the frame is described on the Self-Transposing Printing Frame. Another method of printing is given on page 25.

This paper may be safely handled for the purpose of placing in printing frame and developing, eight to ten feet away from an ordinary full flame of artificial light, or three or four feet away if the light is turned low. With Welsbach light or daylight it is necessary to re-

duce the light somewhat by shading the light or window with one thickness of orange post-office paper.

Place the paper in an ordinary printing frame, in the same manner as when using printing-out paper, having the emulsion side of the paper toward the dull side of the negative. After the paper is placed in the frame in perfect contact with negative, expose by holding the frame close to gas, lamp or incandescent light, or subdued daylight. Artificial light is recommended in preference to daylight because of its uniformity and being in consequence easier to judge the proper length of time to expose.

The amount of exposure varies according to the strength of the light. It takes about the same time with an ordinary gas burner as an incandescent light. The Welsbach requires about only one-half as much time as the ordinary gas burner and kerosene light of ordinary size about three times as much as an ordinary gas burner. If daylight is used the window should be covered with post-office paper in which a sub-window about one foot square for making the exposure may be made. Cover this sub-window or opening with two or three sheets of tissue paper so as to diffuse the light, then have a piece of black cloth or post-office paper to put over the opening when the white light is not wanted for making exposure. The printing frame should be kept from one to two feet away from the opening covered with tissue paper when making an exposure.

The time necessary for exposing is regulated by the density of negative and strength of light. The further the negative is from the source of light at the time of exposure the weaker the light, hence, to secure uniformity in exposure it is desirable always to make the exposure at a given distance from the light used. With a negative of medium density exposed one foot from an ordinary gas burner about two minutes exposure is required.

The temperature of the developer should be from 65° to 70° Fahrenheit, and the proper developer to use is the one put up by the company who manufactures the

paper, as the best results will always be obtained when using their developers, as substitutes very often are not proportioned correctly and naturally the prints do not turn out as they should. Always follow closely the directions as given with the developer.

To Develop

Immerse the paper in the developer, using care that it flows evenly over the surface and leaves no air bells. The image should appear in about eight or ten seconds and when the print is developed sufficiently, which requires from 45 seconds to one minute, remove quickly from the developer and rinse in clear water before placing in the acid fixing bath.

Provide a box of Kodak Acid Fixing Powder and prepare the fixing bath as per directions on the package. Prints should be kept in motion and not allowed to lie on top of one another while in this bath. After becoming thoroughly fixed, which takes about ten minutes, they should be removed and washed for about one hour in running water, or ten or twelve changes of clear water, allowing them to remain in each change for five minutes. Do not use a fixing bath that has been used for fixing film.

The prints should then be removed from the water and placed on ferrotype tins, face down, and the water squeezed out of them by placing a blotter on the back and running a roller over the blotter in order to insure perfect contact. Allow prints to remain on the tins until they are bone dry, then remove by lifting one corner by means of a knife.

More explicit directions are given with each kind of paper.

Another way to print stereoscopic views, which is comparatively simple, is to take the negative made with Stereo Kodak, place it in a cutting-board and trim the ends flush with the edge of the picture, of course using care that it is square with the bottom. After both ends have been trimmed, cut the negative in two in the

middle and transpose them, placing them on a glass and fastening them with gummed paper along the edges, of course using care that the bottoms of the two negatives, after having been transposed, are on the same horizontal plane. The negatives must be placed on the glass with the back side toward the glass (the back is the shiny side).

After the negatives have been fastened to the glass use Stereo Die Cut paper, placing the paper on the negative so that the center comes directly at the point where the two negatives join. Place the paper on the negative, emulsion side toward the negative, using care to see that the bottom of the paper is parallel with the bottom of the negative.

The negative will be slightly longer than the paper. This is the portion of the picture which has to be cut away in order to make the print center so as to appear correct through the stereoscope. The Stereo Die Cut paper is just the proper size for Kodak negatives, so that there is no trimming necessary after print is made.

An ordinary printing frame which is of sufficient length may be used for printing stereoscope views.

Price List

Stereo Kodak, Model No. 1, double matched Kodak Anastigmat Lenses, <i>f</i> .7.7 and Stereo Automatic Shutter.....	\$45.00
N. C. Film Cartridge, No. 101, 3½ x 3½, 6 Stereo exposures60
Do., 3 Stereo exposures.....	.30
Black Sole Leather Carrying Case, with strap....	3.50
Kodak Film Tank, 3½ inch.....	5.50
Duplicating Outfit for same.....	2.75
Kodak Tank Developer Powders for 3½ inch Tank, per pkg., ½ dozen.....	.20
Eastman Pyro Developer Powders (for dark- room development), per dozen pairs.....	.50
Do., per ½ dozen pairs.....	.25
Eastman Hydrochinon, Eikonogen, Pyro and Special Developer Powders, in sealed tubes, per box of 5 tubes.....	.25
Stereo Die Cut Azo Paper, furnished only in grades C and F, 2 dozen.....	.25
Do., 1 gross.....	1.10
Stereo Self-Transposing Printing Frame.....	2.00
Nepera Solution (for developing Azo) 4 ounce bottle28
Eastman Reducer, per box, 5 tubes.....	.50
Royal Re-developer, per package of 6 tubes.....	.75
Eastman Flash Sheets, No. 1, per pkg. ½ dozen	.35
Do., No. 2, per package ½ dozen.....	.56
Do., No. 3, per package ½ dozen.....	.84
Kodak Flash Sheet Holder.....	1.00
Kodak Dry Mounting Tissue, 1 dozen sheets, 4¼ x 6½08
Eastman Film Developing Clips (nickeled), 3½ inch, per pair.....	.25
Kodak Film Clips (wooden) 5 inch, per pair....	.15
Kodak Junior Film Clips, No. 1, each.....	.12

NOTE: Prices subject to change without notice.

Kodak Print Roller, Double, 6 inch.....	\$.50
Flexo Print Roller, Single, 4 inch.....	.20
Kodak Metal Tripod, No. 0.....	2.75
Do., No. 1.....	4.00
Do., No. 2.....	4.50
Leather Carrying Case for Nos. 0, 1 or 2.....	2.25
Leatherette Carrying Case for No. 0 and No. 1..	.75
Kodak Dark Room Lamp, No. 2, $\frac{5}{8}$ inch wick..	1.00
Developing only, Stereo negatives, $3\frac{1}{2} \times 3\frac{1}{2}$, per roll of 3 Stereo exposures.....	.35
Do., per roll of 6 Stereo exposures.....	.70
Printing only, Stereo negatives, unmounted, each	.14
Do., mounted, each.....	.16

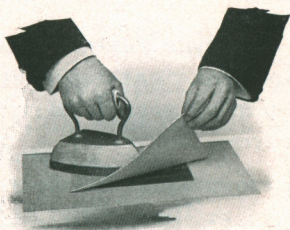
NOTE: Prices subject to change without notice.

**To insure best results insist upon having
EASTMAN Non-Curling Cartridge Films**

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ROCHESTER, N. Y.**

PRINTS DO NOT CURL
WHEN MOUNTED WITH

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perfect adhesion.

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Clean, convenient, a minimum of smoke.

PRICE PER PACKAGE OF 1-2 DOZEN SHEETS

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No. 2,56
No. 3,84
Kodak Flash Sheet Holder, . .	1.00

NOTE—Prices subject to change without notice.

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