

licture laking AT NIGHT...

IT'S SO EASY to make pictures at night. Picture taking is no longer confined to the sunny days. With Photoflood Lamps and the Kodaflector or with flashlight you can now make pictures any time, anywhere; indoors or out. There are innumerable pictures that can be made after the sun goes down; portraits, campfire scenes, fireworks, moonlight pictures, lightning flashes, lighted streets and squares, illuminated buildings, floodlight effects, interiors electrically lighted, table top studies, greeting cards and fires are but a few of the opportunities for striking and effective pictures that can be made after the sun has gone down.

> For the best results when taking pictures at night, use the Kodak Super Sensitive Panchromatic Film. When photographing colored objects, this film reproduces in black-and-white the correct color values of the subject. It is three times faster, by electric light, than Kodak Verichrome Film.

> Kodak Panatomic Film is a very fine grain panchromatic film intended for use in miniature cameras. It is slightly faster, by electric light, than Kodak Verichrome Film; by making the same exposures recommended for Verichrome Film, satisfactory pictures will result.

> In the following pages we will outline some of the many possibilities. In some instances these instructions will necessarily be more or less approximate, owing to the great differences in each particular subject; a few general hints will doubtless be found helpful.



INDOOR PICTURES AT NIGHT

* Making pictures indoors at night has been simplified so much, by the introduction of Eastman's new film—the Kodak Super Sensitive Panchromatic Film, that it is very easy for anyone to make pictures in all parts of the home, with any kind of a camera.

By using the Mazda Photoflood Lamps, or the Photoflash Lamps, you may obtain sufficient light for all kinds of subjects—with the added advantage of being able to place the lamps in any position, to obtain the lighting desired.

The Kodaflector makes indoor pictures still easier. It increases the efficiency of Photoflood and Photoflash Lamps at least four and a half times.

Snapshots of the youngsters in the playroom (unposed pictures), can now be made if you use a camera with an f.6.3 or faster lens. Quick exposures—not snapshots—are possible with the slower lens cameras, including those of the box type, by using Photoflood Lamps and Kodak Super Sensitive Panchromatic Film.

Make some indoor pictures tonight, everyone will have fun doing it.

WITH THE PHOTOFLOOD LAMP

* NIGHT PHOTOGRAPHY indoors, such as home portraits, family groups, still-life studies, and intimate home life scenes in which action need scarcely be suspended more than is necessary when making snapshots outdoors, are easily and simply made with the new Mazda Photoflood Lamps and Kodak Super Sensitive Panchromatic Film.

This lamp, not to be confused with the Photoflash Lamp, is similar in appearance to the usual 60-watt Mazda lamp and is used

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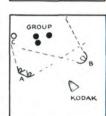
in the same sockets. It gives, however, a light approximately equivalent to that of a 750-watt general service lamp. This intensely brilliant light—the result of over-loading the filaments—is very effective for photographic purposes and, although the life of the lamp is shortened by this overloading, its rated life of approximately two hours at 115 volts is sufficient for such a number of exposures as to make the cost per picture negligible. The Photoflood Lamps cost 35 cents each.

Reflectors or other special equipment are not necessary. Simply place three Photoflood Lamps three

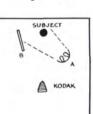




Super Sensitive Panchromatic Film.



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feet from the subject, use stop f.6.3 and make an exposure of 1/25 second. Use white cards, 8 x 10 inches or larger, behind the lamps to throw more light on the subject, although a light-colored shade on a floor lamp can be tilted and used for the same purpose. Place two lamps on one side of the subject and one lamp on the other side, as shown in the middle diagram on page 5.

If your lens does not open to f.6.3, use stop f.16 (U. S. 16), or use the largest stop on box cameras and other single lens cameras and Jiffy Kodaks, and make an exposure of 1/5 second. With shutter set for "Time" or "Bulb," opening and closing the shutter as quickly as possible gives about 1/5 second. The camera must be on a tripod or other firm support for shutter speeds slower than 1/25 second.

For the best results, use the Kodaflector which is designed especially for use with the Mazda Photoflood Lamps. It also increases the illumination when using the Photoflash Lamps and ordinary Mazda lamps. The advantage in using lamp reflectors, particularly the Kodaflector, is that the light can be so concentrated as to furnish ample illumination for instantaneous exposures.

If bare lamps are used without reflectors, the camera must be shielded by holding cards behind the lamps, or by placing a screen or high-backed chair between the camera and the lamps.

If a little thought is given to the placing of the lamps, more pleasing pictures will PAGE 4



A, 1 Photoflood in home lamp, 6 feet from subject. B, 2 Photofloods in home lamp, 6 feet from subject. Exposure, 1110 second with stop f.6.3. Kodak Super Sensitive Panchromatic Film.





A, 1 Photoflood in home lamp, 3 feet from subject.
B, 2 Photofloods in home lamp, 3 feet from subject.
Exposure, 1125 second with stop f.6.3, Kodak Super Sensitive Panchromatic Film.





A, 2 Photofloods in Kodaflector, 10 feet from subjects. B, 1 60-watt light in bridge lamp. Exposure, 1 second with stop f.11 (U.S.8). Kodak Super Sensitive Panchromatic Film.



be obtained. Experiment with the lamps in various positions, watching the different lighting effects on the subject's face. As a general rule it is better that the lamps be higher than the subject, and if Kodaflectors are used have them pointed downward, slightly.

The distance from the lamps to the subject is the important factor in determining the correct exposure, not the distance from the Kodak to the subject. The camera may be moved to include as much of the subject as desired.

When arranging the lamps and Kodak, see that no reflections of the lights in windows, glass in picture frames or glass doors, are within range of the lens of camera.

It is advisable to use ordinary electric lights when arranging your subjects. When everything is in readiness, replace the ordinary electric lights with the Photofloods.

If the lamps are placed on one side of the camera, as shown in the upper diagram on page 3, do not bring them too close to the imaginary line between the Kodak and the subject or the lighting will be flat. The lamps should be moved to one side, until some of the subject's face is in shadow. The shadow portion should be illuminated by a reflector of some white material, held in the proper position, see upper diagram on page 3. If the

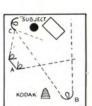
shadows are not lighted, harsh, contrasty pictures will result. An extra lamp placed at the same height as the subject's head can be used instead of a reflector, moving the extra lamp

We recommend the Kodaflector as the ideal lighting unit. It consists of a folding, adjustable stand with combination clamp and swivel top, two special reflectors with sockets and angled rods, and two connecting cords (attached to the sockets), as shown in the illustration.

The price of the Kodaflector, complete, but not including the Photoflood Lamps, is \$5.00.

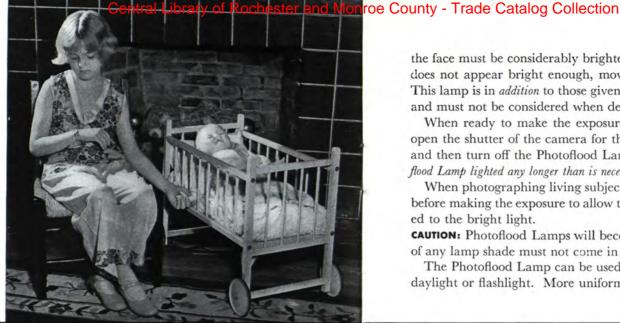


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A, 2 Photofloods in Kodaflector, 4 feet from subject. B. 1 Photoflood in home lamp with reflector, 8 feet from subject. C, 1 Photoflood in home lamp with reflector, 11/2 feet from

subject. Exposure 1/25 second with stop f.6.3. Kodak Super Sensitive Panchromatic



the face must be considerably brighter than the rest of the subject; if it does not appear bright enough, move the lamp closer to the subject. This lamp is in addition to those given in the exposure table on page 8, and must not be considered when determining the proper exposure.

When ready to make the exposure, turn on the Photoflood Lamp, open the shutter of the camera for the time required, close the shutter and then turn off the Photoflood Lamp at once. Do not leave the Photoflood Lamp lighted any longer than is necessary.

When photographing living subjects, turn on the lamp a few minutes before making the exposure to allow the subject's eyes to become adjusted to the bright light.

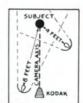
CAUTION: Photoflood Lamps will become quite hot; therefore the fabric of any lamp shade must not come in contact with the lamp bulbs.

The Photoflood Lamp can be used for making silhouettes in place of daylight or flashlight. More uniform results are obtained with it than

PHOTOFLOOD LAMPS AND KODAFLECTORS

to and from the subject until the desired shadow illumination is obtained. When following the table on page 8, ignore the extra lamp used for shadow illumination.

The extra lamp or white reflector can be eliminated by placing each of the two lamps specified in the table on either side of the camera axis, as shown in the diagram at the right. To avoid flat lighting, one lamp should be farther from the subject than the other. Where the table gives 6 feet, place one lamp 4 feet and the other 8 feetthus averaging 6 feet. The closer lamp should be high,

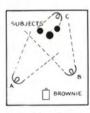


and the farther lamp on a level with the subject's head. The closer lamp should be farther from the camera axis, as shown in the diagram.

Interesting backlighting effects can be obtained by using an additional lamp in a floor lamp or Kodaflector, so that the lamp will be above and one or two feet to the side of the subject. The camera must be shielded from this light by a screen or tall chair. The hair or edge of

HAVE SIMPLIFIED PICTURE TAKING AT NIGHT





A, 1 Photoflood in home lamp, 6 feet from subjects.

B, 1 Photoflood in table lamp, 5 feet from subjects.

C. 1 Photoflood on cord behind man. Exposure 1 second with largest opening of Brownie Camera. Kodak Super Sensi-Panchromatic Film.

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with daylight. Following the general directions on pages 14 and 15, an exposure of four to six seconds will be required with the largest opening of a single lens camera, using Kodak Verichrome or Panatomic Film (one or two seconds, with Kodak Super Sensitive Panchromatic Film), and a single Photoflood Lamp in a reflector. With stop f.8 (U. S. 4) the exposure should be about three seconds with Kodak Verichrome or Panatomic Film, or two seconds if stop f.6.3 is used. The Photoflood Lamp should be

2 Photofloods in home lamp with shades removed, placed behind white sheet. Exposure 2 seconds with stop f.11 (U.S. 8). Kodak Super Sensitive Panchromatic Film.

EXPOSURE TABLE

FOR KODAK SUPER SENSITIVE PANCHROMATIC FILM AND TWO PHOTOFLOOD LAMPS

When using Kodak Panatomic Film or Kodak Verichrome Film, increase the exposures two or three times.

Distance Lamps to Subject		Exposure in Seconds		
	Diaphragm or Stop Opening	Two Photo- floods in Kodaflector	Two Photo- floods in Ordinary Reflectors	Two Photo- floods without Reflectors
4 feet	f.4.5	1/50	1/25	1/10
"	f.4.5 f.6.3	1/25	1/10	1/5
"	f.11	1/10	1/5	1/2
	f.16	1/5	1/2	1
6 feet	f.4.5	1/25	1/10	1/5
"	f.4.5 f.6.3 f.11	1/10	1/5	1/2
"	f.11	1/5	1/2	I
	f.16	1/2	1	2
10 feet	f.4.5	1/10	1/5	1/2
"	f.4.5 f.6.3	1/5	1/5	1
"	f.II	1/2	I	2
	f.16	I	2	4

This table is for portraits and light-colored interiors. For dark-colored interiors without people, double the above exposures. For instance, if 1/10 second is given, using 1/5 second will double the exposure time.

Doubling the number of lamps will halve the exposure.

When the lamps are used for general illumination to make a picture of a room, use stop f.16 (U.S. 16) to get sufficient depth of focus.

placed at the same height from the floor as the lens of the camera. **ORDINARY HOME LAMPS:** If, in an emergency, you want to take pictures at night but find that you have no special lamps or reflectors on hand, you can make time exposures using regular home or Mazda lamp bulbs.

Use enough lamps to total 350 watts, placing about 250 watts on one side of the camera axis and 100 watts on the other, but all lamps at the same distance from the subject.

EXPOSURE TABLE USING REGULAR SERVICE LAMPS WITHOUT REFLECTORS (350-WATT TOTAL) FOR KODAK SUPER SENSITIVE PANCHROMATIC FILM

When using Kodak Panatomic Film or Kodak Verichrome Film, increase the exposures two or three times.

Distance Lamps to Subject	Diaphragm or Stop Opening	Exposure in Seconds	
4 feet " "	f.4.5 f.6.3 f.11 f.16	1/2 1 2 4	
10 feet " "	f.4.5 f.6.3 f.11 f.16	2 4 8 16	

This table is for portraits and light-colored interiors. For dark-colored interiors without people, double the above exposures.

Central Library of Rochester and Mor

FLASHLIGHTS

* A FLASHLIGHT is the most concentrated form of artificial light and with it we can obtain the same effects that are produced by sunlight. It is especially useful in the home for indoor portraits, group pictures and interiors that do not get much sunlight, as it is easily controlled and can be used to produce any degree of contrast or softness.

The requirements for making flashlight pictures are few and simple. A firm support for your Kodak, a Photoflash Lamp, and if a flash is to be made at some distance from the subject, a reflector should be used to increase the illumination on the subject.

THE PHOTOFLASH LAMP

★ THE Photoflash Lamp resembles an ordinary incandescent bulb such as is used for household lighting. This bulb, however, contains oxygen and a quantity of crumpled-up aluminum foil; it comes in three sizes, No. 10 (small), No. 20 (medium) and No. 75 (large). Use the No. 10 lamp in small or medium sized rooms. The No. 20 lamp is for large rooms. The No. 75 lamp is for interior and outdoor photographing of large areas.

The Photoflash Lamps are merely screwed into an ordinary lamp socket or into the end of a special tubular hand flashlight, or in the Kodaflector. When the current is turned on, the specially coated filament immediately ignites the aluminum foil and an instantaneous flash of great intensity and actinic quality results. Fast lens equipment is not needed where the Photoflash Lamp is used. The flash is quick

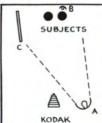
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flash of especially actinic light for photographic purposes. It is good for but one flash-one picture. Its value lies in the rapidity of its flash, about 1/50 of a second. No noise, no smoke. Two sizes for the average pictures made by amateurs -15 cents and 25 cents. The illustration shows the Photoflash Lamp and with special tubular flashlight and reflector.



enough to catch a child at play, and a portrait exposure is made before the subject can close his eyes. This light is so easily portable that pictures can be made in any



A, 1 No. 10 Photoflash in home lamp (with reflector), 6 feet from subjects.

B, 1 No. 10 Photoflash on extension cord in fireplace between girl and camera, with cord connected to the SAME socket as Photoflash A.

C, White tablecloth over screen 2 feet from subjects.

Exposure, use stop f.11 (U. S. 8). Kodak Super Sensitive Panchromatic

A, 2 Photofloods in home lamp, 4 feet from subject. B, 1 Photoflood in home lamp, 6 feet from subject, Exposure, 1125 second, stop f.6.3. Kodak Super Sensitive Panchromatic Film.



KODAK

A, 1 Photoflash in home lamp with reflector, 6 feet from subject. B, 60-watt bulb in table lamp. Exposure using stop f.11 (U. S. 8). Kodak Verichrome Film.

SUBJECT .



part of the home. Most photographic stores sell these lamps.

While the Photoflash Lamp may be used without a reflector it is made more effective where one is employed. By using the Kodaflector the best results are obtained.

The Photoflash Lamp should be held a little higher than the subject's head, and for a group it should be near an imaginary line between the subjects and lens to avoid shadows on the group.

First use an ordinary electric light to determine the proper position for the lamp, then replace it with the Photoflash Lamp.

If your camera is loaded with Kodak Super Sensitive Panchromatic Film, and you are making the exposure with a Photoflash

EXPOSURE TABLE FOR NO. 20 PHOTOFLASH

With the No. 10 Photoflash Lamp, use next larger opening With the No. 75 Photoflash Lamp, use second smaller opening

For All Kinds of Kodak Film

	Diaphragm or Stop Opening			
Distance Lamp to Subject	One Photo- flash in Koda- flector	One Photo- flash in Ordinary Reflector	One Photo- flash Without Reflector	
30 feet 20 feet 15 feet 10 feet 6 feet	f.4.5 f.6.3 f.11 f.16 f.22	f.4.5 f.6.3 f.11 f.16	f.4.5 f.6.3 f.11	

A white card held directly behind the Photoflash Lamp will enable you to use the diaphragms recommended for ordinary reflector.

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Lamp; before opening the shutter of your camera (which should be set for "time"), turn out all the room lights or leave only a very dim light in the room. Then open the shutter, set off the flash, and close the shutter immediately. This procedure is necessary because of the extreme speed of the film.

Outdoor night pictures of at least fairly nearby subjects, such as a group around a campfire, the corn or sausage roast, etc., may be taken with this lamp. For groups outdoors, where a comparatively large area is to be illuminated, the largest lamp (No. 75), will prove very satisfactory.

SNAPSHOTS AT f.6.3

 \bigstar Many times you will want to make snapshots of the familiar every-day incidents around the home that occur only in the evening—after dark. Such pictures are now made easily by using Mazda Photoflood Lamps and loading your camera with Kodak Super Sensitive Panchromatic Film; the camera should have a lens with an opening of f.6.3 or larger.

It is a simple matter to replace some of the regular electric lights for the Photoflood Lamps; with these lamps you will obtain ample illumination for making snapshots.

The examples on these two pages will give you some idea of how simple it is to make snapshots at night, and the diagrams show how you can make similar pictures.

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A and B, 1 Photoflood each in separated Kodaflector (single units), Afeet from subject. C, 1 Photoflood in table lamp on radio. Exposure 1125 second stop f.6.3. Kodak Super Sensitive Panchromatic Film. home lamp, 4 feet from subjects. B, 1 Photoflood in home lamp, 5 feet from subjects. C, 1 Photoflood in floor lamp. Exposure 1125 second with stop f.6.3. Kodak SS. Pan. Film.

A - 1 Photoflood in





SNAPSHOTS AT NIGHT



SILHOUETTES ADD NOVELTY TO PICTURE MAKING

PHOTOGRAPHIC SILHOUETTES

★ Photographic silhouettes can be made indoors either by daylight, flashlight, or with Photoflood Lamps, but as the strength of daylight varies considerably, the surest way of obtaining correctly exposed silhouette negatives is by using a Photoflash Lamp, or with Photoflood Lamps (see page 7).

Two rooms with a doorway between them are needed. The opening is covered with a sheet stretched so that no wrinkles are seen. The subject is placed before the sheet facing at a right angle to the camera, in full profile. The Photoflash Lamp should be screwed into a Kodaflector or a floor lamp placed on the opposite side of the sheet in a line with the camera as shown in the diagram above. It would be convenient to have an extension cord from the Kodaflector or floor

lamp, which would be long enough to allow making the connection to a wall outlet in the same room where the Kodak is set up. The switch at the lamp should be turned on and the flash set off when the plug on the extension cord is connected with the outlet.

Just before making the exposure, turn off all lights in both rooms, then open the shutter, set off the flash, close the shutter and turn on the lights in the rooms again. See directions on page 7 for using the Photoflood Lamp.

Silhouettes make very interesting and unique pictures. They can be used for making unusual personal greeting cards, as illustrated and described on page 19.

TABLE TOP STUDIES

★ Table top photography gives the amateur an opportunity to wander from the beaten track of outdoor snapshots, and attempt experiments with the unusual, something which is purely the creation of one's own ingenuity and imagination.

The table top or other suitable support comes in as the base of operations, on which you build up any fancy your imagination leads you to, from the simplest arrangement of fruit and flowers to an elaborate "set"

UNUSUAL EFFECTS ARE MOST FASCINATING



1 Photoflood in home lamp, 4 feet from subject, and placed on the right side.
Exposure 3 seconds with stop f.16.
Kodak Verichrome Film.

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simulating a windswept, moon-lit desert, or a battle scene in which the children's toy soldiers and cannon can be used to advantage, or a miniature train would make a fine railroad picture.

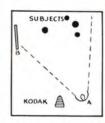
Our illustration shows the possibilities; the novel arrangement shown on page 15 needs no description, it is but one of the thousand and one similar pictures you can compose. For a still life picture of flowers or a basket of fruit, use a plain cloth for a background, and in order to get a large image use a Kodak Portrait Attachment.

Many interesting pictures can be made of the children's toys and trinkets that may be about the house. The lighting for the picture on the preceding page can be obtained with one Photoflood Lamp placed above and to one side of the "set-up." Make an exposure of three seconds with stop f.16 or U. S. 16, if using Kodak Verichrome Film.

Other arrangements can, of course, be anything you fancy, and the variety of pictures is limited only by your imagination.

A good point to keep in mind when making table top pictures is to have your "set-up" not too far from the edge of the table or other support. If too much of the table shows in the foreground, it will be out of proportion to the rest of the picture.





A, 1 No. 20 Photoflash in home lamp with reflector, 10 feet from subject. B, White tablecloth over screen. Exposure, use stop f.11 (U. S. 8). Kodak Super Sensitive Panchromatic Film

THE CHRISTMAS TREE

★ The Christmas tree is another favorite subject for the Kodak and one that is not difficult to photograph by a simple flashlight. It is best done as soon as the last touch has been given the decoration of the tree and when the little folks are sound asleep.

Set the Kodak in position to show all the tree in the finder, with stop f.11 (U. S. 8) and the shutter opened at time, use a Photoflash Lamp with reflector, placed slightly behind and to one side of the camera, at a height of about six feet. Close the shutter immediately after the flash. If the illumination of the room is dim, it will not affect the film while the shutter is open, providing none of the lights show in the finder.

When a single lens camera of either the box or folding variety is used for photographing Christmas trees under similar conditions, use the largest stop opening. Photoflood Lamps can also be used by following the Exposure Table on page 8. If people are not included, be sure to *double* the exposure.

INTERIORS BY ORDINARY ELECTRIC LIGHTS

★ Crry homes are sometimes so close to other buildings that it is not always possible to get enough illumination to photograph some of the rooms by daylight. When electric light is available this difficulty is overcome. By using plugs that will hold two, three or four lamps and connecting with the nearest floor or ceiling outlet, any quantity of light can be placed where it is needed. The regular wall and ceiling lights will often supply enough illumination, or if more light is needed lamps



PERSONAL GREETING CARDS

of higher wattage can be used. By using ordinary electric lights in a Kodaflector, the amount of illumination is increased considerably.

The illustration below shows a kitchen and dining alcove photographed by a single 60-watt lamp in an amber shade over the table, a 100-watt lamp in a porcelain shade over the sink, and a 40-watt lamp in the ceiling over the camera. The exposure was 15 seconds with stop f.11 (U. S. 8); larger rooms with dark wall paper and hangings would of course need more illumination and longer exposure. Each room will call for its own exposure, but it will soon be found comparatively easy to estimate a satisfactory exposure.

Lighted floor and table lamps can be photographed in their normal positions and will not fog the picture if the bulbs do not show through or under the shade. They photograph much more attractively when lighted and can improve many an interior picture.

A distinction must be made between lamps that show in the picture area and those that do not show but are used for illumination. Brilliant pictures by artificial light can be made only when the light from the lamps that are not in the picture, is prevented from shining directly into the lens while the exposure is being made. A magazine or newspaper can be so held as to shade the lens from direct light.

THE PERSONAL TOUCH

★ The personal greeting card is rapidly coming into favor and the Kodak enables you to make the truly personal and distinctive ones,

One 60-watt lamp in an amber shade in dining alcove. One 100-watt lamp in ceiling over sink. One 40-watt lamp in ceiling overcamera. Exposure 15 seconds with stop f.11 (U.S.8). Kodak Super Sensitive Panchromatic Film.



Mounted print on regular or hand printed card.





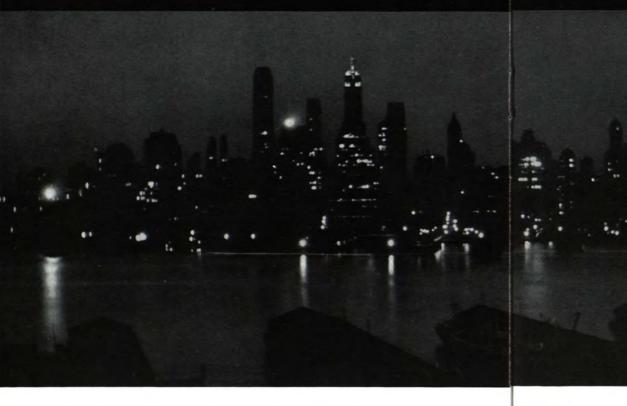
Photographic silhouette, hand lettering and decoration.

showing as they do, a group of the family, an individual or the home.

No special equipment is needed, as the simplest box camera will produce negatives suitable as a basis from which to work. Look over your good prints or make a special silhouette for the occasion, from the instructions given on pages 14 and 15. The lettering can be done by hand, or your prints can be mounted on a regular greeting card if a considerable number are required.

Our illustrations show just how simple, yet effective, these cards can be. The only limit to the elaboration of the decoration of the cards is your ability to design and execute the personal touches.

OUTDOOR PICTURES AT NIGHT



Exposure 5 minutes with stop f.11 (U.S.8). Kodak Super Sensitive Panchromatic Film, 15 minutes with Kodak Verichrome Film.

such as those described in fairy books.

A large industrial plant like a steel mill or a blast furnace will offer excellent opportunities to make unusual and fascinating pictures at night. The flying sparks from the chimneys and the bright light reflected on the smoke will prove most effective.

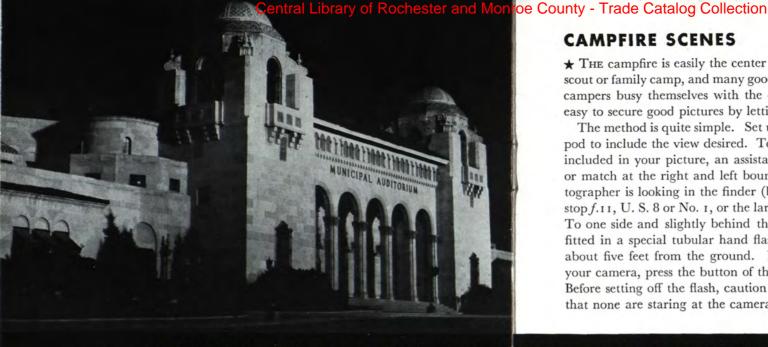
Pictures at night of outdoor subjects are really very easy to make. They can be made with any kind of camera. For the very best results, however, you should load your camera with the Kodak Super Sensitive Panchromatic Film, which is obtainable in both rolls and packs. By using this film very short exposures can be made; and it has a special backing which minimizes halation or "fuzziness" around the bright lights in the picture.

Be sure to include many outdoor pictures at night in your photograph album; the beautiful results will be a constant source of pleasure to you and your friends.

★ THERE is something about pictures made outdoors at night that arouses the imagination and fascinates one. They are often pictures of ordinary subjects made under unusual conditions, and they are therefore more interesting than the usual type of pictures made by daylight.

A novel idea for your collection would be to make two pictures of a building or a street scene, one by daylight and the other at night, both pictures being made from exactly the same position—the comparison would be most interesting.

Pictures made after dark of buildings with their myriads of brilliantlylighted windows, campfire scenes and fireworks, remind one of scenes



BUILDINGS AND CAMP FIRE SCENES

FLOODLIGHT PICTURES

★ More and more of our public buildings are being illuminated after dark, and their beauty shown off to great advantage by powerful, indirect lights that bathe the building in a brilliant soft light. The Capitol at Washington, for instance, is beautifully displayed after dark and can be easily photographed with exposures of two to three minutes with Kodak Super Sensitive Panchromatic Film and stop f.16 (U. S. 16), or five to ten minutes with stop f. 16 (U. S. 16), with Kodak Verichrome and Panatomic Film. These exposures are for white light. The requirements are a tripod or other firm support for the camera and not too much movement or obstruction near the lens. Street lights must be kept as far out of the immediate foreground as possible. When using Kodak Verichrome Film, Kodak Super Sensitive Panchromatic Film or Kodak Panatomic Film, halo from street lights is reduced to a minimum.

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CAMPFIRE SCENES

★ THE campfire is easily the center of attraction after sundown in any scout or family camp, and many good picture opportunities occur as the campers busy themselves with the corn or marshmallow roast. It is easy to secure good pictures by letting off a flash at the right time.

The method is quite simple. Set up your Kodak or Brownie on a tripod to include the view desired. To determine the area which will be included in your picture, an assistant should hold a lighted flashlight or match at the right and left boundary of the group, while the photographer is looking in the finder (be sure the shutter is closed). Use stop f.11, U. S. 8 or No. 1, or the largest stop opening on a box camera. To one side and slightly behind the camera, hold a Photoflash Lamp fitted in a special tubular hand flashlight and reflector (see page 10) about five feet from the ground. Having first opened the shutter of your camera, press the button of the flashlight, then close the shutter. Before setting off the flash, caution the campers not to move, and see that none are staring at the camera, as this is apt to spoil the picture.

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MAKE VERY INTERESTING SUBJECTS



FIREWORKS

★ Fireworks offer opportunities for some beautiful and novel pictures. The effect wanted, is of streams of light with the incidental sparks caught in the slower-moving showers. These lines fall beautifully, tracing graceful patterns that make splendid pictures.

Since the film is not affected by a dark sky, the shutter may remain open or be reopened to capture successive pieces. The lens must point towards an unobstructed part of the sky in order to get a solid background, and you must be prepared to close the shutter should any spectators get too close to the lens. Many a brilliant burst can be secured with an exposure of one second and as long as they are not set pieces attached to a framework, the camera can be tilted as much as necessary to get the film fairly well filled. Simply aim the lens at the space where the shells are bursting and you will not fail to get some very beautiful pictures. The camera must be on a firm support, especially when making pictures of set pieces that are on the ground, and where buildings are included as shown in the illustration on the opposite page.



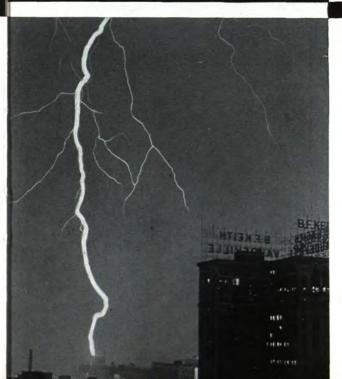
Exposure 45 seconds with stop f.8 (U. S. 4). Kodak Super Sensitive Panchromatic Film.

LIGHTNING

★ LIGHTNING is in somewhat the same class as fireworks and what we aim to get are brilliant ribbons of light against a black background, it is more erratic, however, and more patience is required. The most satisfactory method is to place the camera, focused at the 100-foot mark, on a tripod at an open window pointed in the direction of the last few flashes. The shutter, set at time and using the largest opening, is left open, and closed after a single flash, or left open for several flashes.

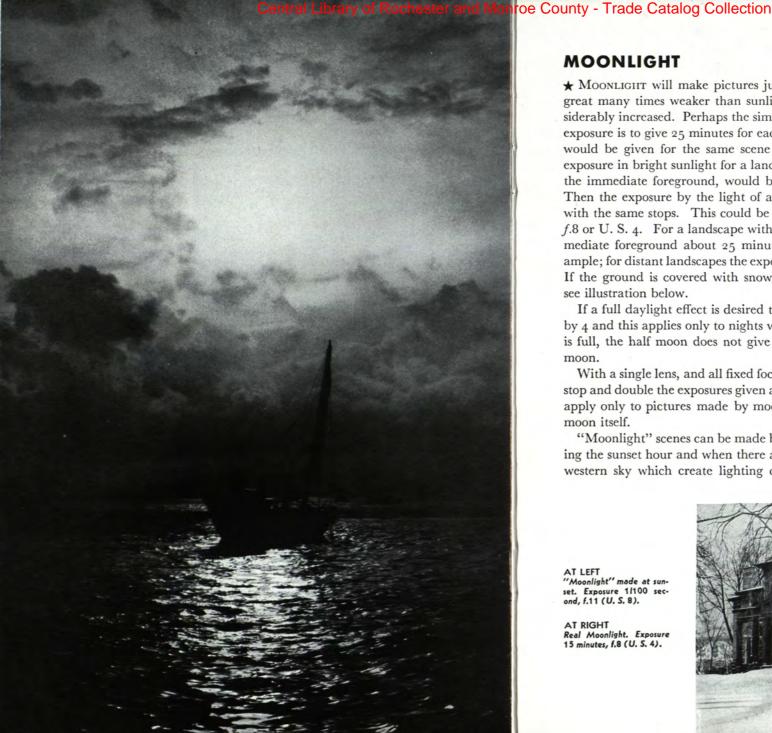
The only form of lightning that does not picture satisfactorily is sheet lightning, which uniformly illuminates a broad expanse of sky. What we like best are the spectacular pictures—the brilliant zig-zag lines of light which flash across a black sky made by chain lightning, and ball lightning—an unusual form—a fiery ball descending to the earth.

The camera can be held in the hands for photographing lightning, with the shutter set for "time." In this case, however, the film should be turned after each flash so as not to show more than one horizon line.



Open shutter at "time." Point camera at the sky. Close shutter after a flash or flashes.

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MOONLIGHT

★ MOONLIGHT will make pictures just as sunlight does, but as it is a great many times weaker than sunlight, exposures must be very considerably increased. Perhaps the simplest way to calculate a moonlight exposure is to give 25 minutes for each one-hundredth of a second that would be given for the same scene by sunlight. For example: The exposure in bright sunlight for a landscape with a dark-toned object in the immediate foreground, would be 1/25 with stop f.11 or U. S. 8. Then the exposure by the light of a full moon would be 100 minutes with the same stops. This could be cut down to 50 minutes with stop f.8 or U.S. 4. For a landscape without a dark-toned object in the immediate foreground about 25 minutes with f.8 or U. S. 4 would be ample; for distant landscapes the exposure can be from 10 to 15 minutes. If the ground is covered with snow, shorter exposures can be made, see illustration below.

If a full daylight effect is desired these exposures must be multiplied by 4 and this applies only to nights when the sky is clear and the moon is full, the half moon does not give even half as much light as a full moon.

With a single lens, and all fixed focus types of cameras, use the largest stop and double the exposures given above. These suggestions of course, apply only to pictures made by moonlight and not those showing the moon itself.

"Moonlight" scenes can be made by sunlight. This is best done during the sunset hour and when there are masses of clouds floating in the western sky which create lighting conditions favorable for picturing

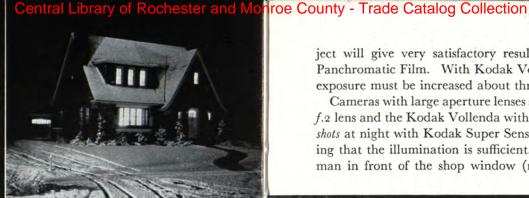
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AT LEFT "Moonlight" made at sunset. Exposure 1/100 second, f.11 (U. S. 8).

Real Moonlight. Exposure 15 minutes, f.8 (U. S. 4).







"moonlight" scenes by sunlight. The sun must be wholly or partially obscured and if the light is red, yellow or orange an exposure of 1/100 second with stop f.11 (U.S. 8) can be given, and to secure a night effect from a negative exposed in such a manner, it must be printed long enough so that all but the high-lights will be dark.

LIGHTED STREETS AND PUBLIC PLACES

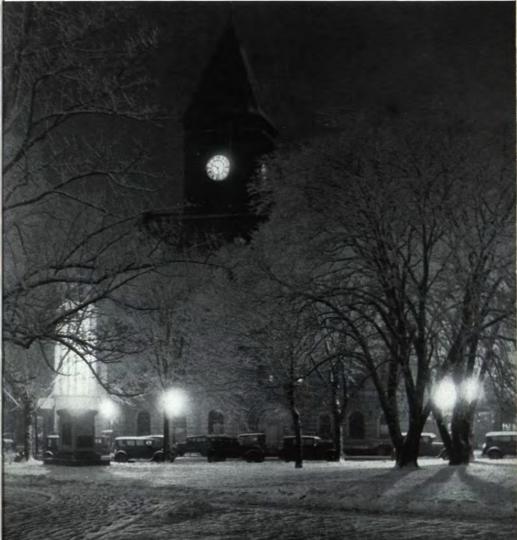
★ THE "White Way" or theatre district of a large city often offers bright scenes that would make an attractive souvenir and the town or village square with its corner churches and soldiers' monument, is well worth an exposure, especially on a wet night when the pavement shows interesting reflections.

When making night pictures, some lights may have to be included in the picture. In estimating the exposure necessary it is not so much the lights, however, as the general illumination that is important. The pictorial effect may sometimes be improved considerably, by including some of the lights.

The pictures will not show any trace of occasional passing vehicles or pedestrians during the long exposures necessary, providing they do not stop. If an automobile or trolley car approaches, the shutter should be closed or place your hand or hat momentarily in front of the lens, as any moving bright lights will show as streaks in the negative. Exposure will necessarily depend on the quantity and quality of the light and the size of the stop opening. With stop f.8 (U. S. 4) or f.11 (U. S. 8) an exposure of from one second to one minute for a well lighted subject will give very satisfactory results, with Kodak Super Sensitive Panchromatic Film. With Kodak Verichrome or Panatomic Film the exposure must be increased about three times.

Cameras with large aperture lenses such as the Kodak Pupille with its f.2 lens and the Kodak Vollenda with an f.3.5 lens permit making snapshots at night with Kodak Super Sensitive Panchromatic Film, providing that the illumination is sufficient. For instance the picture of the man in front of the shop window (made on Kodak Super Sensitive

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Panchromatic Film, exposure f.11 and 1 second) could have been made with the Kodak Pupille at f.2 and 1/25 second; and with the Kodak Vollenda at f.3.5 and 1/10 second.

The picture below of the fountain in front of the Electrical Building at the Century of Progress in Chicago, was made on Kodak Super Sensitive Panchromatic Film, exposure 3 minutes with stop f.16 (U. S. 16).

When traveling through various cities during a long auto tour, or when visiting friends in distant places, be sure to make pictures of the points of interest *after dark*—they will add very much to the interest of your collection.

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FIRES AT NIGHT

★ Fascinating as day photographs are for their volumes of swirling smoke, the night picture of a big fire has a picturesqueness of its own. They don't occur very often in any one place, but when they do it's an opportunity that should not be missed.

A big fire, whether it rages in the light of day or during the hours of darkness, presents an ever changing scene and you never can tell when or where the next spectacular disclosure will be. It is therefore best as soon as you arrive, to be ever ready, at a safe distance from the fire, to make the pictures of the impressive spectacles as they successively unfold.

At night both sky and landscape are dark and we cannot photograph dark smoke against a dark

background. We can, however, make silhouette effects of the fire itself. This can usually be done when the flames are brightly outlined against the darkness by giving an exposure of 2 or 3 seconds with a large stop opening, f.8 (U. S. 4). When making exposures with a box camera, always use the largest stop. It is necessary to place the camera on a tripod or some other firm support; do not hold the camera in your hands.

Red and orange are the predominating colors of fire, therefore, the best results will be obtained if your camera is loaded with Kodak Super Sensitive Panchromatic Film, as this film is sensitive to *all* colors and it is very rapid.

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Detailed Information GIVEN BY SERVICE DEPARTMENT

Eastman SERVICE

While we have indicated in this booklet how certain pictures of more than common interest can be made, you may wish further and more detailed information on some certain phase of photography.

The experts (practical picture makers) of the Service Department of the Eastman Kodak Company, at Rochester, N.Y., are ready at all times to give your enquiries prompt attention and to offer constructive criticism of work when desired. There is no charge—no obligation.

Service Department

EASTMAN KODAK COMPANY, Rochester, N. Y.

KODAK VERICHROME FILM

Double-Guards Your Picture-Taking Success

Verichrome has an amazing picturetaking range for night photography or daytime snapshots. It is *double*coated with two sensitive coatings in-

stead of one. In sun or shade, on bright days or dull or for making pictures at night, it doubleguards your picture-taking success.



KODAK SUPER SENSITIVE PANCHROMATIC FILM

Assures the best results for picture-taking at night. In morning or afternoon light, this extra-speed film is fully 50% faster than ordinary film; by artificial light it is three times as fast. It is completely panchromatic, double-coated and has a special backing to prevent halation.

IN THE YELLOW
BOX WITH THE
"LIGHTNING"
STRIPES

KODAK PANATOMIC FILM

Makes Big Enlargements of Fine Grain

Panatomic has a very fine grain—
it is completely panchromatic, sensitive to all colors. It is excellent for pictures at night with artificial light, as well as for daylight pictures. Invaluable in Vest Pocket and miniature cameras.



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