

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS

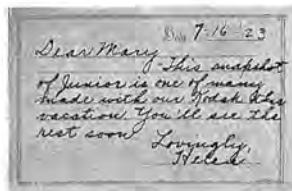


SEPTEMBER 1923



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK

*The Kodak City*



*Send back  
Snapshots in*

## Picture Message Folders

THESE neat folders hold prints either 1A or 3A size, have space for writing and can be sealed. With all the convenience of a post card, plus the privacy of a letter, they enable you to send back a few welcome words and to give, with your Kodak print, a graphic glimpse of the fun you are having.

When you get your next roll of film developed, have some extra prints made for Picture Message Folders.

*Price, 60c. dozen*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

# Kodak Cut Film

## *Super Speed*

FOR both amateurs and professionals the solution of many a difficult photographic problem is Kodak Cut Film *Super Speed*. Take for example, the picture for which a small lens aperture must be used to secure depth of focus (sharpness of distant as well as nearby objects), and yet only a fraction of a second's exposure can be given on account of movement of the objects. This is only one of the situations where Kodak Cut Film *Super Speed* gives the greatest certainty of results with the least sacrifice of desirable features in the picture.

Kodak Cut Film has the speed and latitude for the ordinary situation; Kodak Cut Film *Super Speed*, for the extraordinary one.

## Kodak Cut Film Sheath

—adapts any plate holding camera for use with Kodak Cut Film, including the Nos. 3 and 3A Kodaks, both Regular and *Special* models, when equipped with the Combination Back.

### PRICES

*Including Excise Tax*

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



CANOE ROMANCE

*Made with a Graflex, by H. Armstrong Roberts*

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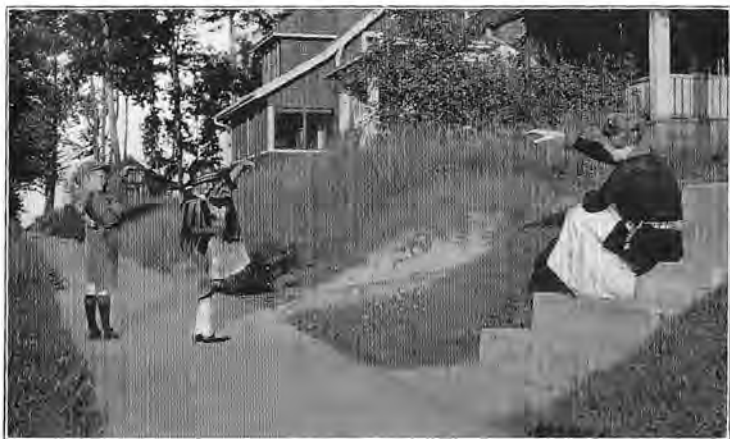


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VOL. XI

SEPTEMBER, 1923

No. 1



OFF TO SCHOOL

*No. 3A Kodak Negative*

## THE SCHOOL BELL

**D**o you know that sound? There is no other quite like it, so that you are sure to recognize it when it cuts sharply into the September air—the school bell!

There have been times when you were afraid to hear it, when if you heard it the summons would come from a distance, because you were late. There have been times (un-

less you were a very unusual person) when you were a little tired of hearing it, because it was toward the end of the season and you were all set for vacation adventures.

But after vacation!—that is another matter. Then it sounds like the good old school bell. It even has a kind of adventurous novelty. You are to get back with the old crowd and to meet all the new

faces. There may be a new teacher.

You may be going to school for the first time and *everything* may be new. Nothing that ever happens to you afterward will have quite the thrill of that. You are going to school. You are now a *person* in the world.

In this case you will go forth with a certain importance of ceremony at home. After that you will often be inspired by receiving a special sort of Good By. Even if you have become a seasoned school-goer you are pretty sure of particular attention at home on that first day of school after vacation. Big brother or big sister may be on hand with the Kodak (or maybe it might be Father—I can testify that it might be Father) to make historic record of the event.

It really is an event. The older I grow, and the more I study my own Kodak prints, the more clearly I understand that the important events of life are not by any means always the sort that seem momentous at the time. Simple moments are often wonderfully significant as we look back upon them. Of course, it is often the other way around—things that seemed important at the time of their happening have turned out to be less than we thought. But, in any case, we get the “slant” afterward and are frequently impressed in an almost startling way—yes, even by things as simple as that day we went back to school. Or, if we are mother or father, that day we saw the children start off light-heartedly.

And we turn to the date on the film, perhaps to settle an argument as to which year it was, or

which day in September that year.

It was a great year, whichever it was, a year from which happy moments shine out. Nothing like Kodak pictures to remind you of happy moments. Generally you may not need to be reminded. There is a pleasant trick about memory that it shows the happy moments very sharply and the unpleasant moments blurred a good deal. But the Kodak pictures are a help when we may be feeling not quite so well, perhaps, and we are proportionately grateful. Pictures are the best of all possible helps to memory. They give the details, exactly and vividly. They make moments live again. They take mere guesses and make them facts. They do even more than that. They give us back the past—the past of a few months ago or of years ago, so that we get a sort of special interest on the investment of living!

Does this sound like “high brow” philosophy? Well, Kodak pictures get me going. After all, they are about life, and life is so tremendously interesting!

And you see, I was born before there were any Kodaks, and I’ve been wishing I had a picture of my funny self on the day I first went to school in that little red brick school house with my lunch in a queer tin pail. I have the memory, and it is fearfully dramatic. But I’d like to have the picture.





AT THE THRESHOLD OF LIFE

*Negative made with Graflex equipped with Kodak Anastigmat Lens  
By Austin K. Hanks*



FIGURE ONE

## A SCREECH OWL NURSERY

BY HOWARD TAYLOR MIDDLETON

*Illustrated by the Author*

**F**OR several years Screecher and his spouse have nested regularly in the same old gnarled apple tree in the orchard, but it was not until this season that the writer was fortunate in timing his arrival correctly from the standpoint of juvenile portraiture.

What I was most anxious to procure was a series of pictures de-

picting, to an interesting degree, the evolution of the young owls from white downy balls to fully feathered birds.

Walt and I began operations upon a delightful morning in late summer. Arriving at the hollow tree containing Mrs. Screecher and her family, a hand was thrust cautiously down the hole, and five



FIGURE TWO

fluffy babies withdrawn, much to their mother's disapproval, for she fought fiercely with beak and claws to protect her offsprings from the seemingly ravaging camera men.

As soon as all the young birds were taken from the cavity, the opening was covered with a focusing cloth to prevent the escape of the mother, and the two largest and strongest of the fledglings posed beside the front doorway of their apple tree home. Then the camera was set up and focused upon the scene, and as the tree was in deep shadow, a flashlight portrait was decided upon. Accordingly the shutter was set for "time," and

the lens stopped down to 16 to insure sufficient depth of focus. Next, an Eastman Flash Pistol was held in the hand slightly behind and above the lens, and the cloth removed from the hole.

It was but a moment ere the horned head of Mother Owl filled the aperture, and immediately following her appearance, the shutter was opened, flash fired, and shutter closed, the three operations being performed with all possible speed. (Fig. 1.) Then the cloth was once again draped across the hole; we were not yet through with Mother Owl, you see.

Experiments very soon brought to light the fact that only three of



FIGURE THREE

the babies were lusty enough as yet to stand the strain of posing successfully before the camera, so we decided to try for a family portrait comprising Mother and a trio of her fuzzy infants. Therefore, after three of the children had been placed in a row upon an apple bough, the old bird was captured and placed near them. While it took a great deal of time and patience to induce the feathered lady to "register" the proper pose and expression, eventually she settled down sufficiently to permit of restraining hands being removed, and a portrait taken, before she darted away on silent wings through the green tree tops. (Fig. 2,  $\frac{1}{100}$  second at  $f.8$ , Kodak Cut Film, Super Speed.)

Being deeply in love with a certain type of studio portrait now much in vogue, viz: that embodying the artistic lighting effect which outlines the head of the subject with a shimmering halo, we made a close-up Graflex portrait of the young owls, taking them against

the light to produce the result desired. (Fig. 3,  $\frac{1}{40}$  second at  $f.5.6$ .)

Four days later found the young owls quite noticeably advanced toward maturity, and improvising a front verandah for the owl domicile from an overhanging branch, we took our second flashlight portrait. (Fig. 4.)

Another four days sped by, and again we called at the screech owl nursery. The downy balls had now been transformed into feathered crested birds of prey—evolution had almost run its course. In a very little while these babies would be babies no more, but winged hunters of the night, pouncing upon mice and insects with all the skill and cunning of their experienced parents, and, realizing these things, we hastened to make our final record of the owlets. (Fig. 5,  $\frac{1}{40}$  second at  $f.8$ .)

During the times we had been working with our cameras in the orchard, we kept our eyes wide open for the day-abiding place of the Lord of the owl household, and





FIGURE FOUR

made mental note of several likely spots where he might be found snoozing the *sunny* hours away.

We knew he would remain very near his wife and children, he being a bird of unquestionable reputation

in so far as his domestic relations are concerned. Mr. Screech Owl is far more careful in this particular than many humans, for he invariably mates for life, and divorce is unknown in the best owl circles.



FIGURE FIVE



FIGURE SIX

Now that our evolution series had been brought to a successful close, during the portrayal of which, Mother Owl honored us with her presence, we combed the orchard for the male of the species to make our set of pictures quite complete—and in a hollow limb at a height of ten feet, we found him.

He was far too sleepy to offer serious resistance, and we had little trouble in persuading him to perch beside his bed chamber window while the Graflex took generous toll of his charms. (Fig. 6,  $\frac{1}{25}$  second at  $f.5.6$ , sun behind a cloud bank.) We thanked him and hurried home to develop our films.



STRANDED

*Made with a No. 1A Kodak Jr.*

BREAKFAST

*Made with No. 8 Premo, by F. W. Still,  $\frac{1}{25}$  second, stop U. S. 8*

## JOE AND JERRY AND SUGGESTED MOTION

UNCLE ED was a pretty wise old chap. He remembered how, when he was a boy, he had usually expected everything to do just a little more than it could reasonably be asked to.

He recalled his habit of hoping that his pony would stand without hitching a few minutes longer than he really thought it would, of demanding wire-cutter talents in his pocket knife, of overloading his express wagon. Uncle Ed knew, therefore, that youth is optimistic and that its slogan is, "let's take a chance and see."

So when Uncle Ed sent Joe a Brownie for a birthday present he wrote:

"I've selected a simple little camera that you will find easy to use. But don't expect it to make snapshots in a cave or to catch a baseball in mid-air. Give it the work that it was intended for and you'll be tickled with the results, if you follow the directions in the manual."

With this caution in mind, Joe and his obedient pal, Jerry, had enjoyed splendid success with the Brownie.

They discovered, among other things, that even a camera whose shutter is not designed for fast action scenes can make pictures



JOE STANDS STILL, BUT THE SWAYING OF THE BODY PREPARATORY TO DIVING IS SUGGESTED

that suggest motion without the subject moving at all. The trick is to show a person *about* to do something instead of actually doing it.

Joe wanted just such a picture of himself one day when the boys

the very proud and official owner.

"I'll stand like I was going to dive in," said Joe, "and you press the lever at just the right time." He then took his position and Jerry about fifteen feet away, located him in the finder.

"Now get ready to dive."

"Click!" went the shutter.

"Let's make another for luck," Joe suggested, and "click" went the shutter again.

When the prints were ready, next afternoon, one proved to be a dandy. It showed Joe ready to jump.

But something was wrong in the other picture.

"You moved the camera," Joe accused.

"Didn't either, you moved yourself," retorted Jerry. "See, the trees are sharp, everything's sharp but you. If the camera had moved the whole picture would be blurred."

"Guess you're right," Joe agreed. "I must have been over-posed. Probably lost my balance a little. Here you can have it," claiming the good print for himself.

When Jerry showed the blurred picture at home he had to explain that it was Joe getting ready to dive.

"He's dived already, hasn't he?" asked Jerry's dad.

"Why, no, he's just going to."

"Well then, why is he shaking himself so?"



TELLTALE MOTION—JOE WAS TOO NEAR THE CAMERA TO PERMIT OF THIS KIND OF MOTION

were swimming in the park. Although the camera was really his it was used jointly by the two and Jerry knew as much about it as did

## DO YOU KNOW THAT—

EFFECTIVE pictures may frequently be made with the sun behind or well to the side of your subject, but that care should be taken that the direct rays of the sun do not strike into the lens?

A picture with a good portion of sky is invariably improved by clouds and that clouds can be recorded in the negative by using a Kodak Sky Filter or Color Filter on the lens?

An autographic record on negatives made under various light conditions is an excellent guide for future reference?

While photographing small children or animals, when the subject is on the ground, it is well to get a lower viewpoint than ordinarily and by stooping and thus lowering the camera the resulting picture will be improved?

An  $f.6.3$  lens is about 60% faster than a lens working at  $f.8$ ?

Mounting your pictures in the album with Kodak Dry Mounting Tissue will prevent buckling of the album leaves?

It is best to always fix negatives and prints in an acid fixing bath such as is prepared by using the Kodak Acid Fixing Powders?

When making several prints from one negative it is best not to attempt to develop more than two at a time?

Unless the camera is of the fixed focus type the lens should be properly focused on the *principal* object?

An enlarged negative can be made in the same manner as making an enlarged print by using a small positive and projecting the image on a sheet of Kodak Cut Film?

September is a good month for making outdoor silhouette pictures in that clouds will add to the pictorial value of the subject?



Made with 3A Kodak Special, Kodak Anastigmat Lens





A VERY YOUNG GARDENER

*Made with 3A Kodak Jr., by T. M. Green*



# BUSY

LITTLE HISTORIES OF  
IMPORTANT MOMENTS  
RECORDED WITH BROWNIE,  
KODAK AND GRAFLEX







THE MAGIC OF CHILDHOOD

*Made with No. 3 Brownie, by Mary A. Mount*

## MY GREAT-GRANDMOTHER AND MY VACATION PICTURES

BY MADGE ELLERY

THE other day when I was rummaging through the attic to find my old tennis racket for my sister Mary Ellen I ran across a bundle of letters, yellowed with age. Mother was *always* a great one for keepsakes and whether it was my business or not I slipped an envelope out of the packet and found that the letter was written by my great-grandmother. It was quite lengthy, a very complete description being given of places visited on a vacation that had been enjoyed during a summer long ago. People in those days, before Kodak

photography was invented, certainly must have had to spend a lot of time writing to friends and relatives about their good times.

Maybe I'm naturally a trifle lazy about this, but I find that a series of snapshots tells the story so completely that I don't have to write volumes—pictures tell volumes. Those that we send away of our good times, trips, vacations, and even those made from time to time around home always seem to be of real interest because we are frequently asked for more. There's Aunt Ida out in Tulsa, Okla. and

also a certain young man in Providence, R. I. who are always asking for more pictures of us and our "doings."

This year, to those two at least, I'm going to send a representative set of the pictures we've made from the beginning of the summer, and, yes, that one I made just yesterday of Bill and the new dog Dad brought him. Probably I'll get up a little album of just a few pages or some kind of a folder and title it something like, "Our Doings, Summer 1923" or maybe I'll call it "A Letter Without Words," although I suppose I'd

better put some title under each picture.

I do wish our friends and relatives would follow my example in doing this same thing. While we do get a few prints from some of them once in a while it would be nice to have a *series* of pictures occasionally, at least, from those whom we don't see much of.

I don't mind writing a few pages but I certainly never could spend the time that my great-grandmother did in telling about a vacation, especially when my Kodak can do it so much better in split seconds.



ARCH AND RIPPLES

*Made with a No. 3 Kodak*



THE STORY HOUR

No. 2C Kodak Special Negative.  
*Combination Daylight and Flashlight Exposure*





A TRUE FISH STORY

*Made with a Graflex, by H. Armstrong Roberts*

## DON'T OIL THE SHUTTER!

YOU WILL PUT YOUR CAMERA OUT OF ACTION IF YOU DO

**T**HOUGH oil is an engine's best friend, it is a bitter enemy of the photographic shutter.

Of course, bearings that are constantly in action must be lubricated; but photographic shutters are designed to work without lubrication and will only be rendered less efficient by the application of oil.

A photographic shutter is freely exposed to the temperature of the air yet is so constructed that changes in temperature will scarcely affect it. If it needed oil it would work much slower in cold than in warm weather and the photographer would never know at what speed marking to set the indicator in order to secure the correct exposure.



NUMBER ONE—*Made with a Dirty Lens*

## CLEAN LENSES FOR BRILLIANT NEGATIVES

### HOW TO TAKE CARE OF YOUR LENS

A PERSON who wears glasses knows that when they are kept clean things appear clear and easily discernible but that when they are not cleaned occasionally things begin to appear dull and misty.

This also applies to the lens in your camera and it is of course unreasonable to assume that the camera lens can see things clearly if it is not clean. This is apparent by examining the two pictures accompanying this article. Number one was made with a dirty lens which could not transmit an image having clearly defined gradations of light and shade. The outlines of images are obscured and merged into their surroundings. Picture number 2 shows the same view but made after all surfaces of the lens had been carefully cleaned. The

example we have given is extreme but similar results in various degrees will be secured depending on the condition of the lens. Carrying a Kodak for any length of time, open, with the bellows extended, on dusty streets or country roads will soon be the means of accumulating a fine layer of dust on the lens, that has been stirred up by passing vehicles.

You can examine your lens by removing the back of the camera, opening the shutter, when set for time exposure, and looking through the glasses with the camera held toward a window or bright light. In this way you can readily see if it has collected a film of dust or dirt. There is a caution which must be observed, however, if the lens is to continue to be your faithful servant; spectacle lenses are not



NUMBER TWO—Scene same as on Opposite Page, taken with Lens Properly Cleaned

nearly so sensitive to scratches as are camera lenses and the camera lens, therefore, should not be wiped too often, and neither should it be wiped before any gritty particles of dirt which have collected are first dusted off with a camel's hair brush or with the folds of a cloth.

For cleaning the lens, an old linen handkerchief, which has been laundered numerous times and become softened through this process, will be found just the thing. Where there is a sort of mist on the lens it will do no harm to breathe gently on the surfaces and then wipe carefully with a rotary motion, having two folds of the handkerchief between your fingers and the glass. Silk while a smooth fabric is harder than linen and should therefore not be employed. Alcohol, weak acids or any kind of cleaning or polishing preparations should not be used on a photo-

graphic lens. The penalty for doing so may be a damaged lens which cannot make brilliant pictures until it has been repolished by the makers.

Front and back combinations may be removed from double lenses for cleaning, but never attempt to remove the separate elements from combinations since any misplacement or damage they might receive would impair the optical properties of the lens.

Box camera lenses may be cleaned by inserting a matchstick covered with two or more thicknesses of a handkerchief through the largest diaphragm opening, when the shutter is opened, as for time exposures. The back surface may be cleaned, when there is no film in the camera, by reaching in from the back, but under no consideration should an effort be made to unscrew the lenses from box cameras. It is not necessary to clean

your lens daily but it is well to examine it once in a while to see whether it has become dirty or

foggy. A carrying case helps to a considerable degree in keeping dust out of your camera.



## EXPOSURE AND DEVELOPMENT

WITH A FEW WORDS ON "LATITUDE"

THE relation between exposure and development is a matter which should be grasped thoroughly and as early in one's photographic career as possible.

It has been said, that the secret of successful photography is correct exposure, and this is perfectly true. But even correct exposure without correct development will fail to give the best results.

Before going deeper into this subject, we must understand what is meant by "latitude." Assume for the moment that the correct exposure for a certain subject is one second. Make a negative with this exposure and then one with half-a-second, one with two seconds and one with four seconds. Develop this strip in the tank strictly in accordance with the instructions. When dry print them all on the same variety of paper.

You will probably be very surprised to find that these four prints are so exactly alike as to be indistinguishable one from the other. Yet the negatives looked very different—one was thin, one looked just right, the third was dense and the fourth very dense. The prints were alike because the scale of gradation was the same in each negative—*only the density varied.*

These negatives gave similar prints because their respective ex-

posures were within "the latitude of exposure" of the film. To put it another way: latitude of exposure is that margin of error on either side of correct exposure within which all exposures—*when correctly developed*—will yield negatives of normal gradation and will give similar prints. Their densities will of course be different.

Now let us imagine a second experiment. We will make six exposures of one subject, giving each the correct exposure, and will assume the correct development to be seven minutes. We will, however, develop the six exposures for the following times:  $2\frac{1}{2}$ , 4, 7, 10, 15, and 20 minutes respectively and print the resulting negatives on the same variety of paper.

From the negative least developed we shall get a print flat and grey, with little difference between highlight and shadow, while the print from the last negative of the series will be so harsh and contrasty as to be described as "soot and whitewash." In between these two extremes we shall have a range running from one to the other. Yet all these negatives had absolutely correct exposure.

Now return a moment to the phrase with which we started, "the secret of successful photography is correct exposure"; alter

it slightly into "the secret of successful photography is exposure within the latitude of the film," and you have a statement which is the truest and most important in the whole of photography.

The use of the tank method of developing your negatives insures correct development, as the factors have been carefully calculated and are included in the instructions.

Therefore, before exposing, consider your subject carefully, be

reasonably generous in your exposure, and do not attempt the impossible even though Kodak Film has plenty of speed and remarkable latitude.

We have seen negatives which looked as if they were snapshots taken in the middle of the night, in a cellar, of a black cat which wasn't there.

It can't be done—so, if you are wise, you will not try to do it even with an *f*.4.5 lens.



SUNLIGHT LABORS

*Kodak Negative, by Edith S. Watson*



A NATURAL  
SEAPLANE

*Enlarged from  
No. 3A Kodak Negative*

*Made by Howard C. Babb*

### LEVELING THE CAMERA

**S**ANDY, stony or boggy ground, cement walks, smooth pavements and steep hillsides are places where it is sometimes impossible to make a tripod stand straight.

The Optipod, which fits all tripods, has a ball and socket joint, with which the camera can always be leveled, no matter how much the tripod tilts.

With the Optipod the camera can also be pointed directly downward, or at any angle desired.



The picture reproduced on the cover of this month's KODAKERY was made by A. G. Hill with a Graflex,  $f.8 \frac{1}{135}$  second, noon, bright sunlight.

## SERVICE DEPARTMENT TALKS

## WHEN LOADING YOUR CAMERA

**W**HILE Kodak Roll Film and Film Packs can be loaded in daylight thus affording the advantage had in taking extra film along and reloading wherever you may be, it is well to remember the precaution given in the first section of the manual of directions which came with your camera. This refers to the advisability of either loading the camera in the shade or of standing in such a position that the direct rays of sunlight do not strike the fresh roll of film or pack when inserting into the camera. It is also well to keep the red paper on the cartridge taut so that the strip of film and its protecting paper can not slip and loosen up sufficiently to let light in around the edges thereby fogging the film.

When the end of the paper has been threaded into the slit of the empty spool just turn the winding key enough so that you are sure of the paper having a good hold. If you wind off too much paper before replacing the back of the Kodak the first section of film might be uncovered and ruined by fog. One more precaution in connection with roll films: if the paper is permitted to loosen up do not take the cartridge in the hand and wind it as tightly as possible by twisting. This "cinching" of the film is sure to cause fine parallel lines on the negatives, and it is only necessary to see that the film is wound tightly enough so that the red paper keeps well inside the flanges on the ends of the spool.

As to film packs, do not press in on the safety cover when loading into or removing from the camera, also do not, when holding the pack by the sides, between fingers and thumb, apply pressure by squeezing, as in this way light might sift in and strike the films.

Ordinary care as mentioned above when reloading outdoors is all that is required.

\* \* \* \*

Avail yourself of Kodak Service if there are any problems in your photographic work which we can help you solve—send us your negatives and prints for criticism.



Address all communications  
SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.



IN this little book there is picture-making instruction you'll be glad to get. 172 pages profusely illustrated with pictures and explanatory diagrams.



## “How to Make Good Pictures”

TREATS of the phases of amateur photography in a manner simple, understandable—and interesting.

The chapter on hand camera portraiture, for example, makes clear a branch of picture-making that will provide a fund of fun with your Kodak this summer.

Another chapter especially worth while explains exposure for many subjects and scenes you'll put in pictures while on vacation.

*Price, 40c.*

*At your dealer's*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*Kodak Keepsakes*

## ARTIST ALBUMS

Few keepsakes give greater pleasure than collections of interesting Kodak prints placed in Artist Albums.

Their attractive appearance and convenient capacity make these little albums especially suitable for remembrance gifts. They have embossed black paper covers and 10 loose leaves held in place by a cord. There are two sizes,  $5\frac{1}{2} \times 7$  inches, and  $7 \times 10$  inches, and extra leaves can be purchased in packages of five.

Make up a story-telling album of your last trip, and send it to someone who shared the fun.

## PRICES

Artist Album No. 1, $5\frac{1}{2} \times 7$	. . . . .	\$0.25
Extra leaves, package of 5	. . . . .	.09
Artist Album No. 4, $7 \times 10$	. . . . .	.35
Extra leaves, package of 5	. . . . .	.12

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City**At your dealer's*

*Use the scale to enlarge your  
picture—the focus  
sets itself*

## Kodak Auto-Focus Enlarger

ENLARGING with this easily-operated apparatus is simply a matter of placing a negative in the holder, and the camera at any point on the scale. The figures on the scale show how much larger the picture may be made—anywhere from  $1\frac{1}{2}$ , up to  $3\frac{1}{2}$ , times its original dimensions. A snapshot made with a little Vest Pocket Kodak, for example, can be made into a splendid  $5\frac{1}{4} \times 8\frac{1}{4}$  inch picture, and of course, negatives made with larger Kodaks will produce still larger pictures. The Kodak Auto-Focus Enlarger accommodates negatives of any size up to 4 x 6 inches, and the largest picture it can make is 14 x 21 inches. Whatever the size desired there is *no focusing to be done*. The enlargement is always as clear and sharp as the original negative will permit.



*Detail of Camera  
showing Scale*

Price, complete with Kodak Anastigmat Lens, negative holder,  
paper holder, set of six metal masks, electric cord and plug, but  
without Mazda Lamp . . . . . \$35.00  
(75 to 200 watt lamps may be used)

Diffusing Disc for soft focus effects . . . . . 1.00

### EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



## Kodak Diffusion Portrait Attachment

WITHOUT complicating the making of the picture, this new attachment placed over your regular lens will enable you to secure extremely pleasing effects in portraiture—close-ups that are clear and distinct, yet with just enough diffusion to soften the lines about the hair and features.

These attachments are now made in sizes to fit all of the popular models of Kodaks and Brownies.

*Price, \$1.25 and \$1.50*

*According to size*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

## Kodak Self Timer

FASTEN a Kodak Self Timer to the Cable Release and it will "push the button" for you. Not only that—it will wait for you to take your place in the picture so that the group is complete.

*Price, \$1.25*



## The Optipod

ON many occasions better pictures would result could some firm support be found for the Kodak during exposure. You will rarely fail to find such support if you carry a little Optipod in your pocket. Its arm screws into either one of the tripod sockets in your Kodak, and its clamps can be tightly fastened to almost anything from a fence to a fender.

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**VELOX** is the trade name of a paper that has long been used wherever the best prints obtainable were desired. This name now appears in light unobtrusive letters on the back of every print which is made on this superior paper. Look for "Velox" on the back.

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# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



OCTOBER 1923



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK

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ANYONE can make excellent enlargements with this apparatus, quickly, easily and without previous experience. It focuses automatically.

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WHEN a picture would be incomplete, without you in it, let a Kodak Self Timer take it for you. Attach the Timer to the cable release of your camera and it will press the button.

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Lens f.7.7 and Kodak Portrait Attachment*



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VOL. XI

OCTOBER, 1923

No. 2



THE FOUNTAINS AT VERSAILLES

*Made with 3A Kodak, f.22, 1/25 second*

## MANAGING FOREGROUNDS

BY ALBERT CRANE WALLACE

THEY do have to be managed, because they are always there—right in the front. The thing we go after—it may be a house, or a valley, or a scene of any sort—will have a space leading up to it, and that space should be made to contribute its share to the welfare of the picture.

Of course when we are thinking of a picture and not merely of a scene, that is to say, when we are thinking of the composition, of how all the lines of the objects showing in the finder build up pleasantly, we are likely to have the feeling that we begin with the foreground.

This is seldom really true, for we



THE SUN TRACK

*Made with a Premo, by W. L. Siebel*

are most likely to have a specific subject in mind, one that is not in the actual foreground. But our movements in selecting a point of view are sure to be concerned at the very beginning with that first chapter of our story which is immediately in front of us.

Of course we may be at a railway station platform with the train about to start, or in any one of many situations in which we must make a quick shot at our game. In such circumstances we may have very little choice. Even with plenty of time we may not be able to find a good foreground for our main subject. But the habit of

thinking that the foreground is important will help much.

A good foreground is important not only for the composition of a picture, but for the setting off of our particular subject. Take the case of the fountains at Versailles. The rim of figures at the bottom of the picture not only gives the picture a basis but emphasizes the softness of the spray. The tree, wall and bit of path are an effective approach to the old barn in the farm picture, and in "The Sun Track" the tracery of leaves and the full silhouette of shore help to give wideness to the stretch of water.

Reflections, by the way, are often the most charming possible approach to the "high spot" of a scene or picture. The picture of the Capitol on a wet night is an excellent example of the

beauty of reflections.

When the motion picture man chooses a "location" he is very much concerned about foregrounds, and the amateur with his Kodak has the same resources. A single figure, taken as a portrait, may be immensely enhanced by a good approach.

It is well to avoid having a foreground object so close as to be greatly out of focus. A slight softening of a foreground—as with a background—is no disadvantage. It may, indeed, add an accent to the chosen part of the picture in which the focus is sharpest. Great distances should not be



THE CAPITOL AT NIGHT

*Made with No. 9 Premo, by A. L. Streff*



ON THE FARM

*Made with 3A Kodak, f.11,  $\frac{1}{25}$  second*



THE LITTLE RIVER

*Made with a Premo, by D. H. Lansing*

attempted without a bit of foreground to give atmospheric range, even if the close objects come out in full black. To take the Grand Canon without a foreground piece of cliff or other relief is certain to rob the picture of picture quality and to diminish the effect of enormous space.



#### ABOUT LENSES

How a Lens Forms an Image and Why Cameras Have Different Kinds of Lenses are two interesting chapters in the booklet "About Lenses," a copy of which will be mailed you on request.



IN THE SALMON TRAP

*Made with 3A Kodak, f.16,  $\frac{1}{25}$  second exposure*





ILLUSTRATING "MIRROR PICTURES"

No. 3A Kodak, Rapid Rectilinear Lens, Combination  
Daylight and Flashlight exposure

## MIRROR PICTURES

### HOW TO OBTAIN SHARP IMAGES

EDITOR'S NOTE: *The procedure described below applies to all kinds of mirrors, whether silvered glass, metal or water.*

IT is very natural to suppose when taking a picture of an object reflected in a mirror that the lens should be set at the distance mark on the focusing scale which agrees with the distance between the mirror and the lens. In other words it is usually thought that focusing on reflected images need be done no differently than when focusing on the object itself. If however you should place your camera so that the lens would be 10 feet from the mirror and then set the focus pointer on the 10 foot mark, as ordinarily, the reflected image would not be sharp on the negative except if the subject were placed right against the mirror.

The focus should be adjusted, not for the distance from the eye to the reflector, but for the distance from the eye to the reflector *plus* the distance from the reflector to the object.

Therefore if your camera is placed 10 feet from a mirror to photograph the image it reflects it is necessary to add to this distance the number of feet between the subject and the mirror. This may be anywhere from 1 to say 15 feet depending on how much of the subject is to be shown in the mirror. When making the picture reproduced on page 8 the camera was just 10 feet from the mirror and the subject about 2 feet from it so the distance pointer was

set at the 12 foot mark on the scale. This of course provided for securing a sharp image in the mirror but one other important point must be taken into consideration when the subject itself is to be included in the picture. It is not difficult to see in the above example that if the distance from lens to mirror was 10 feet and from mirror to subject 2 feet that the subject must then have been but *eight* feet from the lens. But to get the reflected image sharp we had to focus the lens for 12 feet and consequently to get the figure of the subject itself also reasonably sharp we must stop the lens down, it now being only a problem in depth of focus. A No. 3A Kodak with rapid rectilinear lens was used in making the picture. By referring to the depth of focus table in the manual it was found that when the focus pointer was set on the 12 foot mark everything from 9 feet to 18 feet from the lens would be sharp provided the lens was stopped down to U. S. 32 (f.22). Considering that his subject was 8 feet from the lens the photographer moved the diaphragm pointer just a little beyond 32 and obtained sufficient detail in the dress to make a very nicely balanced picture and secure a very sharp reflected image.

As to exposure for such pictures this of course depends on existing light conditions and how far it may

be necessary to stop down the lens. The farther away we work from mirror and subject the greater will be the depth of focus at a given diaphragm opening and the larger the lens opening permissible to use to get the desired depth the shorter may be the exposure. When making the picture reproduced a combination daylight and flashlight exposure was given and this will be found a decided advantage in any case of the kind where it is necessary to stop the lens down considerably. To the right of the subject there was a moderate sized window but this was too far in back of the figure to sufficiently illuminate the face so that the reflected image would be brilliant in the negative. To overcome this, arrangements were made to make a flash to the left of the figure,

enough to the front and also low enough to throw the volume of light up under the hat into the face. Care was taken of course that the flash would be well out of range of the lens. The subject stepped into place assuming the position decided upon, the cable release was pressed, after setting the shutter for "time," and an exposure of about three seconds given before igniting a No. 3 Eastman Flash Sheet to the left of the figure as mentioned above. As soon as possible after the flash the shutter was closed. The subject having been cautioned not to move until this had been done.

The short exposure given before the flash was made produced just what highlight was needed to the right of the face and back of the figure.



THE FISHING FLEET

Made with No. 1A Kodak,  $f.16$ ,  $\frac{1}{25}$  second



TWO  
ADVENTURES  
IN  
HAIR  
CUTTING

IN AMERICA  
*Made with No. 2A Brownie*



IN INDIA  
*Made with a Graflex*



BOTH IN THE SAME BOAT!

## THE DARTMOUTH SUBMARINE

THIS surely looks like a new thriller in water sports but you are justified in asking why the men didn't put on bathing suits when doing such a stunt. Strange as it may seem the paddlers who are shown calmly guiding their canoe under the water were not even damp when they stepped on shore. Another odd feature about this picture is that the men sitting on the bank are the same two who are the actors in the "marvelous" submarine feat. You've guessed it—our old hoodoo double-exposure is the answer. The making of the two exposures on one section of the film was not done intentionally and the resulting picture is, of course, of value only as a curiosity.

A novel effect like the one above is seldom obtained when we do make a double exposure and all that we get is a grand hodge-podge of images—one overlapping the other, thus losing two pictures and wasting a section of film.

The picture or pictures were taken by a Dartmouth college man during high water at Hanover, N. H. While he secured an interesting picture by not turning the film it was purely luck. The thing to do to prevent losing pictures and wasting film is to immediately turn the film to the next number when an exposure has been made even if we do not intend to make other pictures for some time.

If you are using a camera equipped with the autographic attachment this also can be used as an aid in preventing double exposure. If you always write the date or other data on the film just after making a picture and then by chance fail to turn the key to bring the next number in sight, you can readily determine as to whether or not you did turn the film by opening the autographic door and seeing if your records for the last picture are within the slot opening.



PRIEST'S TOMB AT AGRA, INDIA

*Made with a Graflex*

NUMBER ONE—*Kodak Negative*

## TWO PICTURES

"Now look this way, dear."

"Click" goes the shutter and the result is a very nice picture of a little girl staring out into space. Picture 1.

"Don't bother about me, Peggy. Go right ahead with your doll."

And then in a few minutes when Peggy has lost the self-conscious look that the sight of the camera

NUMBER TWO—*Kodak Negative*

inspired, press the button and, instead of a little girl looking at the lens, you have, in Peggy dressing her doll, a story of childhood that you'll treasure. Picture 2.

There are times, of course, when you will want full face pictures, but particularly with children, exposures of which they are quite unconscious are usually the best of all.



LINES OF BEAUTY

*Made with a Graflex, by H. Armstrong Roberts*





ON OUT-D

VARIOUS HAPPY  
REPORTED BY KOD



# DOOR DAYS

PPY ADVENTURES  
KODAK AND GRAFLEX





NUMBER ONE—Gray Clouds, no filter required, *f.16,  $\frac{1}{50}$  second*

### HOW TO RECORD THE CLOUDS

“**H**ow can I make pictures of landscapes in which the clouds will show?” This question is asked in many letters received by our Service Department and it is evidence that large numbers of camera users appreciate the pictorial value of clouds in a picture.

Why some photographers do not always succeed in recording the cloud forms is probably because a filter is not used when needed or is used when it is not needed.

All clouds that are clearly outlined against the sky can be so recorded on the film that both clouds and landscape will appear in the print and it is not at all difficult to determine when and when not to use a filter if we understand the effect a filter has on the light that records images on the film.

Daylight, which is white light, is composed of all colors. All films and plates are more sensitive to the blue in white light than to any of the other colors which go to make up white light. This is the reason why, when no filter is used and all the blue in white light is allowed to reach all parts of the film, the blue sky, being over-exposed, will reproduce in as light a tone as will white clouds, whenever the exposure is long enough for recording detail in nearby landscape objects.

But, while negative materials are more sensitive to blue than to any of the other colors of which white light is composed they are not quite as sensitive to the blue, as they are to white light itself which contains all colors. It is because of this fact that pictures of distant landscapes, which only require

short exposures and in which the blue does not have time to over-record, can be made without a filter and still show the landscape and also the white clouds in the blue sky, at times when the atmosphere is free from haze.

In order to record detail in a *nearby* landscape, however, we must give a longer exposure than is needed for distant landscapes, and so the only way we can record the white clouds, the blue sky and detail in the nearby landscape, is by using a filter which will prevent some of the blue from reaching the film.

There is seldom any advantage in using a filter for gray clouds, because gray will photograph gray both with and without a filter.

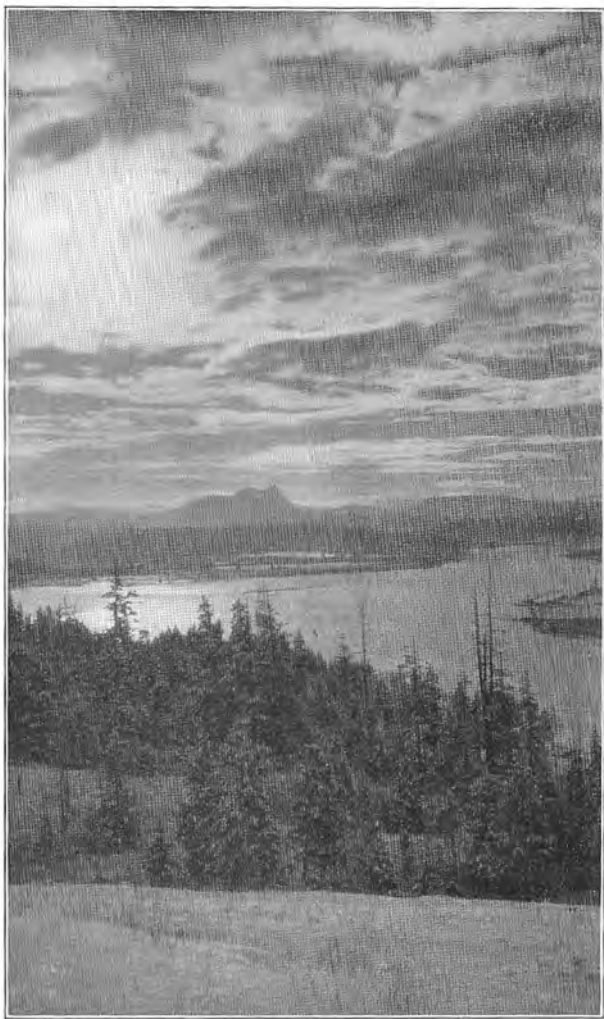
Should gray clouds be outlined against a blue sky, a filter would prove a detriment, for it would make the blue sky photograph in the same, or in nearly the same tone as the gray clouds.

No filter is needed for recording the yellow, orange and red tinted clouds we so often see in the western sky in late afternoon during the summer and autumn months.

Two types of filters are recommended for landscape photography. These are known as color filters and sky filters. Both the Kodak Color Filter and the Wratten K-2 Filter are orthochromatic filters. The only difference between them is in the depth of the color, the K-2 being a deeper yellow than the Kodak Filter.



NUMBER TWO—Kodak sky filter aided in recording the fleecy white clouds, *f.16*,  $\frac{1}{25}$  second



NUMBER THREE—*Made with Kodak Color Filter over  
lens, U. S. 64,  $\frac{1}{2}$  second*

The Kodak Sky Filter is not an orthochromatic filter. Only one-half of this filter is colored, the other half being plain glass. Its function is, not to change the color of all the light that reaches the film, but to reduce the intensity of the light from the sky. The filter is placed in front of the lens, in such a position that the light from the sky will pass through the colored portion while the light from the landscape passes through the plain glass and thus overexposure for the sky and underexposure for the landscape are prevented. It is recommended that the exposure with the Sky Filter should be twice as long as would be given without it, but for ordinary landscape exposures and for photographing distant landscapes, photographers often prefer the results that are obtained when the same exposure is given with the Kodak Sky Filter as would be given without it.

The exposure with the Kodak Color Filter must be seven times as long and with the K-2 filter twenty times as long as is needed when no filter is used. It should be remembered however that under given light conditions, the distant landscape requires only half the exposure demanded by nearby landscapes. This does not mean however that the filter factor which is a fixed quantity, should be reduced for distance work.

No. 1 of our illustrations shows the result of photographing, without a filter, a landscape with an open foreground, in which detail is not so essential, at a time when the air was free from haze. This is a

good example of recording gray clouds with a snapshot exposure without a filter. Notice how the silhouetted forms of the trees add to the attractiveness of this view.

Illustration No. 2 shows how easy it is to record those fleecy white clouds in a blue sky by using a Kodak Sky Filter and making a snapshot exposure. This is not, however, the kind of a view that shows the full advantage of the Sky Filter, there being a water foreground, which reflected considerable light, instead of an expanse of landscape made up chiefly of shades of green and brown. Also because of the strong light coming from the rear of the trees and hills there is practically no shadow detail in the picture. The photograph presents however, an excellent example of the pictorial value of clouds, for without them the picture would be rather weak and uninteresting.

Some of the clouds shown in illustration No. 3 could have been recorded without a filter, although not to the extent to which they appear in the picture. The Kodak Color Filter helped to register the small white veil-like cloud forms near the horizon and aided considerably in recording the hills and mountain tops in the distance, which were obscured to some extent by haze and would have blended into the sky had no filter or too light a filter been used. This photograph well illustrates the advantages of the Kodak Color Filter. The K-2 would have cut out still more of the haze while the Sky Filter would have produced

scarcely any effect on this haze. From the foregoing discussion we can readily sift out these easily remembered points:

No filter need be used for gray or color-tinted clouds, but a sky filter or a color filter should ordinarily be used for white clouds in a blue sky. A filter is of value in ordinary landscape work, and is a help

in recording distant landscapes. When blue or purple haze can be seen in the distance, a color filter is needed, and for this purpose the Wratten K-2 is recommended, because it is of a deeper yellow and will cut out even more haze than the Kodak Color Filter, although the latter is a good general purpose filter.



*Graftex Negative—Made by J. C. Youenes*



*Made with No. 3 Kodak, f.7.7 Anastigmat Lens  
and Kodak Portrait Attachment*

#### DO YOU KNOW THAT—

**F**INGER marks on negatives often show up in the print and that it is always best to hold the negative so that the fingers do not extend past the margin into the picture area?

Making enlargements from your favorite last summer's negatives is a great pastime for some of those fall and winter evenings?

When your learned photographic friend refers to "latent image" he means the invisible image which

is recorded on the sensitive film by the action of light entering through the lens and that this *invisible* image is made *visible* when the film is placed in the developer?

Highlights are the brightly lighted parts of the subject, consequently the denser parts of a negative and the lighter portions in the print?

A permanent record of that Hallowe'en party can be obtained by making a flashlight picture?

You can get much better pictures of the children if you let them do the posing rather than trying yourself to "arrange" them just so and continually "don'ting" them?

You will not get that "stary" look in your subject's eyes if you leave the lights on in the room where you are making flashlight portraits or groups?

Photographic silhouettes can be made by any kind of light that is strong enough for making a negative, although the surest and easiest way is by flashlight?

Your camera and your eye are quite similar in their relative functions, the lens of the eye, in front of which there is a diaphragm called the iris, transmitting the image of the subject to the "sensitive film" or retina at the back of the eye?





SHOT NUMBER ONE

*Snapshot with Largest Stop Opening in Front of Lens*

### JOE AND JERRY TAKE THREE SHOTS

WHEN word came that Joe's Uncle Ed was coming Friday to spend a week hunting, the boys' joyful anticipation of the event combined their gratitude for the box-type Brownie which he had provided and their hope that they might be appointed to his sporting entourage for the week-end.

And sure enough, before he'd been at the house an hour he suggested that the boys go to camp with him that night and bring back some ducks Sunday morning. So they boarded the evening local for Ferry Point.

Uncle Ed began at once a lecture on duck hunting, bird by bird. Dress, habits and relative edibility of canvasback, widgeon, mallard, red head and teal were described in turn and he wound up by calling

the spoonbill, "the lowbrow, black-sheep, runt, and sucker among ducks, scarcely worth a dram of powder." Then he, too, dozed off, half an hour behind the boys' schedule.

From Ferry Point they drove twelve miles in the dark, for which period Uncle Ed chose as his text the absolute necessity of keeping out of sight, and still as a mouse, whenever a flight of duck approached. So, all in all, the boys got quite a bit of sleep and were wide awake for the daylight shoot, which netted eight birds.

Other hunters at the cabin looked askance at Uncle Ed's dog, Rex. He was a pointer, with a keen nose for quail but quite indifferent to duck. Uncle Ed, however, said Rex was a regular part of his hunting outfit and belonged with him.



SHOT NUMBER TWO

*Snapshot with Second or Middle Stop Opening in Front of Lens*

The upshot of it was that after breakfast he and the boys and the dog set out alone for another marsh a few miles away, where a fine

patch of wild rice alongside a drainage ditch looked like a good feeding ground. For small boys in bulky rubber boots a few miles is a



SHOT NUMBER THREE

*Snapshot with Third or Smallest Stop Opening in Front of Lens*

long way through swamp grass and sinkholes. So when they finally reached the spot they thought the sky should be black with birds. But not so. They waited an hour before anything showed up. Then a flight of mallards settled about a hundred and fifty yards away—too far for a shot.

"They'll come right over us after they've fed a while on that wild rice," said Uncle Ed in a stage whisper. "Be quiet, boys."

And quiet they were—for hours it seemed.

They finished their second roll of film by taking another snapshot of Uncle Ed, already the most photographed man in the state for that day. Then, after removing the roll, Jerry proposed:

"Let's just see why the manual says to use only the biggest stop for average snapshots. What happens when you change the stop slide?"

Joe pulled out the time slide and pressed the exposure lever, disclosing the opening through which the light passes before it strikes the lens. Then he pulled out the stop slide to show the second, or middle sized opening, and the third, which was still smaller.

"Nothing mysterious about it, is there?" asked Joe. "The biggest opening lets in the most light and quite a bit is needed for a snapshot, of course."

"I'd just like to see how much difference it makes in the picture, though. Let's load 'er up and expose three films, one for each stop."

So Uncle Ed became the target for three more shots with the Brownie—a complete assortment

to prove that the manual's suggestion was right. Then they resumed the busy occupation of waiting for the ducks to stop feeding and start flying.

All the prints were on exhibition at Joe's house a week later when Uncle Ed came back to town. Of course those made with the second and third stops were under-exposed.

"Why are they so dull?" asked the hunter. And then, although the three exposures had consumed only a couple of minutes, Joe, suddenly inspired, answered:

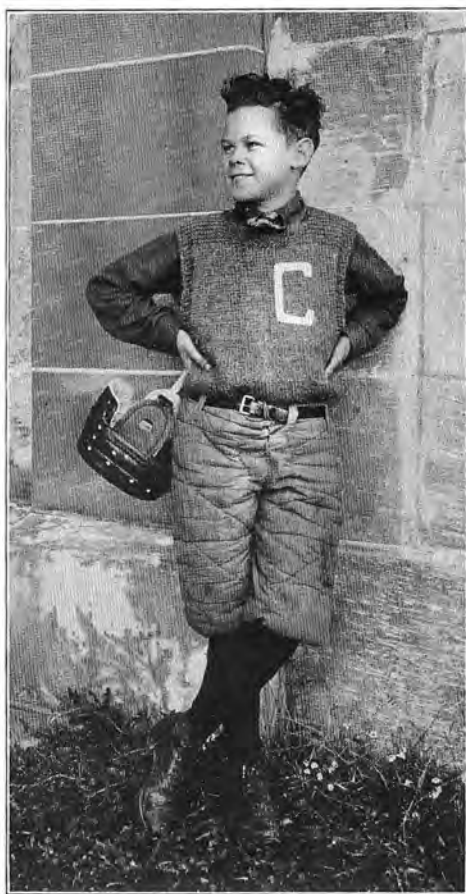
"We made a snapshot every two hours while you were waiting for a gunshot at those mallards, and the sun kept getting dimmer."

"Why didn't you shoot sooner?" asked Joe's sister of Uncle Ed.

"Aw, he was afraid of scaring the wild rice," Jerry explained.



*No. 2 Brownie Negative*



THE NEW QUARTERBACK  
*Made with a 3A Kodak*

## KODAK SERVICE

**W**HEN you purchase goods of our manufacture you establish a claim which entitles you to the service we extend to all photographers.

If you are a beginner in photography and desire information, or if you are an experienced worker and wish to undertake a kind of photographic work with which you are not familiar, write to us. We shall be glad to assist you.

One of the functions of our Service Department is to assist those who wish to make better pictures, and this service, like all other Kodak service, is rendered free of charge.



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It takes only a pleasant half-hour every now and then to keep your Kodak Album up to date—ready to be shown and enjoyed.

Handy conveniences are a Kodak Trimming Board, a tube of Kodak Photo Paste and a Kodak Print Roller. Trim to the best proportion—spread the paste with the bevelled nozzle of the tube—press the print firmly into place with the roller. Then enter a few dates and titles, verified from your autographed negatives, and slip the negatives in proper sequence, into your negative album. Your photographic diary is complete—a storehouse of happy memories.

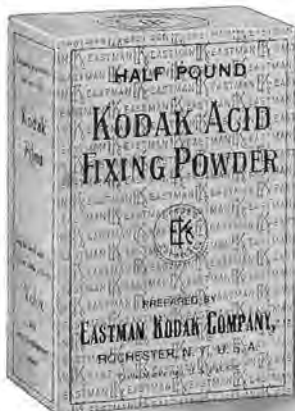
### PRICES

Kodak Albums . . . . .	\$0.25 up
Eastman Film Negative Albums . . . . .	\$1.00, 1.25 and 1.50
Kodak Trimming Boards . . . . .	\$0.75 and 1.00
Kodak Photo Paste, 2 oz. tube . . . . .	\$0.15
Kodak Print Roller . . . . .	\$1.00

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



“ \* \* \* it is probable that no part or process of photography is more abused than that of correctly preparing a fixing bath and properly fixing prints. To secure permanency, prints must be fixed in a fresh, acid fixing bath.”

—THE VELOX BOOK

## Kodak Acid Fixing Powder

Put up in  $\frac{1}{4}$ -,  $\frac{1}{2}$ - and 1-pound packages this powder is convenient for quick preparation of a *fresh* fixing bath of amount just suitable for the quantity of work in hand—16, 32 or 64 ounces. Simply dissolve the contents of package in water as directed and the bath is ready—properly prepared with clean, pure hypo and the *correct* amount of acid for hardening.

### PRICE

Kodak Acid Fixing Powder, per pound package . . . . .	\$0.25
Ditto, per $\frac{1}{2}$ -pound package . . . . .	.15
Ditto, per $\frac{1}{4}$ -pound package . . . . .	.10

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*At your dealer's*

*Shorter exposures are possible with*



## A Combination Back and Kodak Cut Film *Super Speed*

A Combination Back which may be put on any No. 3 or 3A Autographic Kodak—regular or special model—in place of the regular Autographic Back. Accommodates plate holders and ground glass focusing panel.

Kodak Cut Film may be used conveniently in these plate holders by means of Kodak Cut Film Sheaths, which hold the film in place. The *Super Speed* emulsion obtainable in Kodak Cut Film makes possible the taking of pictures with considerably less than the usual exposure and this additional speed is frequently required for results.

### PRICES

Combination Back with Ground Glass for Nos. 3 or 3A "Regular,"	\$4.00
Ditto, for No. 3 <i>Special</i> . . . . .	4.50
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Double Plate Holders for any of above, each . . . . .	1.50
Kodak Cut Film, dozen . . . . . $3\frac{1}{4} \times 4\frac{1}{4}$ , \$0.67	$3\frac{1}{4} \times 5\frac{1}{2}$ , \$0.93
Kodak Cut Film, <i>Super Speed</i> . . . . . $3\frac{1}{4} \times 4\frac{1}{4}$ , .77	$3\frac{1}{4} \times 5\frac{1}{2}$ , 1.03

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



## Supplementary Lenses for Different Effects

### Kodak Portrait Attachment



### Kodak Diffusion Portrait Attachment

THE capacity of your camera for making portraits and "close-ups" is greatly increased by these little attachments, either of which can be slipped over your regular lens in an instant. Without altering the exposure requirements of the picture, they permit working at short range—within three feet of the subject, for example—and produce correspondingly large images.

THE *Kodak Portrait Attachment* renders the subject *sharply*, and is invaluable for making pictures of small objects, flowers, etc., or for head-and-shoulder portraits.

#### PRICE

Any Size . . . . . \$0.75

THE *Kodak Diffusion Portrait Attachment* renders the subject in *soft focus*. Without destroying details, it pleasingly relieves harsh lines and highlights as in the most artistic portraiture.

#### PRICE

According to Size . . . \$1.25 or \$1.50

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*If it isn't an Eastman, it isn't a Kodak*

# No. 1A Autographic Kodak *Special* with Kodamatic Shutter and Kodak Anastigmat Lens *f.6.3*



A feature of the *Special* Kodaks is the Kodamatic Shutter, shown above, which is not only exceedingly accurate but through its exposure scale gives you the correct timing at a glance.

INTO this latest product of the Kodak factories, the new 1A *Special*, making the popular sized picture,  $2\frac{1}{2} \times 4\frac{1}{4}$  inches, has gone all the skill, all the experience that the largest photographic organization in the world has at its command.



Kodamatic Shutter, Eastman-made, has seven snapshot speeds— $\frac{1}{200}$  to  $\frac{1}{2}$  second, an unusually wide range.

Kodak Anastigmat Lens *f.6.3*, Eastman-made, is a fast lens and accordingly increases the number of picture opportunities with which this *Special* Kodak can successfully cope.

*Price \$60 at your dealer's*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*Look for "Velox" on the Back*



*For Certainty  
of Value*

When you find the trade name

**VELOX**

on the back of your prints you  
are certain that you have re-  
ceived full value in the quality  
of paper used for your finishing.  
No better paper for printing  
from amateur negatives is made.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*Ask your Dealer*

# KODAKERY

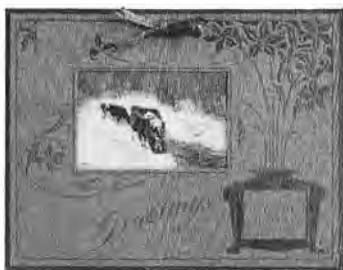
A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



NOVEMBER 1923



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*



*Let*

## Kodak Calendars convey your Christmas Greetings

A Kodak Calendar carries just the personal touch that brings a smile of pleasure to the recipient on Christmas day.

Get the prints made now and select the calendars at your dealer's. A grey envelope goes with each.

### *Prices*

Horizontal or Vertical,  $5\frac{1}{4} \times 6\frac{3}{8}$ , for  
Vest Pocket or  $2\frac{1}{4} \times 3\frac{1}{4}$  prints . . . 20 cents each

Horizontal or Vertical,  $7 \times 8\frac{3}{4}$ , for  
1A or 3A prints . . . . . 25 cents each

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



FROM a Kodak negative made "close-up" with a Kodak Portrait Attachment.

## Kodak Close-ups

SLIP a Kodak Portrait Attachment over the regular lens and your Kodak is brought into sharp focus at arm's length.

You are then ready for informal portraits, for close-ups of flowers and of other objects too small to dominate the picture when photographed in the ordinary way.

Ask your dealer for a free copy of the booklet "At Home with the Kodak"

*Kodak Portrait Attachment, 75c.*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



POPOCATEPETL, FROM SACRO MONTE, MEXICO

*Made with 3A Kodak, stop f.22,  $\frac{1}{25}$  second exposure, by Francisco de la Llave*



PUBLISHED MONTHLY - YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

NOVEMBER, 1923

No. 3



*A Story-Telling Close-Up Picture; enlarged from Vest Pocket Kodak Negative*

## KODAK CLOSE-UPS

WITH SEVEN SUGGESTIONS FOR MAKING THEM

ALL of us like to see an occasional close-up of our favorite movie actress or actor on the big screen and similar intimate, large-image Kodak pictures are also especially attractive. These can easily be obtained with even the humblest box Brownie camera by simply placing an extra

inexpensive lens over the regular camera lens. This extra lens, the Kodak Portrait Attachment, permits working within arm's length of the subject so that a considerably larger image than ordinary is secured. No change in exposure is required when using the Portrait Attachment and it is only necessary to have the subject at the exact distance from the lens that is



specified in the brief directions furnished with each attachment and included in your camera manual.

A little experimenting to get pleasing lighting effects will be needed but once you have learned what to look for it will not be difficult to determine how to handle each individual subject. If when making close-ups you will bear in mind the following seven points you should be rewarded with some much-prized pictures for your album.

*Position of Subject*—When making single-figure ordinary portraits place subject about three feet from a window and turn the face towards the camera until desired position is secured. To get the exact viewpoint as seen by the lens stand directly in front of the camera, stooping so that your eyes are on a level with the lens. It is generally best to have one shoulder of the subject show more prominently than the other. Notice our illustrations.

*Use of Reflector*—Unless there is sufficient light coming from the opposite side of the room to illuminate the side of the face away from the window it will be necessary to use a reflector of some kind on that side to reduce the heavy shadows. A sheet or any white cloth will answer, and can be placed far enough from the subject to give the



*Made without Kodak Portrait Attachment  
No. 1A Series II Pocket Kodak  
(See opposite page)*

proper modeling to the features; about two feet away will be right in most cases.

*Position of Camera*—The camera should be about on a level with the eyes of the subject and placed of course on a tripod or some steady support such as a table. Do not point the camera directly at the light.

*Eyes*—If you want a picture in which the subject will be looking at you, in the print, have the subject look at the lens or an object that is



*A Kodak Portrait Attachment Close-Up of the little group on the opposite page  
The same Kodak was used but the distance was cut to  $3\frac{1}{2}$  feet  
and the picture made horizontally*

about at the same level as the lens, as in the illustration on page 7. It is not always necessary however to have your subject look directly at the camera especially if you are making a story-telling picture as in the other illustrations.

**Backgrounds**—The walls or draperies in the home generally provide suitable backgrounds if they do not contain designs that are very conspicuous. Watch, however, to see that there is no object directly in back of the subject that might detract or look peculiar in the picture. For example, in the lower illustration on page 6, the picture on the wall might better have been moved away from the head a trifle. Also in the picture at the top of this page the mirror might have been moved up.

**Posing**—The less posing attempted the better the likeness is

apt to be. As a rule it is better to "pose" the chair in which the subject is to sit, especially with children, then let the sitter assume a characteristic attitude. Don't "fuss" around after the subject is seated but make your series of exposures as soon as possible, merely suggesting slight changes of position to get somewhat different effects if desired.

**Exposure**—On sunny days indoors an exposure as short as one-fifth second with an  $f.6.3$  lens, wide open, can be made if the subject is not more than three feet from the window and the sun is on the side of the house where you are working. On bright days the exposure with rapid rectilinear or anastigmat lenses  $f.8$ ,  $f.7.7$  or  $f.6.3$  will range from 1 to 3 seconds with the largest stop. With single lens cameras the exposures will be from



*Without Kodak Portrait Attachment  
Made with Vest Pocket Kodak Special*

2 to 6 seconds with the largest stop.

The above seven points refer to portraiture indoors by daylight and give, we think, all that is needed to get good pictures, although experience will teach much, permitting variations in lightings, exposures, and positions.

Pleasing close-ups can likewise be obtained out of doors. When portraits are made out of doors, if the sun is shining brightly, have the subject in the shade of a building or a large tree, but with clear and unobstructed sky overhead,—then place the camera on a tripod or some other solid support, use a small stop opening, and make a very short time exposure. By following this rule unpleasant and distorting shadows on the face will be avoided.

The flashlight method of portrai-

ture is also easy and provides a means of making pictures in but a fraction of a second.

EDITOR'S NOTE: In this article we have referred only to close-up portraits but the uses of the Kodak Portrait Attachment do not end here as is apparent by the illustrations in the article Variety in Your Album. See page 18.



#### ON REQUEST

"At Home With the Kodak," a 32-page booklet, goes into considerable detail about home portraiture. A copy can be obtained from your dealer or direct on request.

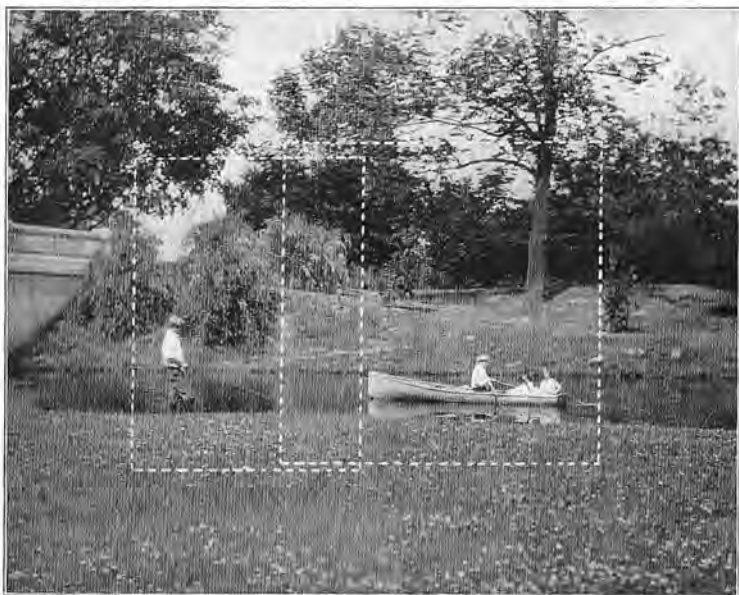


*The Close-Up with Kodak Portrait  
Attachment*



**A KODAK DIFFUSION PORTRAIT ATTACHMENT CLOSE-UP**

*This attachment is similar to the regular Portrait Attachment except that instead of a sharp image the focus is diffused, giving pleasingly soft lines*



*The Original Picture showing possibilities of sub-division*

## PICTURES WITHIN PICTURES

### HOW TO FIND THEM

**H**AVE you ever looked at a picture in which the interest was divided between two or more subjects? Your eye wandered from one section to another on the print because there seemed to be no one definite or principal object to hold the attention.

When looking through your negatives or prints with a view to picking those from which you would like enlargements do not select only the pictures which at a glance you consider have good composition or unusual interest. Study each of them carefully and

you may be surprised to see that several which did not impress you particularly as complete pictures present great possibilities for enlarging from parts of them. Thus you may find two or more pictures within a picture, and each of them will probably be more pleasing than the original print.

The picture we have used to illustrate this point is a fair example, although in this case the view as a whole is quite pleasing, even though the interest is divided between the boy on the bank fishing and the boat in the stream.

*Enlargements  
from  
Two  
Sections  
of  
Original  
Picture  
Shown on  
Opposite  
Page*



In each of the enlargements on this page, the subject is quite simple, showing a principal object to which the surroundings are subordinated. This is a start in training yourself to know the fundamentals of composition and though it is unnecessary to study the very indefinite "laws" of the subject it is advantageous to cultivate an eye for a well balanced picture.

A third enlargement might be made from the landscape shown in the upper part of the original picture.

The easiest method of selecting choice bits from

pictures of the kind we have been discussing is to cut two L-shaped pieces of card and lay them on the print as a frame, then by moving the cards you can isolate any portion of the picture and readily decide just what parts will make good enlargements.

Do not consider that the above suggestions are written only for those who do their own enlarging,

as any amateur finisher would make enlargements from parts of a negative if you would furnish him a print outlined as in our first illustration.

On this page and the page opposite are pictures illustrating the simple selection of the most interesting feature of a scene for the purpose of picture-making. The enlargement on the right hand page shows how the story-telling element of a negative may be emphasized, how the "human interest" part may be made more vivid and attractive. Thus one picture is really a quotation from the other and is a reminder of how much emphasis is given to what remains by what is cut away.

Look for the Pictures in your Pictures!



*From Original Negative of the Woodpath*



#### GET IN THE PICTURE

After you have composed the picture, set the shutter for a snapshot and have taken your position in the group, or want to make a close-up portrait of yourself with Kodak Portrait Attachment, the Kodak Self Timer will make the exposure. It fits all cable releases.



*Enlargement from part of the Original Picture shown opposite*





AFTERNOON TEA

*Made with a 2C Kodak Special, f.16, 1/2 second*

### DO YOU KNOW THAT—

**I**F the perspective of a view is not pleasing to the eye it will not be pleasing in the picture and that perspective is determined by the point of view from which the lens makes the picture?

With a tube of Eastman Intensifier and a package of No. 4 (Contrast) Velox you can get a satisfactory print from a badly underdeveloped or a somewhat underexposed and flat negative?

Depth of focus is the distance from the nearest to the farthest objects that appear sharp in the negative or print and that there is a depth of focus table in each camera manual which shows just what can be expected in this respect with the lens on that camera?

If development of a negative is carried too far some of the parts not affected by light will be acted upon by the developer, causing a veil (known as chemical fog) over the whole negative and that by using a tank with the time and temperature method this can not happen?

Simple costumes on the children make the best photographs and that youngsters also feel more at ease when dressed simply?

You need no artistic skill to color your prints or enlargements with Velox Transparent Water Color Stamps?

The manual that came with your camera tells you how to make interior pictures?



JAPANESE LADY AT HER TOILET

*From No. 2 Brownie Negative, by Masaichi Ishizuka*

## TANK DEVELOPMENT

### ANSWERING AN OFTEN-REPEATED QUESTION

#### *The Question:*

*How can each exposure on a roll of film be developed to best advantage in a tank if some of the negatives are under-exposed, some properly exposed, and others over-exposed?*

#### *The Answer:*

Experience has proved that the quality of the negative is determined solely by the time of exposure, and no manipulation nor special treatment during development can alter it.

Error in exposure, within the average range, has been provided for by the great latitude of Kodak Film. Considerable variation either

way from the normal exposure will only result in different degrees of density, not contrast, and prints from negatives of different density can be made equal in quality by simply varying the printing time.

The foundation of the tank system is this: development in a solution of known strength, for a given length of time, and at a standard temperature.

Every exposed film must be either under-exposed, normally exposed or over-exposed. If it has been under-exposed a dilute developer with long development, which is the tank theory, will produce the best possible negative; if normally exposed, a similar developer will also give a superior negative, one with better gradations, than if the stronger or more concentrated tray developer is used, while if the film has been over-exposed the dilute developer becomes a necessity if the negative is to be saved.

As stated above the negatives so produced will vary somewhat in printing density, as they would if properly tray-developed, but will produce normal prints by simply varying the printing time.

Tank development, or any other method, will not produce a good negative from a hopeless under-exposure, nor from a hopeless over-exposure, but it will absolutely produce the highest average of good printing negatives from any and all exposures within the limits of the latitude of the film or plate. There you have it in a nut shell.

Now let us sum up the advantages of the tank method. Developing with the tank is simplest and results are certain because they depend solely on conditions which anyone can control. Tray development is not so simple and its results are not so certain because they are influenced by conditions which cannot readily be controlled.

The photographer who develops negatives in the tray must do so in a room that is totally dark.

In order to be sure of obtaining

correctly developed negatives by tray development it is necessary (1) always to use the same kind of developer, (2) always to have the developer at the same temperature, (3) to use a dark-room light that is always of the same strength, and (4) to be able to accurately judge, from acquired experience in developing negatives, when to stop development.

In tray development these four factors must be kept constant in order to insure correct development. The first three mentioned can be kept from varying, but it is practically impossible for the amateur to keep the fourth factor constant.

In tank development of roll films no dark-room is needed. When prepared tank developer powders are used in the tanks for which they are intended, there are but two factors to consider: These are (1) the temperature of the developer, and (2) the length of time to develop.

Since any amateur photographer can easily keep these two factors constant, he can, if he uses a tank and carefully follows the instructions that are furnished with the tank, obtain correctly developed negatives every time and get the best that is possible out of all kinds of exposures.

The experience is in the tank.





OLD CITY GATE, TURCKHEIM, GERMANY

*Made with No. 3A Kodak, f.22,  $\frac{1}{5}$  second*

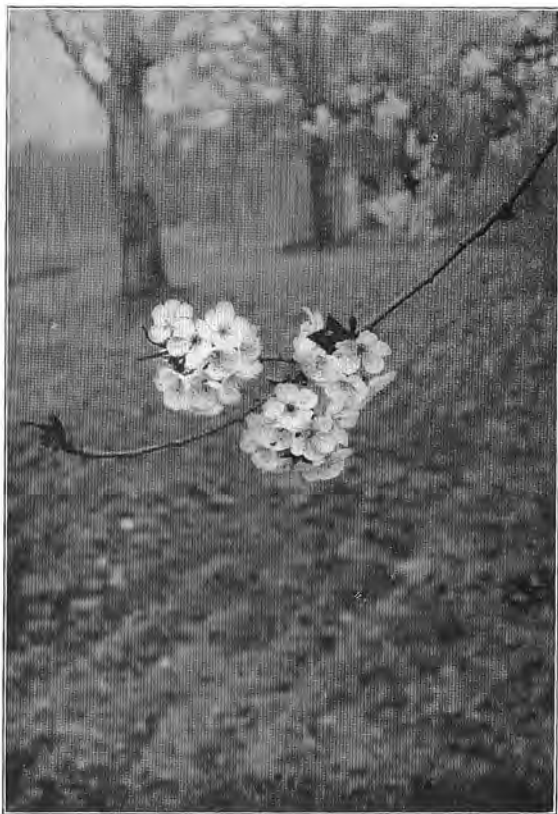
# THE MAGIC OF T



# THE FOUNTAINS AT VERSAILLES

STUDIES IN FRANCE'S FAMOUS GARDEN  
MADE WITH A 3A FOLDING KODAK





PEACH BLOSSOMS

*Made with Kodak Portrait Attachment on lens, No. 3 Kodak negative*

## VARIETY IN YOUR ALBUM

BY MADGE ELLERY

THE writer has turned the leaves of many snapshot albums, all of which contained interesting pictures, but she remembers one album in particular

because some of the prints were distinctively different.

Along with the vacation series, views, groups, interiors, portraits, children and those pictures in each



THE SPIDER WEB

*Made with a Kodak Portrait Attachment and Kodapod. Enlarged from  
Vest Pocket Kodak Negative*

class of the story-telling type, were  
prints showing close-up nature

studies and other odd pictures.  
For example, there was a very



artistic little close-up of a twig of peach blossoms as shown in the illustration on page 18. The point of view from which this was made and the spacing of the image on the negative were no doubt given some thought from the standpoint of composition and a tinted enlargement of it on a matte or rough surface bromide paper surely would be worthy of framing and a place on the wall.

This picture was made with a Kodak Portrait Attachment on the lens which permitted working at close range and securing a larger image than ordinarily. Yet there is just enough detail in the trees in the distance to lend atmosphere and depth to the picture. The branch of blossoms was hanging low—about four feet from the ground.

Another unusual picture in the collection referred to was that of a spider web which is reproduced in the illustration on page 19. Here again the Kodak Portrait Attachment was used to good advantage, as was also a Kodapod.

To get pleasing results when photographing the den of this cannibal it is best to make the picture early in the morning when the silky woven strands of the web are laden with dew. It is then that the web glistens and sparkles in the sunlight not unlike a jeweled necklace, so that but a short exposure is required to record a fully timed image. The sun was to the left of the web and enough to the rear in the picture shown so that it was necessary to shade the lens when making the exposure. This lighting gave lustre to the strands, caus-

ing the whole web to scintillate, with the result that a brilliant image was secured.

Spiders are generally busiest in the night, at which time they spin their webs. During the heat of the day they hide in what may be termed their nest, which consists of several turns of web somewhat matted together. One of these day-abiding places is shown in the picture reproduced just to the left of the web. Here Mrs. Spider anxiously awaits the coming of Mr. Fly or some other unsuspecting victim who will be ensnared in her beautiful trap.

If you would like a portrait of dame spider along with a view of her graceful web there is a way to get her to pose—if she is at home. Just above the web you will notice a single strand from which the web seems to be suspended. This is a "telegraph wire" leading to the hiding place of Mrs. Spider and it is a direct line of communication from all parts of the web. When a fly or moth drops in for a visit they find that Mrs. Spider is mighty quick to welcome them, for the slightest movement at any part of the web is at once communicated to the hostess. Therefore, try a little deception by gently touching the "telegraph wire" or some part of the web and be ready to press the button when Lady Spider rushes out for the meal that is not there.

Another little point in picturing spider webs:—you may run across a very fine specimen in the meadows, the woods or your garden, but find that the web is located in such a position that it does not stand out well in relation to its background.

Naturally a dark background gives the necessary contrast to the subject and while the natural surroundings are best it may be necessary to hold a focusing cloth or your coat (if it is of dark material) in back of the web in order to obtain the right effect.

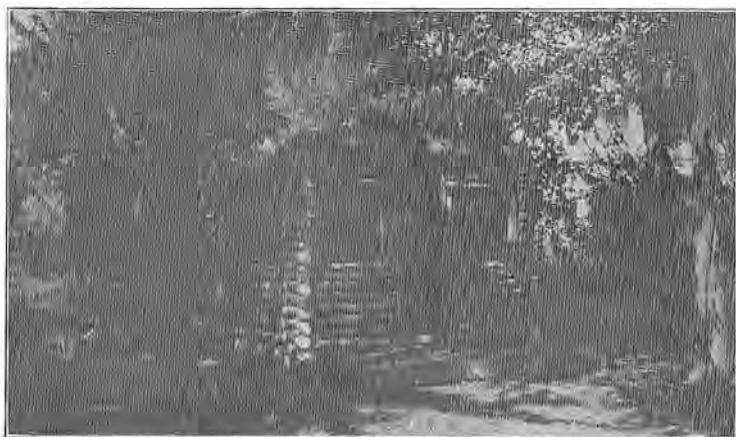
EDITOR'S NOTE: There are many other unusual subjects to be photographed, all of which go to make up an especially interesting Kodak Album.

We shall have something more to suggest along these lines in future issues of KODAKERY.



IN THE GARDEN OF THE CLOISTER, TOULOUSE, FRANCE

*Made with 3A Kodak, stop f.22, 1/2 second exposure*



No. 1—THE SNAPSHOT

*Too much shadow and too late in the day for an instantaneous exposure*

## JOE AND JERRY IN THE WOODS

OLD Cap Clark meant his cabin to be a winter's day retreat from which he could make the rounds of his traps and pick off an occasional rabbit with his trusty rifle—perhaps the very weapon that had dropped every officer of an onrushing enemy battalion in '76 or '66 or '98 or one of those wars. For Cap had won them all, practically single-handed.

Needless to say, such a character held rare attraction for Joe and Jerry and they looked forward to many exciting hours in the cabin, if it ever got finished.

"I'll tell you what let's do," said Jerry. "Let's photograph it every time we're out here. You know how the contractors are always making pictures of their jobs so that they can show afterward how fast the work went. We can do the same thing."

"Sure, let's," Joe agreed. "Cap will be so glad to get the pictures that he'll probably let us help with the traps every Saturday."

Joe handed the Brownie to Jerry, who pressed the lever.

But that's only half the story.

When the boys went after their prints a couple of days later, Mr. Sill, at the Kodak counter, greeted them with his usual smile plus this little lecture.

"Do you youngsters think that the Brownie has an owl's eye for a lens? Well, it hasn't. A Brownie can't see in the dark. Any camera, especially one of the simpler models requires good light for good snapshots. And here you've made a snapshot out in the woods in late afternoon of a fall day, when the sun isn't nearly as strong as in mid-summer. Can't be done, can it boys?"



No. 2—THE TIME EXPOSURE

*The result of a short time exposure with middle stop*

"Guess you're right, Mr. Sill," answered Joe.

"The picture seems to prove it," Jerry agreed.

"Just remember this," continued Mr. Sill. "A certain amount of light is necessary to record the image properly on the film. If the day is dull or if the subject is partly or wholly in the shade, a snapshot isn't likely to let enough light in. Why don't you try the same subject again with a time exposure? Better use the second stop instead of the largest, to be safe from over-exposure. I'm sure the picture will come out all right."

On the following Saturday, Joe and Jerry appeared once more at the cabin site. This time Joe made the picture. He placed the Brownie on the stump, pulled out the time slide and set the stop slide for the second opening. Then he pressed

the shutter lever across and quickly back, making a comparatively short time exposure.

The picture turned out good, of course.

But the scheme of keeping a pictorial record of the progress of Old Cap Clark's cabin didn't amount to much because he hadn't driven a single nail for a week. A new family had just moved into his neighborhood in town and Cap hadn't finished telling them about what Napoleon had said to him and what he had said to Napoleon.



The picture reproduced on the cover of this month's KODAKERY was made with a No. 2C Kodak, Jr. and Kodak Portrait Attachment, by Marshall S. Wildman.



SCENIC RAILWAY, BOIS DE BOULOGNE, PARIS

*Made with No. 3A Kodak, f.8,  $\frac{1}{25}$  second*

## DUPLICATE THOSE VALUABLE NEGATIVES

**Y**OUR collection no doubt contains several negatives which have become quite valuable and it is likely that some of these pictures can never be made again.

All who have tried to duplicate a negative by photographing a print that was made from the original negative realize that it is rarely possible to get good results by this method unless one has a camera with extra long bellows draw and a very good print on a velvet or glossy surfaced paper from which to make the copy. Also all who have tried to duplicate a landscape, a portrait or a story-telling negative by photographing the subject again at some later time know that the resulting negative can never be an exact duplicate of the original.

The best plan, as well as the easiest, the quickest and the cheapest, is to safeguard the future of a valuable negative by making a transparent positive of it—at the start. From this positive a faithful duplicate of the original negative can be made at any time in the event of loss or damage.

A transparent positive can be made in the same way that a print is made on Velox paper, the film on which the positive is to be printed being placed in contact with a negative in a printing frame, exposed to the light and then developed, fixed and washed.

The positive must be made in a darkroom, or in any room that can be made totally dark.

The positive can be made on the same kind of film that was used

for making the negative, but as Kodak roll film and Film Pack Film are orthochromatic and can only be safely handled in a ruby light, the writer prefers to make positives on Eastman Commercial Cut Film, which can be safely handled in an orange colored light. The brightest orange light that is safe to use is obtained when a Series 1 Wratten Safelight is used in a Kodak or a Brownie Safelight Lamp. These safelight lamps can only be used where an electric lighting circuit is available but the safelights which can be obtained in various sizes, through Kodak dealers, can be fitted to any darkroom lamps that are used.

The length of time the positive should be exposed to the printing light can only be determined by test. As the film is much more sensitive to light than Velox paper, the exposure needed will seldom be more than 2 or 3 seconds when the printing frame is placed about 5 feet from a 10 watt electric lamp. If a stronger light source is used, and it is not practical to place the printing frame as far as necessary from the light to avoid over-printing, the exposure should be made with a lighted match, held about 18 inches from the center of the printing frame.

The exposure must be so timed that the positive will be fully developed in from 3 to 4 minutes when the developer that is recommended on the instruction sheet that accompanies the film is used at a temperature of 70° F.

The positive should be developed



BOY

*Graflex Negative, by D. P. Foster*

until detail has become visible in the lightest tones. At this stage it should be examined by holding it before the orange light, with the emulsion side of the film facing the light. The reason for holding the emulsion side facing the light is because density can best be judged by looking through the back of the film.

Development should be stopped when the image, as seen on looking *through* the positive, is a little darker than would be desired for a print on paper.

After the positive has been developed, fixed, washed and dried,

it should be laid on the negative and the positive image brought into register with the image in the negative. If exposure and development were correct the positive will so nearly neutralize the negative that scarcely any image can be seen on looking through the two super-imposed films.

After a satisfactory positive has been secured a duplicate negative can be made from this positive, in the same way that the positive was made.





FIFTEENTH CENTURY HOUSES  
*Made with No. 3A Kodak, f.22,  $\frac{1}{5}$  second*



## SERVICE DEPARTMENT TALKS

THE negatives of those interesting vacation pictures may be wanted from time to time for enlargements or additional prints. If the negatives were thoroughly fixed and washed they will undergo no change with the lapse of time, provided they are taken care of properly.

Since negatives will absorb chemicals from paper in damp weather it is best not to file them between the leaves of a book, between sheets cut from newspapers or leave them in contact with ordinary wrapping paper.

Never handle negatives with perspiring or greasy fingers. Finger marks are difficult to remove and they will usually show in the prints if within the image area.

Negatives should be filed in boxes between sheets of good tissue paper, in tissue envelopes or better still in Eastman Film Negative Albums which are made specially for the purpose.

By observing the precautions we have mentioned and always keeping negatives in a dry place, they will remain in perfect condition indefinitely.



*For any information you may desire regarding  
amateur photography address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY

ROCHESTER, N. Y.

*An instrument  
that makes enlarging as easy  
as contact printing and  
that permits improving the  
print by local control*

## Kodak Auto-Focus Enlarger



PRINTS of any size desired, from  $1\frac{1}{2}$  to  $3\frac{1}{2}$  times the size of the original negative, are quickly and easily made with this outfit. The automatic focusing device keeps the lens at exactly the proper distance from the negative to project the sharpest possible image.

Printing is rapid because the ventilated lamp house permits use of a powerful Mazda light of 75 to 200 watts. The procedure throughout is just as simple as contact printing. And local control (improvement of the print by varying the length of exposure given to different parts of the negative, as shown in the illustration) is even easier than in contact printing.

The Kodak Auto-Focus Enlarger enables you to enjoy the convenience of carrying a small camera plus the satisfaction of having large prints in the album and on the wall.

Price, complete with Kodak Anastigmat Lens, negative holder, paper holder, set of six metal masks, electric cord and plug, but without Mazda Lamp . . . . . \$35.00

Diffusing Disc for soft focus effects . . . . . 1.00

### EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*New and Different—*



## Velox Water Color Outfit

HERE is an attractive bit of new equipment for the pleasant pastime of coloring photographs. The well-known booklet of Velox Transparent Water Color Stamps and three suitable brushes are now offered in a white-enameled, metal box, the inside top of which serves as a mixing palette.

The booklet contains twelve leaflets, score-marked to make twenty-six stamps of each color. Place a single stamp in one of the hollows in the box cover, add a few drops of water with a brush, and the tint is ready for the print.

These colors are especially adapted to coloring Velox prints, bromide enlargements, lantern slides, and all work requiring nice blending of transparent colors.

### *Price*

Velox Water Color Outfit, complete, with three brushes and booklet of Velox Transparent Water Color Stamps . . . \$1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

## OPTIPOD

EVERY picture requiring longer than snapshot exposure is an opportunity for the Optipod to prove its usefulness to you. Its cushioned clamp closes tightly but harmlessly on the edge of any solid support. A chair or table is thus tricked into service as a tripod. The Optipod's swivel arm screws into the tripod socket and permits placing the camera in almost any desired position.



*Price, \$1.25*

## KODAK SELF TIMER



THIS little device plays the part of photographer by "pressing the button" for you when you want to be in the picture. It is first attached to the end of the cable release and then set so that it will make the exposure a moment after you have left the camera. The Kodak Self Timer can be adjusted to release the shutter after any desired interval from half-a-second up to a full minute.

*Price, \$1.25*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

## Kodak Cut Film

WITH Kodak Cut Film *Super Speed* you can get good negatives of subjects that have offered difficulties before. But extra speed in emergency is but one advantage of using Kodak Cut Film. Others are: safety from breakage, freedom from halation, width of latitude, fineness of grain, lightness of weight and convenience in handling.

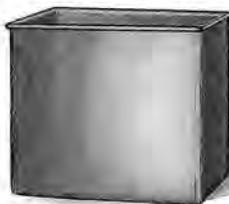
In cut film sheaths, Kodak Cut Film can be used with any camera accommodating plate holders of standard size.

### PRICES

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20

*Prices of film include Excise Tax*

## Kodak Developing Box No. 1 and Kodak Cut Film Developing Hanger



KODAK Cut Film is easily and properly developed by the time and temperature method in the Kodak Developing Box No. 1. The monel metal tank accommodates up to twelve films, each suspended from a Kodak Cut Film Developing Hanger.

### PRICES

Kodak Developing Box No. 1, without hangers . . . . .	\$2.00
Kodak Cut Film Developing Hangers, each . . . . .	.20

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*If it isn't an Eastman, it isn't a Kodak*

## No. 2C Autographic Kodak Special

*with  
Kodak Anastigmat  
Lens f.6.3 and  
Kodamatic Shutter*

THE speed of the Kodak Anastigmat *f.6.3* adds pictures that poor light would prohibit, and the accuracy of the Kodamatic Shutter, pictures that faulty exposure would spoil.

Then, too, there is the exposure plate on the shutter which tells at a glance the correct exposure for dull, gray, clear, or brilliant light with each lens aperture; and there's the Kodak Range Finder that finds the focus.

The 2C Autographic Kodak Special is a *Special*.

DETAILS—Size of pictures:  $2\frac{7}{8} \times 4\frac{7}{8}$ ; Size of Kodak:  $1\frac{1}{16} \times 8\frac{3}{4} \times 3\frac{7}{8}$ ; Weight, 32 ounces; Shutter Speeds: seven, from  $\frac{1}{150}$  to  $\frac{1}{2}$  second, with time and "bulb" actions. Brilliant finder. Aluminum body covered with the finest quality genuine sealskin. Metal parts finished in nickel and black enamel. Autographic feature, neatly countersunk for convenience in writing. Rising and falling front. Screw focusing device. Two tripod sockets.

*Price, \$65—at your dealer's*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

Your negatives deserve the best paper



*Look for*  
**VELOX**  
*on the back*

THE trade name VELOX is well worth looking for on the back of your prints because it indicates that the paper is worthy of the picture.

No other photographic paper is made exclusively for printing from amateur negatives; VELOX exactly meets their requirements.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



DECEMBER 1923

5¢

EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK

*The Kodak City*





*The personal greeting, a*

## Kodak Calendar

CONTAINING one of your prize snapshots, a Kodak Calendar makes the sort of remembrance that you alone can give. As you drop it in the mail box you are satisfied that a smile of appreciation awaits it on Christmas morning.

Kodak Calendars make possible a worth-while greeting to many friends whom purse limitations keep from the gift list.

*Prices, including envelope for mailing*

Horizontal or Vertical,  $5\frac{1}{4} \times 6\frac{5}{8}$ , for  
Vest Pocket or  $2\frac{1}{4} \times 3\frac{1}{4}$  prints . . . 20 cents each  
Horizontal or Vertical,  $7 \times 8\frac{3}{4}$ , for  
1A or 3A prints . . . . . 25 cents each

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*Gift Suggestions for  
your Friend the Camerist*

Kodak Self Timer, \$1.25  
Kodak Carrying Cases, 90c. up  
Kodak Portrait Attachment, 75c.  
Kodak Auto-Mask Printing Frame, \$1.50  
Kodak Auto-Focus Enlarger, \$35.00  
Kodak Metal Tripods, \$2.75 up  
Kodak Amateur Printer, \$10.00  
Kodak Albums, 25c. up  
KODAKERY, 60c. a year  
Kodapod, \$1.75

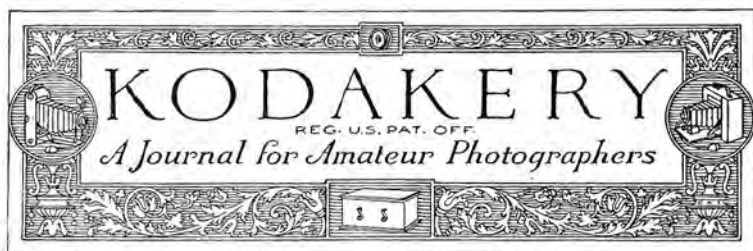
*And other pertinent suggestions  
at your Kodak dealer's*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



**"OF COURSE I CAN SKATE"**  
*Made with a Graflex, by H. Armstrong Roberts*



PUBLISHED MONTHLY - YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

DECEMBER, 1923

No. 4



Made with a 2C Kodak Jr., by F. E. Parker; exposure  $\frac{1}{25}$  second, stop 2

### WOODLAND SCENES IN WINTER

THE problem which dense foliage and dark foregrounds present in picturing forest scenes disappears as soon as winter arrives. Even before winter comes, in fact as soon as autumn has removed the canopy of leaves from the deciduous trees, forest photography is made easy, for then the sunlight can stream across the forest floor and place light tones on foregrounds

that were monotonously dull in summer time.

The greatest transformation in the appearance of forest scenes occurs, of course, in regions where winter brings an abundance of snow. Sunshine and shadow on a snow covered foreground offer attractive lighting effects, even in a forest of evergreens.

The contrast between sunshine



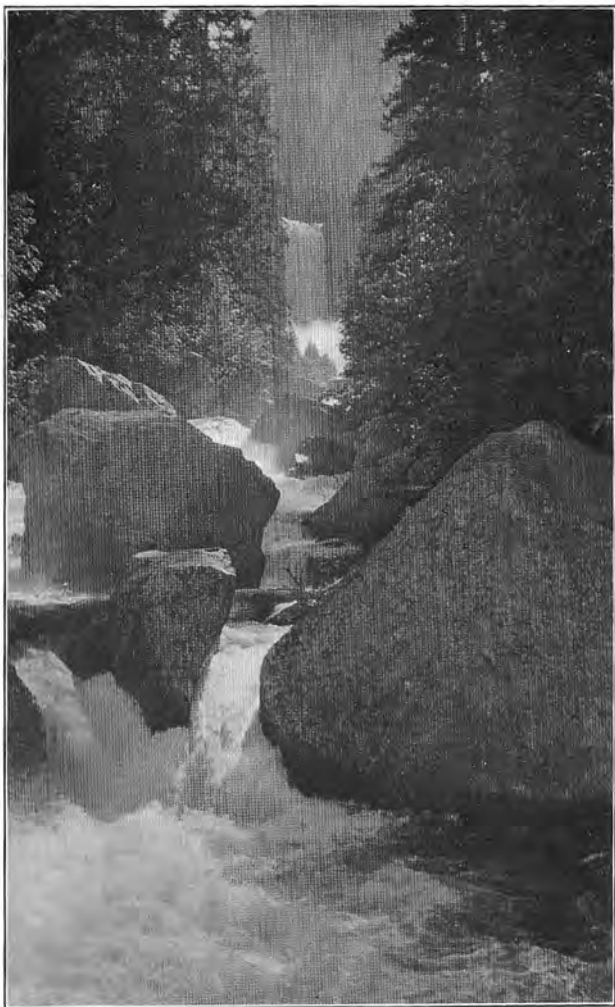
*Made with a 2C Kodak Jr., by F. E. Parker; exposure  $\frac{1}{25}$  second, stop 2*

and shadow on snow is far more pronounced in a forest, where dark tones predominate, than on an open landscape which receives the unobstructed light from the sky.

In photographing woodland scenes we should emphasize this contrast, so as to get prominent highlights in our pictures. The value of such highlights is shown by our illustrations. The splendid effects that Mr. Parker secured were obtained by giving a short exposure, so that only the sunlit patches would be rendered in white. If these highlights were not there the foreground would be gray and void of detail, and it would look more like sand than like snow. Had the exposure been long enough for recording detail in the tree trunks all of the snow would have been recorded as highlights and the foreground would have been rendered as a blank mass of white.

The viewpoint from which forest pictures are made should always be far enough from the nearest trees that the ground between the trees and the camera can be seen in the finder. If the bottom of the picture cuts through the base of tree trunks the picture will not look right, for we know that a tree is supported by something beneath it, and we want to see that support. Our pictures may, however, cut through tree tops with impunity, because we know that trees are not suspended by their tops.

The exposures recommended for forest scenes, when there are patches of sunlight and shadow on the snow are,  $\frac{1}{25}$  of a second with stop 16 on anastigmat and rectilinear lenses,  $\frac{1}{25}$  of a second with stop No. 2 on single lens folding cameras, and a snapshot with the second stop on single lens fixed focus box cameras.



FEDERAL FALLS, YOSEMITE VALLEY

*Made with a 3A Special Kodak; exposure  $\frac{1}{25}$  second, stop 16*



WATER SNAKE

*Exposure  $\frac{1}{10}$  second, f.22*

## CAMERA THRILLS OF A YEAR

BY HOWARD TAYLOR MIDDLETON

*Illustrated with Graflex Pictures by the Author*

WE are penning these lines in the ruddy glow of a birch-wood fire. We may laugh at the mad song of the north wind in the maples and the tinkle of winter sleet against the panes, for across our laps an Eastman album of photographic prints lies invitingly open, and we are all intent upon our trophies of a year—the pictures that stand out boldest from among their fellows because of the thrill that each one brought us in the making.

In fancy, we ask you to draw up an easy chair and join us in a cozy

semicircle before the brightly blazing logs. We will continue to forget the raging storm and will tell you a few of the stories that the photographs in our album recall—as nothing but photographs can. As memory waves her enchanting wand you shall go riding with us upon a magic carpet to a lush green meadow bank—the place where thrills begin.

Pal made the first big find. Strolling leisurely along, with eyes ever on the alert for a picture opportunity, she stopped with all the abruptness of a hunting dog on



BROODING CUCKOO

*Exposure  $\frac{1}{350}$  second, f.5.6*

point and, prefaced by a muffled exclamation of mingled fear and triumph, signalled for our cautious approach. Our arrival brought the initial thrill. The father of all water snakes was before us in the grass. Our subject lay in such a position that it was necessary to "shoot"

against the sun. The light was rather weak, and as this serpentine giant was partially coiled and I wanted to get nearer to him so as to get a close-up portrait, I stopped down the lens to increase the depth of focus, then set the Graflex shutter for a  $\frac{1}{10}$  second exposure—





GREEN HERON

*Exposure  $\frac{1}{110}$  second, f.8*

a slower speed than is absolutely safe when holding the camera in the hands. Having done these things, I began my stalk, moving ahead with infinite caution until I approached within five feet. Then with the Graflex pressed tightly against my breast I inhaled deeply, held my breath, and pressed the shutter release very gently. Had the monster snake moved ever so slightly the picture would have proved a failure, but he kindly remained "frozen" until the exposure was made, when he moved on his sinuous way down the bank into the Rancocas, to be seen no more.

Our next thrill came in midsummer with the finding of a brooding yellow-billed cuckoo in a

blackberry tangle. While not particularly rare, this bird builds its home in such secluded nooks that the discovery of a cuckoo's nest may be justly regarded as an event by any nature photographer. Could we stalk Dame Cuckoo with the Graflex, or must we fasten the camera with an Optipod to a branch in front of the nest and indulge in (what may very likely prove to be) a weary wait for the return of the feathered lady to her rudely interrupted housekeeping? We decided to try out the former method first at any rate, so after setting the lens at *f.5.6*, and the shutter at  $\frac{1}{350}$  second, I started toward my quarry. Moving only a few inches at a time, avoiding even a suggestion of jerky motion

despite an almost irresistible inclination to swat a swarm of blood-thirsty flies which threatened to devour me, I eventually came within easy camera range and made an exposure. Had I been confident that the bird would "sit tight" until photographed I would have stopped down the lens and slowed the shutter as I did for the snake portrait. This would have given greater depth of focus and a picture sharp to the edges, but it seemed like taking too great a chance. At  $\frac{1}{850}$  with stop *f.5.6* I knew I could procure a fairly successful portrait, even though the bird might flutter from her nest as I drew near.

With early autumn came Green Wing, the heron, to the Rancocas meadows where both trouble and

good fortune awaited him. In front of a boat-house a boat-shaped floating box, made of slats, rode at anchor. In this box live fish were kept until desired for the table. Upon the very evening of his arrival Green Wing alighted on the top of this fish box and caught his long toes between the slats, where he was held in painful captivity. When discovered and released, in the early morning, the entire foot was badly swollen, and it was thought best that the wounded member be salved a bit before returning its owner to the freedom of the marsh. Accordingly Green Wing spent several sunny days in a clean and roomy coop where he dined extremely well upon minnows, tiny frogs and



A CLOSE-UP OF THE GREEN HERON \*

*Exposure  $\frac{1}{250}$  second, *f.16**

**MALLARD DUCKS**

*Exposure  $\frac{1}{1000}$  second, f.5.6*

other dainties which were caught expressly for him, until the foot was well again. Then his hospital door was flung wide and he found himself at liberty. Did he immediately flee for parts unknown as we would expect a wild bird to do? Not Green Wing! He proceeded to stand by the place from which good food emanated without the trouble of fishing for it, and soon he grew so tame that close-up portraiture became a thing of joyful ease. Joy came with the realization that kindness to a hurt wild creature is promptly returned by fearlessness and faith.

On a morning in late November we crouched low in an elder thicket, o'erlooking the breeze-ruffled Ran-

cocas, while watching a hen mallard swimming near. Suddenly, with a singing rush of wings, a magnificent drake swooped down to join his consort at her feeding. The thrill that came to the camera man when the image of the flying duck loomed big on the Graflex mirror will never be forgotten.

It was winter, the surface of the Rancocas was like black glass, and the muskrats were very hungry. The tender roots and water grasses upon which they feed were bound tight beneath a foot of solid ice, so, in order to live they had to imitate their big cousins the beavers, and gnaw the bark from the elders and the willows. Chancing upon a muskrat while engaged

at such a meal, we found it an easy matter, by moving cautiously and keeping within the shelter of surrounding bushes, to come to close camera range without interrupting the banquet. Musquash was famished, and far too busy overcoming that serious condition to worry about intruding photographers. With eyes upon the mirror, fingers on release lever and

focusing screw, and moving at a snail's pace, we crept nearer and nearer until at length the little furry creature was but six feet away. We experienced our final thrill with the operation of the Graflex shutter, and the attendant scamper and leap of Musquash, as he plopped out of sight down his favorite tunnel in the creek bank.



THE MUSKRAT

*Exposure  $\frac{1}{110}$  second, f.8*



*Result of giving a  $\frac{1}{10}$  second exposure with stop f.4.5. in dull light*

### WINDOW SEAT PORTRAITS

**A**s a setting for indoor portraits the window seat makes a strong appeal. It looks so comfortable and homelike, and is so brightly lighted that it tempts many to make portraits with snapshot exposures.

We should not forget, however, that brightness is a relative term, and that when we are in a room we judge the brightness of the light on a window seat by comparison with the light in other parts of the room.

The daylight on a window seat usually comes from one direction only, and, if the window is closed it

comes through glass, which absorbs some of it, so that it is not nearly as strong indoors as outdoors. For these reasons it is only on sunny days, when the sun is shining through the window, that we should expect to secure fully timed portrait negatives of a subject on a window seat with exposures as short as  $\frac{1}{10}$  of a second.

When bright sunlight is streaming through the window it is best to filter it through a lace curtain, or a screen which can be made by stretching a sheet of muslin across the window. This will soften and



*Result of giving a  $\frac{1}{10}$  second exposure with stop f.6.3 in diffused sunlight*

diffuse the light so that the subject can keep the eyes wide open. By thus softening and diffusing the light we can also secure a better illumination of the shadows.

If the sunlight that reaches the window seat casts faint instead of pronounced shadows no curtain or screen need be used, as weak sunlight is diffused light and it gives a soft lighting which is not intense enough to cause eye strain.

A comparison of our illustrations shows the advantage of making portraits in such a light. Both pictures were made on the same day, without using a screen, between 3 and 4 in the afternoon.

Groups of clouds were floating in a hazy sky. The picture on page 12 was made while the clouds obscured the sun. It shows the result of making too short an exposure in dull light. After this portrait was made the subject was moved to the other side of the window seat so as to be directly in line with the sunlight. The exposure was made as soon as the clouds had moved sufficiently to allow the sun to cast faint shadows.

Owing to the fact that the window seat was in an alcove, between two clothes closets, and the walls and ceiling of the room were light blue, no reflector was used.

Had this alcove not been there, or had the walls and ceiling been dark in tone, a reflector would have been needed for securing the lighting effect that is shown on the shadow side of the child in the picture on page 13.

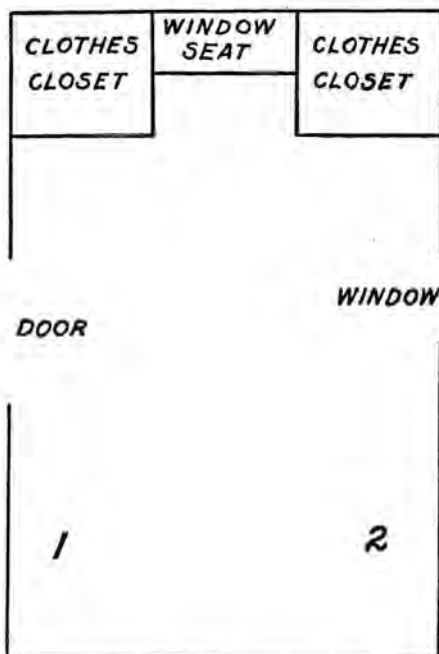
These pictures were made with a Graflex, on Kodak Cut Film. Pictures similar to the one on page 13 can be made with any camera that is fitted with an anastigmat lens that has an  $f.6.3$  or larger stop, by giving a  $\frac{1}{10}$  or a  $\frac{1}{8}$  second exposure. If a rectilinear lens is used with its largest stop the exposure should not be less than  $\frac{1}{2}$  second. With a single lens camera the exposure should not be less than 2 seconds with the largest stop. On single lens cameras the lens is mounted behind the shutter.

A snapshot, by which we mean any exposure that is not longer than  $\frac{1}{25}$  of a second, should not be made with any single or double lens, unless the window is open, so that the light will not have to pass through glass before reaching the subject.

Though shorter and, of course, much longer exposures than those we have mentioned have given good results in making window seat portraits, yet none but those who are experienced in this work, and those who love to experiment, should

make shorter ones, for the reason that in no branch of photography is ample exposure more important than in portraiture.

It takes a certain amount of light to make an impression on a film or plate. A faint impression may record the brightest tones but it will not record the other ones. An ample impression will record all the tones, from the brightest to the darkest and, unless the impression is unreasonably excessive (more than 30 times the permissible



*Diagram of room in which the pictures on pages 12 and 13 were made*

1-2. Camera Positions

minimum) these tones will be so recorded that they can, without "dodging" or "juggling," be transferred from the negative to the print.

Though we have directed attention to window seat portraiture on sunny days only it must not be

assumed that good portraits cannot be made on window seats, and elsewhere indoors, on days that are cloudy. In future numbers we will explain how to make indoor portraits under all the light conditions that are found in the home.



### DO YOU KNOW THAT—

**T**HE skyline should never be in the middle of a picture, because the pictorial effect is much better when this line is considerably above or below the center?

When making portraits in the home an absolutely plain or an unobtrusive background, such as draperies or papered walls that have no conspicuous designs, prove very satisfactory?

A Kodak Sky Filter placed over the lens with the colored part at

the bottom will aid in recording shadow detail in snow pictures?

You'll value a picture of that Christmas tree for your album?

The shadows in a negative are the thinnest or most translucent parts and in prints are the darker parts?

You can take a picture of yourself or get into the group by using a Kodak Self-Timer—if your camera is fitted with a cable release?



THE RIVER—NICE, FRENCH RIVIERA

*Made with a 3A Kodak*



# LEISURE HOU

RECORDED BY THE KODAK  
AND THE BR



# R PASTIMES

DAK, THE GRAFLEX  
ROWNIE



## JOE'S AND JERRY'S SNOWMAN

## DID IT MOVE?

THE first big snow storm of the season sent Joe and Jerry hurrying to the attics of their respective homes. To keep warm and dry and to play with paper dolls? Nothing of the sort! They were after last year's hiking boots, skiis and other winter equipment.

Saturday morning saw them outdoors, tramping down the valley in quest of adventure. All they found

was an old felt hat, perched on a post, down by the sawmill.

Now an old felt hat is useful for different things at different times of year. In early spring it's worth saving to put a brick under on April Fool's day. In summer it usually becomes part of a scarecrow. And in winter an old hat immediately suggests a snowman.

So Jerry and Joe set to work fashioning a grotesque monument to the first hike of the season. After the job was supposedly done, and while Joe was gone for a moment in search of exactly the right sort of twig for a pipe, Jerry grabbed the Brownie and photographed the masterpiece. He was just winding the film when Joe returned.

"Whajja do that for?" he demanded of Jerry. "What's the idea taking his picture before he's half done? Why he hasn't even got a pipe in his mouth yet. And one of his feet is bigger than the other. I'm going to take a shot at him myself when we get him finished."

And Joe did.

While there really were two snowman pictures among the prints that Mr. Sill handed across the Kodak counter after school on the following Tuesday, no one would suspect that they were of the same subject.



*Camera Moved During Exposure*



*Camera Held Steady During Exposure*

"The one you made is a mess," accused Joe.

"What makes you think it's the one I made," Jerry wished to know. "How can you prove that the good picture is yours?"

"Well, in the first place he had the pipe in his mouth for my exposure and in the second place I can tell by the feet and in the third place the Brownie belongs to me and naturally I get the best pictures."

"Guess you're right," Jerry

agreed. "I was in such a hurry to make the exposure before you got back that I probably didn't remember to hold the camera steady in both hands and to press the lever gently."

"Sure, that was it. The camera moved. When the camera moves the whole picture blurs. But if only the subject moves, only the subject blurs."

"Why the snowman couldn't move, anyway," scoffed Jerry.

"Couldn't, eh? You just go out there after the first warm day and see if he hasn't."



#### YOUR ADDRESS

**K**ODAKERY is mailed as third class matter which, like all other printed matter that does not require first class postage, cannot be forwarded from one address to

another, free of charge.

If you change your address without notifying us, KODAKERY will not reach you. Requesting the postmaster to forward your mail will not insure your receiving KODAKERY, unless you pay him the postage for forwarding it.

Should you move from one place to another be sure to inform us promptly, giving both your old and new addresses, and also the date when your subscription expires.

## KODAK PICTURES FOR CHRISTMAS CARDS

BY BARBARA KEITH

A FEW evenings ago we were looking through a basket of our Kodak pictures that were not yet placed in albums. Several of them were from the winter before, and we had almost forgotten what charming pictures we had obtained of the snow scenes near our home, pictures showing feathery garlands of frostiness with glimpses of wide fields and cozy farmhouses beyond. Then there were idyllic views of the river, of the orchard in blossom time, and of our merry making parties with groups of friends.

Suddenly came the inspiration. Why not print Kodak pictures on postcards for Christmas greetings? Why not use these delightful individual pictures as personal messages? Friends who had shared our summer holiday-making would welcome such mementos of past pleasures.

We talked it over with the good fairy who develops our films, and found her ready, as ever, with interest and suggestions. She it was who determined that the autumn pictures should be done in sepia, and who ruled against glossy prints for the snow scenes.

We rejoiced in her decisions when the cards were finished. They were more than charming. They were superb. The card *was* the greeting.

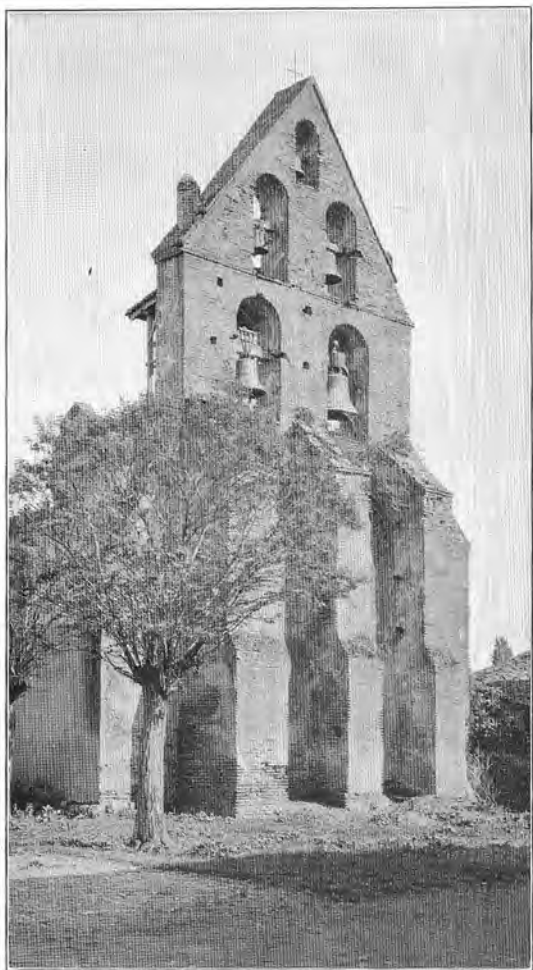
Directing and inscribing Christmas cards, instead of being a labor of worry and dissatisfaction, afforded us a keen enjoyment. The only difficulty was in choosing for the dearest of friends from the wealth of our choice cards.

And the friends? They have spoken for themselves. From them we know well that we touched the heart of Christmastide in our Kodak messages.



FRENCH COAST NEAR BORDEAUX

*Made with a 3A Kodak*



LE FAUGAS CHURCH BELLS, FRANCE

*Made with a 3A Special Kodak; exposure,  $\frac{1}{10}$  sec., f.22*

## NUMBERS INSTEAD OF NAMES TO DESIGNATE THE CONTRAST OF VELOX PAPERS

SOME months ago a new Velox paper was introduced. This new paper is softer (less contrasty) and, consequently, capable of rendering a longer scale of tones than the paper which was long known as Special Velox.

With this addition, all of the Velox papers, excepting Portrait, are now made in four instead of three degrees of contrast, which are

designated by numbers instead of by names.

The softest (least contrasty) Velox is Number 1, and the hardest (most contrasty) is Number 4.

In ordering Velox from your dealer always state the grade—Velvet, Portrait, Carbon or Glossy, and also state the contrast desired—No. 1, 2, 3 or 4, and thus make sure of getting exactly what you want.

No. 1, the new grade, is intended for negatives of excessive contrast.

No. 2, (formerly Special), is for negatives of normal contrast.

No. 3, (formerly Regular), is for negatives of little contrast.

No. 4, (formerly Contrast), is for negatives that are so lacking in contrast as to be "flat."

Following is a list of grades, surfaces and contrasts of Velox as now supplied.

SINGLE WEIGHT				VELOX			DOUBLE WEIGHT			
Degrees of Contrast				SURFACE	GRADE	COLOR	Degrees of Contrast			
1	2	3	4	Semi-Gloss	VELVET	White	1	2	3	4
	2			Smooth Matte	PORTRAIT	White				
1	2	3	4	Matte	CARBON	White				
1	2	3	4	Enameled	GLOSSY	White		2	3	



## COUNTING SECONDS FOR SHORT TIME EXPOSURES

WHEN making indoor portraits by daylight it is always necessary to give time exposures, unless the subject is in sunlight under conditions similar to those mentioned on page 12.

While we are making the exposure for a portrait we should watch our subject instead of the movement of the second hand on a time-piece.

Many portraits are made with  $\frac{1}{8}$ ,  $\frac{1}{2}$  and 1 second exposures, none of which can be easily and accurately timed with an ordinary watch.

The most practical way to make these exposures with any shutter that can not make them automatically is:

For  $\frac{1}{8}$  second with a folding camera, set the T. B. I. (time, bulb, instantaneous) indicator on



## ALONG THE RIVER PATH

*Made with a 3A Kodak; exposure  $\frac{1}{2}$  second, stop 16*

B, press, and then release as quickly as possible, the plunger of the cable release, or the rubber bulb, if a bulb and tube are used. If the camera is of the box Brownie type set the shutter for a time exposure, then press the shutter lever twice, as quickly as possible.

A  $\frac{1}{2}$  second exposure can be made by opening the shutter as one begins to mentally pronounce "one hundred" and then closing it at the end of the last word.

A 1 second exposure can be made by the same method, when mentally pronouncing "one hundred and one."

For an exposure of two seconds we should count "one hundred and one," "one hundred and two," for 3 seconds "one hundred and one," "one hundred and two," "one hundred and three." By thus let-

ting the last word indicate the number of seconds we will always know just how long an exposure we are giving.

By practicing this method of counting seconds, while watching the second hand on a watch, one can become quite proficient in a few minutes. No one will expect to count seconds with absolute accuracy, but anyone can quickly learn to count with sufficient accuracy for photographic purposes. An error of 25% in any exposure is negligible, as it cannot be detected in the negative.

While this is a simple and reasonably accurate way of counting seconds for short time exposures, long exposures, of minutes duration, such as are needed for photographing interiors, should always be timed with a watch.



## CARE OF FILTERS

**T**HE Kodak and the Wratten Filters that are designed for use on hand cameras are mounted in metal cells which have flanges that hold them in position in front of the lens. They are made of colored gelatine which is cemented between two pieces of glass.

When a filter is used the light that makes the picture passes through both the filter and the lens, and it is, therefore, just as important to keep the filter clean as it is to keep the lens clean, for dust or finger marks, on either the filter or the lens, will impair the brilliancy of the picture.

Filters should receive the same care as lenses. When not in use they should be kept in a dry place where dust cannot settle, and as filters, like lenses, become foggy on prolonged exposure to the atmosphere they should be cleaned occasionally.

The best way to clean a filter is, first remove any dust that may be on it with a camel hair brush, then breathe on it and wipe it carefully with a clean, well-worn linen handkerchief that has been made soft by many washings.

A filter should never be washed with water, because if water comes in contact with the gelatine at the edges of the filter (inside the metal cell) it will cause the gelatine to swell and separate the glasses. This will ruin the filter.

Excessive heat is injurious to filters, as it softens the balsam

with which they are cemented, and it also causes the gelatine to contract. While it is only in intensely hot climates that injury from heat is apt to occur it is, nevertheless, a wise precaution not to let the sun shine on a filter any longer than is necessary on very hot days.

A filter should not be carried loose in the pocket. It should be carried wrapped in a clean handkerchief, if the box in which it was purchased is not available.

By giving filters the same care that should be bestowed on lenses they will remain in perfect condition indefinitely.



WATCHING DADDY

*Made with a Premo, by James Micola*



A TRUSTY MOUNT

*Made with a Graflex, by Dr. J. B. Pardoe*

## FIXING NEGATIVES

**I**RREGULAR patches of brown stains that do not appear in negatives until some weeks or months after they were developed are caused by insufficient fixing.

A fixing bath that has been used until it has become exhausted will cause insufficient fixing. This trouble is, however, more often due either to not keeping the negatives separated, so that the bath can have free access to the emulsion, or to removing them from the bath too soon after they become clear, that is, after

the creamy color has disappeared.

In the fixing process hyposulphite of soda, commonly called hypo, combines with the silver bromide in the emulsion and forms an invisible salt which water cannot wash out. But as this salt is readily soluble in the hypo which helps to form it, it can be gotten rid of by simply leaving the negatives in the fixing bath until the hypo has dissolved the salt.

The length of time it takes to do this depends on the condition of the fixing bath. A freshly prepared

acid fixing bath will clear negatives inside of five minutes, and, it will then remove this invisible salt during the next five minutes. The negatives will thus be thoroughly fixed if they are kept separated. A bath that has been used several times will, of course, work slower than a fresh one, and it is a wise practice to leave negatives in a used bath fully twice the length of time it takes to clear them.

Any fixing bath which will not clear negatives inside of fifteen minutes is worthless.

An acid fixing bath is recommended in preference to one that contains nothing but hypo and water. The plain hypo bath does not harden the gelatine coating on films and plates, and it must be discarded after it has been once used. An acid fixing bath does harden the gelatine and it can be used several times.

The fixing bath must be rightly prepared to insure the right chemical reactions taking place. For this reason we recommend the Kodak Acid Fixing Powders and also the fixing bath that is made up by dissolving 1 pound of hypo in 64 ounces of water and then adding 4 ounces of Velox Liquid Hardener. Those who prefer to make up fixing baths by weighing out the various chemicals should be sure to use the exact quantity of the necessary chemicals and dissolve these in the exact order that is recommended in the published formulas.

When an acid fixing bath works too slowly it should *always* be thrown away. Strengthening a weak bath by adding hypo is extravagance instead of economy, because the resulting chemical combinations are always wrong. The acid fixing bath is so cheap and gives such long service that it is folly to risk spoiling negatives in an unsuitable bath.

When negatives are thoroughly fixed and then thoroughly washed they will keep in perfect condition indefinitely.



PAINTING TIME

Made with a Graflex, by M. W. Reeves



## IT HOLDS

*Made by Dwight Kirsch, with a 1A Kodak Jr.,  
f.7.7 Kodak Anastigmat Lens*

## SERVICE DEPARTMENT TALKS

### COLD DEVELOPERS

**T**AP water is running much colder now than it did in summer. This fact should be taken into consideration and the temperature of the water tested with a thermometer when mixing all developing solutions.

Kodak roll film can be developed in the Kodak Film Tank, and Kodak Film Pack film can be developed in the Film Pack Tank at any temperature between 45 and 70 degrees Fahrenheit, but since a cold developer works slower than a warm one they must not be developed for the same length of time at all temperatures between 45 and 70.

The length of time to develop at any given temperature is stated in the instructions that accompany all Eastman film tanks.

Temperature is also a very important factor in the making of prints. For the best results the developer used for Velox paper should be at a temperature of 70 degrees, Fahrenheit.



*For any information you may desire regarding  
amateur photography address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.

# KODAK CUT FILM

Regular—*Super Speed*

Regular speed Kodak Cut Film is superior to plates for the average day's work. *Super Speed* is necessary for the difficult situation.

WIDTH of latitude, fineness of grain and freedom from halation at once stamp Kodak Cut Film as superior to plates in photographic properties, while its safety from breakage and comparatively negligible weight mark it for handling convenience.

By means of Kodak Cut Film Sheaths the advantages afforded by Kodak Cut Film are brought to all plate holding cameras—for example, Nos. 3 and 3A Kodaks (regular and *Special* models) when equipped with Combination Backs.



From a *Super Speed* film negative  
Exposure,  $\frac{1}{25}$  second

## PRICES

	$2\frac{3}{4} \times 3\frac{1}{4}$	$3\frac{1}{4} \times 4\frac{1}{4}$	$3\frac{1}{4} \times 5\frac{1}{2}$	$4 \times 5$	$5 \times 7$
Kodak Cut Film, doz. . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film <i>Super Speed</i> , doz. . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . .					.20

*Prices of film include Excise Tax*

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



A HANDY thumb screw clamps the apparatus to shelf or table top. Then plug in the electric connection and adjust negative and paper. You're ready to enlarge.

*Price, \$35.00*

## Kodak Auto-Focus Enlarger

*Simplicity plus* describes enlarging with this device. The preliminaries take but a moment (see above for detailed description) yet that is virtually all there is to do, for as you slide the camera up and down the *size* of the image changes but automatic mechanism keeps the *focus* constantly sharp. Enlarging is thus made about as easy and fast as contact printing. And it's even more fun.

Included with the Kodak Auto-Focus Enlarger are Kodak Anastigmat Lens, negative holder, paper holder, six flexible metal masks, electric cord and plug—the equipment complete save for a Mazda printing lamp of 75 to 200 watts capacity. *Price, \$35.00.* A diffusing disc that slips over the lens for soft focus effects, is supplied extra. *Price, \$1.00.*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*A New Model Graflex*

4 x 5 Revolving Back

**GRAFLEX***Series B*

THIS new camera is successor to the 4 x 5 Revolving Back Telescopic Graflex and is an improvement on that popular instrument.

REVOLVING Back Graflex, Series B, has a Kodak Anastigmat Lens *f*.4.5 in a permanent metal mount, traveling on a single, wide, metal track. One result is that the bellows section is more compact; another result, of greater importance, is that the Kodak Anastigmat *f*.4.5 is an integral part of the camera.

Focal plane shutter, reflecting mirror, revolving back, are unchanged, of course. Speeds are  $\frac{1}{10}$  to  $\frac{1}{1000}$ , a slow snapshot of  $\frac{1}{8}$  and *time*. The price of the 4 x 5 Revolving Back Graflex, Series B, with Kodak Anastigmat Lens *f*.4.5 ( $7\frac{1}{2}$ -inch focus) and one cut film holder or one plate holder, is \$116, excise tax included.

*The Graflex catalog, September edition, describes this and other new models. Write us or ask your dealer.*

**Eastman Kodak Company***Folmer & Schewing Department***ROCHESTER, N. Y.**





## Kodak Portraiture

PORTRAITS like the accompanying illustration, and close-up pictures of small objects—curios, pottery pieces, art treasures—are easily made the Kodak way. Simply slip the Kodak Portrait Attachment over the regular lens and your camera is brought into sharp focus at arm's length.

*Kodak Portrait Attachment, 75c.*

## Self Portraiture

WITH the Kodak Self Timer, shown here, clipped to the cable release and the Kodak Portrait Attachment slipped over the lens, the fun of making your own portrait is yours. A simple turn of a screw controls the time interval from  $\frac{1}{2}$  second to one minute before the device presses the button for you. Ask your dealer to show you.

*Kodak Self Timer, \$1.25*



EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*Convenient and Capable*

Vest Pocket  
Autographic  
**KODAK**  
*Special*

With Kodak Anastigmat  
Lens *f*.7.7  
\$12.00

SMALL enough to slip in the Christmas stocking and ready, by reason of its lens, for superior negatives—that's the V. P. K.

Kodak Anastigmat cuts sharp and clear to the edges of the film—an advantage that means sparkling prints and splendid enlargements. Pictures,  $1\frac{5}{8} \times 2\frac{1}{2}$ .

Give the Vest Pocket to the enthusiast and it's a handy supplement to his larger outfit; give it to the novice and it's a picture-maker he will prize.



*Actual size, folded*

*At your dealer's*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



Good negatives  
deserve, poor  
negatives de-  
mand—VELOX

*Identifiable  
on the back*

## *The Best Possible*

A STRONG claim for a finisher to make—"Our prints are the best possible." But when he takes pains to use the best paper, VELOX—even though it costs him more—he is pretty sure to take pains that his work is right.

And that's the sort of work you want. You want it now, especially, for the duplicate prints from your prize snapshots that are to convey your personal Christmas greeting.

Look for  
VELOX  
on the back.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



JANUARY 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK

*The Kodak City*



*Start it now—*

## “My Kodak Memory Book”

The Christmas snapshots that just came from your finisher's—make them page one in *your* Kodak Memory Book. Then as you add prints of the good times winter still holds in store, the book brings back the season's sport, the highspots at home, the friends and the fun—precious memories, all of them.

“My Kodak Memory Book” has just the sentiment you want in a book for your prints. The cover design carries out the memory book idea; the words that give the book its name are in a raised-letter panel. While 50 black leaves are supplied, the loose-leaf back permits inserting extra pages. An attractive book that you'll like.

“My Kodak Memory Book” \$2.50  
*At your dealer's*

EASTMAN KODAK COMPANY  
ROCHESTER, N. Y., *The Kodak City*

*Get the film that gets  
the picture*



## KODAK FILM

Load with Kodak Film and you make sure of results. Kodak Film is constantly subjected to drastic laboratory tests that prove it unequalled in speed, keeping qualities and latitude.

Kodak Film—the dependable film in the Yellow Box.

*At your dealer's*

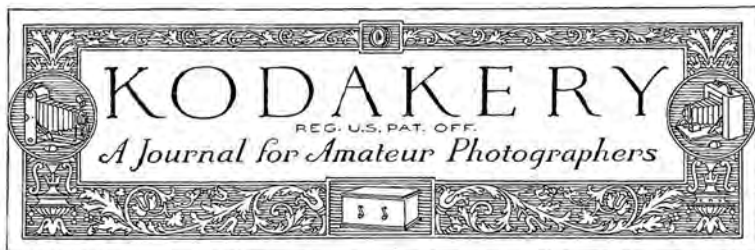
EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



FLORAL TREASURES

*Made with a 2C Kodak Special. Exposure 1 second f.6.3*



PUBLISHED MONTHLY - YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

JANUARY, 1924

No. 5



QUAIL

## HUNTING WITH A CAMERA

BY HOWARD TAYLOR MIDDLETON

*Illustrated by the Author*

THE millions of automobiles that are used in America today make it practicable for hunters to shoot over a much greater territory, in the same space of time, than was possible before the invasion of the motor car army. Autos have enormously increased

the menace to game and the time has come when the sportsman must do his shooting with a camera instead of with a gun if the existing species of our furred and feathered wild life are to be saved from utter extinction.

In many parts of the United





MUSKRAT

States the beautiful gray squirrels, formerly so abundant, have already been exterminated; the mellow whistle of Bob White in the stubble fields is a rare sound indeed, and only in dense thickets, swamps and forests well nigh inaccessible to man, is still to be found, in scattered bands, that ace of feathered trophies, the wild turkey.

There are no game laws for those who hunt with a Kodak, and I can conceive of no cleaner, finer outdoor sport than hunting our wild life friends with a camera and a brace of loyal canine companions at heel.

Probably the most popular mark for the gunner among the small fur bearers is the cottontail rabbit, which loves the hedges and the underbrush. The time at which the cottontail makes the easiest of

wild life camera subjects is during the period of his youth when he is about to leave his subterranean home, and can be persuaded to gamble puppy-like, with his brothers and sisters, before the burrow doorway. When full grown he tests the skill of the camera man who experiences a far greater thrill as he photographs him on the jump than he ever did when laying him low with a gun. The picture of a dead rabbit posed with its killer may be photographic proof of the hunter's prowess, but to me a photograph of a sextette of bunnies who are alive and free, is of far greater worth as a memento of the chase.

When squirrel hunting with a camera, the secret of success lies in the photographer's ability to remain motionless for a sufficient



WEASEL

time to allow Silver Plume, or Chickaree his red cousin, as the case may be, to change his state of mind from fright to curiosity. By "freezing" I have enjoyed the rare thrill of watching both gray

and red squirrels advance to within easy camera range before discovering that the silent object they had been investigating is a man, and not a log, as they at first supposed.

Among the animals that are

trapped rather than shot, those most frequently encountered in the vicinity of the writer's Southern New Jersey home, are the muskrat, opossum, skunk and weasel. Every year one sees a steadily diminishing number of lodges in the marsh, and fewer footprints in the snow. Very soon, if dame fashion fails to find a substitute for fur, in which to clothe the milady when winter winds are blowing, there will be *no* lodges in the marsh and *no* footprints in the snow.

The photographing of these furry denizens of forest, field and meadow has, in my experience, proven an easy matter. A quietly drifting canoe on an inland stream, with a skilled hand at the stern paddle, will often bring a muskrat, sunning on a log, near enough for a picture.

Br'er 'Possum will ever be found at the photographer's service when encountered. All that is necessary to successfully fulfill an engagement with this dunce o' the woods is to have a dog along to locate the quarry by scent. Once discovered, it is merely a question of carrying the shaggy animal, by the tail, into the improvised studio, and posing him before the camera.

The skunk is accommodating, too, and may be depended upon not to run away. In dealing with a woods pussy, diplomacy must be employed if a

close-up portrait is to be secured without attendant unpleasantness. When a skunk is met, as he ambles leisurely across an open field or along a narrow woodland path, do not start an argument about right of way. Be extremely polite and give him *all* the road. He is a good sport and, if treated courteously, will meet you half way. When approaching to within camera range, watch his fore-feet and his tail. If the front paws stamp the earth, danger signal number one is flying. The second



OPOSSUM



SQUIRREL

warning comes with the soaring aloft of the plumed brush, the third — but I earnestly beseech you, do not wait for that. Take your picture and go, while the air is sweet.

The weasel is an exceedingly cunning and swift little villain, and to snap his portrait you must first "hole" him in a stump, then have a comrade of the wild life trails prod him into activity with a sapling while the dog cuts off his escape. When he partially emerges from his retreat, for the purpose of recon-

noitering, capture his image with the camera.

The prong-horned antelope and the bison are almost extinct, the passenger pigeon and great auk entirely so. That the same sad fate may not befall the remainder of our fast vanishing game, I pray you, who now shoot with a gun, to follow my kind of chase. You will experience all the thrills of your favorite hunt without sacrificing the hunted. The pursuit of game with a camera is indulgence in clean sport with a clear conscience.



## PICTURING WINTER NIGHT SCENES IN THE DAYTIME

**A** BLUE sky and a snow covered landscape streaked with lines of sunlight and shadow furnish a combination of tones that is splendidly adapted for making pictures that suggest moonlight nights.

While these pictures are, in reality, records of sunlight and shadow, they can be made to convey the idea of night more effectively than pictures that are actually taken at night. The way this is done is by making a negative in which the sky, as well as the snow covered landscape, is represented by a thin instead of by a dense deposit of blackened silver, and then printing long enough that the finished picture will show a sky and a landscape in which dark tones predominate.

The reason why dark tones must

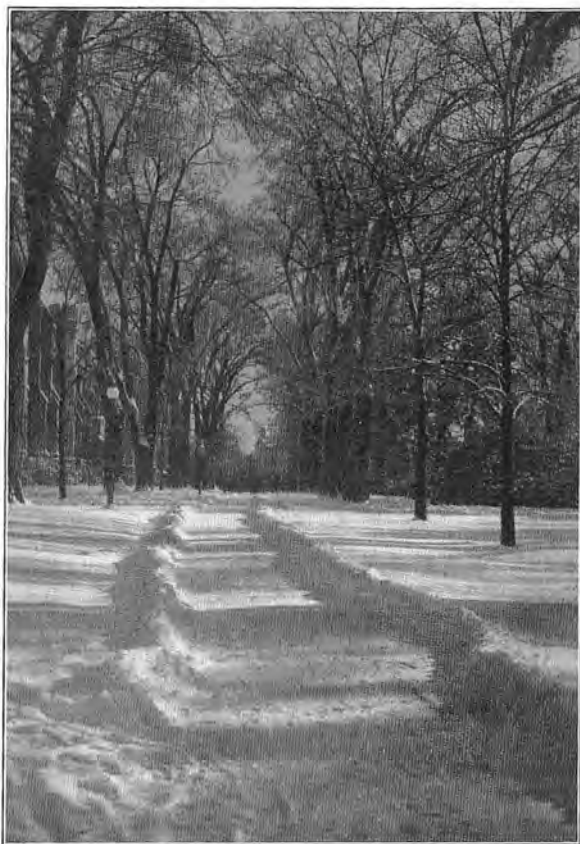
predominate in such pictures is that we always think of night as being dark. We know that the brightest moonlight is not as bright as sunlight, and that we can not see as much detail in landscape objects at night as in the daytime. It is because of these facts that any picture which contains a lot of shadow detail and shows a bright sky makes us think of day instead of night.

We can avoid recording shadow detail by exposing for the highlights and printing for the shadows or, in other words, by giving about one quarter as long an exposure, when taking the picture, as we would for a summer landscape and, when making the print, by printing long enough that the deepest shadows will develop black, the halftones



McCOSH WALK

*A daylight picture made by Evan J. Miller  
at 9.30 A. M. with a 3A Kodak*



A MOONLIGHT EFFECT

*Printed from the same negative that produced the picture on page 9*

quite dark and only the strongest lights white or light gray.

The picture on page 10 was made by the methods we have described—with one exception. The negative received twice as long an exposure as we have recommended, with the result that the sky is recorded in a lighter tone than is desirable. Fortunately, but little of the sky is visible between the dark branches of the trees. Had the exposure been shorter the moonlight effect would have been more pronounced.

We have emphasized the importance of eliminating shadow detail from pictures that are intended to suggest night. The picture on page 10 contains much more detail than the one on page 9, but this detail is not in the real shadows. These shadows are practically black. The foreground of this subject contains highlights and

halftones. By comparing the moonlight effect with the daylight picture we find that it was by printing all but the strongest lights gray—from highlight to halftone value, and thus recording the highlight detail in dark tones—that the moonlight effect was secured in the foreground.

This same depth of printing recorded the maze of fine tree branches and placed the dark tones that this picture needed in the space above the skyline.

Similar pictures can be made with any hand camera. The exposures recommended are:

With cameras that have anastigmat lenses,  $1/50$  of a second with stop *f. 22*.

With cameras that have rectilinear lenses,  $1/50$  of a second with stop *32*.

With fixed focus box cameras, a snapshot with the third stop.



## DO YOU KNOW THAT—

**T**HE largest images your hand camera can make will be obtained by placing a Kodak Portrait Attachment in front of the lens?

Under-developed negatives lack contrast, and that by making prints from such negatives on No. 4 (formerly known as Contrast) Velox you can secure pictures that will show considerably more contrast than the negative contains?

When all four margins of a nega-

tive are gray a general fog extends over the entire picture area, and that such a negative will not make as good a print as one that is free from fog?

Gray margin negatives will never be obtained if Kodak film is used before the exposure date (this is printed on the container in which the film is packed), if the film is developed in a Kodak film tank, exactly according to the instructions that are furnished with the tank?





CHRISTCHURCH PRIORY, HANTS, ENGLAND

*Made with a No. 3 Kodak*

## OPEN SEASON FOR CLOSE GUESSING

**I**NTO the office of Tom Wray, newspaper photographer, popped Joe Lawrence with a newly developed roll of film.

"I've used my No. 1 Kodak *Special* for three months and never failed to get what I went after, until the other day. I made six exposures during the ice carnival parade, of all the best floats, and not a single negative is good," lamented Joe.

"Out of focus," was Tom's verdict. "The parade is 'fuzzy' but the people across the street are sharp. You focused on the wrong subjects, that's all. For what distance did you set the focusing indicator?"

"Hundred feet," Joe answered. "I was on the balcony of the hotel."

"You haven't any right to be disappointed, Joe. You made a bad guess at the distance. The nearest floats weren't more than twenty feet from your camera. No wonder they're out of focus. What stop did you use?"

"Wide open: *f. 6.3*. Rather gray yesterday, you know."

"That emphasized your error in focusing because the bigger the lens opening the less the distance between the nearest and farthest points that will be sharp in the picture. At *f. 6.3*, the depth of focus is much less than at *f. 11* or *f. 16*. Therefore, while it is always

important to focus as accurately as possible, it is doubly important when a large stop is used. Are you a good judge of distance? How big is this room?" asked Tom.

"About twelve by fourteen," Joe answered.

"It's seventeen by twenty—I measured it once. But you're probably as good a guesser as the average."

Tom led Joe to the window. "See that sign down there. It says 'Don't park within fifteen feet of hydrant.' Well, some people draw up within eight feet of it and later try to convince the cop that they are the legal distance away. Others will hunt another parking space when there is ten feet to spare here.

"Few people are good judges of

distance," continued Tom. "The best way to learn is by pacing, or some such procedure."

"Is that what you do?" Joe queried.

"I use a Graflex now so I always know when the focus is sharp because I watch the image in the focusing hood—when that image is sharp the negative is sure to be sharp. But with my folding cameras I have all sorts of schemes for estimating distances. I know that two of my paces cover five feet. But I don't always pace, I sometimes use other methods. I know, for example, that streets in this town are sixty feet wide, that an automobile tread is about a yard and a half, that a tennis net stretches 36 feet, and that a baseball infield is 90 feet square. I have other units in mind, too, for use when I can't pace the space. But I usually manage to walk it off.

"You'd better try that system," Tom went on, "but be sure to know your pace. Take ten steps, measure the distance, then figure your average stride and remember it for your guide. Then, whenever you pace off the distance you can set the focusing indicator at the right point on the scale. Don't make a bad guess as you did yesterday and then wonder why objects twenty or thirty feet away aren't sharp when the focus is set for a hundred," was Tom's final advice.

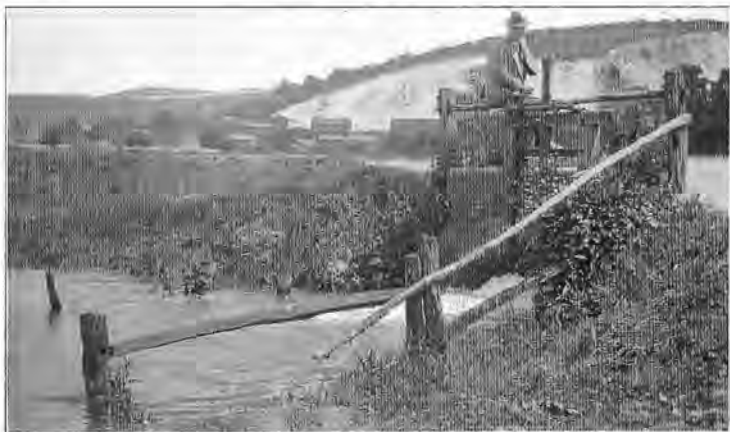
"Of course, you newspaper photographers get more practice, you ought to be good judges of distance," said Joe.

"We have to be," Tom agreed. "If a picture is out of focus we're out of luck."



BLUE JAY

*Enlarged from 3A Kodak negative  
made by Wilfred Hilton*



THE GATE TO THE MILL-RACE  
*Made with a 1A Kodak Jr.*

### THE IMPORTANCE OF PRINTING FOR THE RIGHT LENGTH OF TIME

**T**HE images in negatives and the images on Velox paper consist of metallic silver embedded in gelatine.

Before exposure and development the silver in the gelatine is not in a metallic state but exists in the form of salts. These silver salts are sensitive to light, and after light has acted on them they can be converted into metallic silver. The photographic method of doing this is by the process of development.

The gelatine coating of a film, a plate or a sheet of Velox paper necessarily has both area and thickness, and it is the difference in the quantity of the developed silver that exists in different parts of the image that produces the highlights, half-tones and shadows of the picture.

We view a negative by looking through it and we make a print from a negative by the light that passes through it, so it does not matter whether the negative image, as a whole, contains a comparatively large or a comparatively small quantity of metallic silver—whether the image lies chiefly near the surface of the gelatine or whether it extends from the surface deeply into the gelatine—the negative will make a perfect print in either case if it records all the tones of the subject photographed. This explains why good prints can be made from correctly exposed and over-exposed negatives, and also from correctly developed, slightly under-developed and slightly over-developed negatives.

It is difficult to judge with abso-

lute accuracy the exposure that a negative should receive, but from what has been stated above, and from previous articles in KODAKERY, it is evident that absolutely correct exposures are not necessary for making good printing negatives.

In making prints, however, the case is different. We view prints by looking at them, instead of through them, consequently a print should record on its *surface* all of the gradations of light and shade that make the picture. From this it will be seen that the print must be correctly printed and correctly developed, or it will be either too light or too dark. Fortunately we can do both of these things with ease and certainty.

In printing we have four factors to consider: (1) the distance the negative is placed from the light; (2) the length of time the print is exposed to the printing light; (3) the temperature of the developer; and (4) the length of time the print is developed.

By keeping the developer at a fixed temperature (70 degrees Fahrenheit is best), developing each print for exactly the same length of time (45 seconds for Velox paper), and by always printing at the same distance from the light, three of these factors become known quantities. By adhering to these three known quantities it becomes easy to find the one remaining unknown quantity. We do this by exposing and developing a

print. If the print looks too light when it is in the fixing bath it was exposed for too short a time, and if it looks too dark it was exposed too long. A very few trials will determine the length of exposure necessary for making a print that looks just right, and when we have determined this exposure we will have found the unknown quantity.

Since all the factors have now become known we can, by adhering to them, make any number of prints from the same negative that will be exact duplicates of each other.

From what has been stated it will be seen that it is just as easy to print for the right as for the wrong length of time, and it is evident that a correctly printed print will more faithfully represent the subject than one that was not rightly printed.



"LET'S BE FRIENDS"

Made with a No. 1 Brownie

# MEMORIES OF

## AS PERPETUATED



*Made with a No. 2 Brownie by Mrs. Arthur J. Anderson*



*Made with a No. 3 Kodak Special  
by Arthur W. Rice*



*Made with a 2A Brownie by Lou Ault Jones*



*Made with a No. 2 Brownie*

# SUMMER DAYS

BY THE CAMERA



*Made with a No. 1 Kodak  
by B. H. Winfield*



*Made with a No. 1 Kodak Special  
by H. U. Scholz*



*Enlarged from a 2A Brownie negative, made by Mrs. C. L. Chase*



*This picture was made by the author of the story below, under the extremely difficult conditions that prevailed in a Russian prison. There is an interesting description of how it was secured.*

## THE ADVENTURES OF A VEST POCKET KODAK IN A RUSSIAN CAMP

BY BERT ZENATY

*This is a true story of the Kodaking experiences of a Czeck soldier forced to fight against the Russians, taken prisoner by them Christmas, 1914, and detained in Russian prison camps for four years. The phraseology has not been altered, although grammatical and other changes have been made here and there to make the meaning more clear.—EDITOR.*

THEY took us to Kiev, then to Moscow, and from there I could send my first letter home. While in the field we never got in touch with our homes, and it was only after five months that I got the first lines from my mother. "Thank God, boy, that you are alive. Day by day I spent at the depot watching the trains with

wounded ones, looking for you. Please send me your picture so I know God saved you and you are not crippled."

We asked permission of the Russian commandant to see a photographer and have a picture taken. A half dozen, to the knees only, cost us a rouble and I sent a picture home. But soon came the



answer of a scared mother; "Boy, I can see only your body to the knees and you have your arms behind your back. Speak the truth. Have you all your limbs? Send another picture."

In the meantime we had been transferred to a small town by the name of Korotojak, about 300 miles south of Moscow, where we had lots of chances to find that we were real prisoners. It was only allowed us to go out of our rooms for one hour a day under heavy guard, but sometimes we could buy at the bazaar what we just needed. One of the other prisoners, an officer, and I made a camera out of a couple of boards. A broken field glass gave us just the lens we needed. It was a funny looking box but it was good enough to take pictures. But soon the colonel found out what we were doing and prohibited the drug store from accepting any orders for photographic chemicals or photographic plates. Then we got our chemicals through underground channels which were lined with roubles. We were able to get our letters with pictures past the colonel's office and had a pretty safe feeling that his orders were in vain. But they watched us and one night we were taken by surprise. A couple of Russian officers with a platoon of soldiers arrived at midnight in our quarters and made a thorough search. The result was our hand made camera and the chemicals too, were confiscated.

The world is a funny place. When there seems to be no hope of getting something or accomplishing something, at once you get un-

expected help from somewhere. That was also the case with my camera question. The Russian colonel had a beautiful daughter, 15 years of age, still at school and always with a book in hand and always making speeches or reading poetry to a bunch of blackhaired Russian flappers. Her name was Nasta. We prisoners had the privilege of going to the Russian church on Sundays. When the colonel arrived with his family everything that wore a uniform, including the prisoners, stood at attention. One Sunday when Nasta went by she gave me with her elbow a short energetic bump which I could not understand. That was not new to me with girls in general, but she was the daughter of the "almighty commandant."

When leaving the church we let the colonel and his family pass. And here Nasta did another little trick. She stooped suddenly and arose with some paper money (kopejiks) which she handed me saying, "Mister don't lose your money." My subconscious mind told me that here was something wrong (or right) and I put the money in my pocket. Returning to camp I examined the kopejiks and was surprised to find on one of them, in very bad French, this message: I saw your broken camera on my father's desk. I found also a bundle of letters which did not pass the censors. Your people will be waiting for a message and for pictures of you, but so many are destroyed. I hate the war, I hate force. How may I help you? Trust me as I trust you. You are a gentleman. Don't forget that the





ENTRANCE TO A FRENCH FLOUR MILL  
*Made with a 3A Kodak. Exposure 1/25 second, stop 8*

daughter of the commandant is undertaking this dangerous adventure. Burn the message at once.

Nasta and I exchanged a couple of letters through a laundry woman who acted as a "liaison officer," and I asked her to buy for me a small pocket camera that I could easily hide and ten rolls of film, and soon came the small package. The laundry woman was very careful and brought the articles one by one, because the guard was always present when laundry was sent or returned. The first thing I got was the small camera which looked to me quite funny and different from the cameras of German manufacture. I looked at the lens and at the English words printed on the camera. At that time they did not mean anything to me because I did not understand English. I found the word "Rochester" and

did not know if that was a 'mister' or an English name for focus. Then I found the name "Eastman" and many other words which I could not understand. I did not dream then that I would ever be in America in my life and see the same little Vest Pocket Kodak which I got from Nasta, in nearly every store on the street. I got alright not only the camera and the films but also the chemicals for the developer and the fixing powder. It was an easy matter to hide the chemicals in the kitchen. Then I got a plate of red glass which was difficult to hide because everybody knew what it was for. So I painted on the red glass with india ink the picture of a man with a mighty cap, long skirts, whiskers, and a big cross in his hand, put it in a crude carved frame, and called that fellow "Saint William." I hung

it on the east side of the room and was sure no Russian would ever touch a 'holy' picture. A candle and a couple of blankets made a dark room under the table.

One of the first pictures taken was a snapshot of myself and one of our 'living shadows,' a guard. It was taken by my friends from behind a pile of bricks with a black thread pulling on the shutter of the camera. I enlarged the picture and was anxious to send it home. So I cut it in two pieces (as indicated by the arrows on the picture). The left part representing myself on a walk, I sent through Nasta and friends in the Red Cross. Two months later I sent the other half in the same way. To explain why I was sending the picture of a Russian soldier, I wrote to my parents that a package of underwear had arrived from home and that many pieces I could not use I had given to the guard and I was sending them his picture. On the end of the letter I wrote in Russian a short thanks from the soldier. My next letter told them to put together both halves of the picture. From this whole picture they got an impression of how I was living. Maybe I was the only prisoner who managed to get through the censor's lines with such a picture.

My outer guard and friend, Nasta, always signalled in time when there was danger of an inspection and I always could hide the Vest Pocket Kodak. Once, knowing about a surprise search party, I wrapped the camera in a handkerchief, took two shoe nails and went out to the guard who was sitting in front of the camp door.

While talking to him I managed to pin the handkerchief with the camera beneath the bench. A few minutes later the inspection party arrived and returned convinced that there was no weapon or camera in the hands of the prisoners. Another time I had to use a little string which I fastened to the camera and threw it out of the window. When the inspection was over I had plenty of time to pull it back into my possession. All pictures



INCENSE BURNERS, CHINA  
*Made with a 3A Kodak Special  
by M. C. French*



ALONG THE COLUMBIA RIVER HIGHWAY

*Made with a 3A Kodak by L. W. Barnard*

arrived at home safely through the efforts of a long chain of friends. The most important link was the laundry-woman.

The last picture taken with the Vest Pocket Kodak was a snapshot of Bolshevik recruits after the Bolsheviks had come into power. I was not careful enough to hide the camera and they recognized what I was doing. Because there was a law that cameras were the property of the Soviet they started after me. I jumped behind the door and ran into my room where I had just time enough to take out the film and put it into the hand of a friend. It was too late to remove the lens, the recruits stormed the door and got my camera which had served me for so long.

A ray of hope appeared a couple of days later when the Soviet ordered me to go to Veronesh, but there I had the bad luck to be present at a "round up" at the railroad station. I soon found out I was among a couple of hundred men, women and children under arrest. They brought us to a big school, and put in each room a dozen of us. I was sure enough I was innocent but soon I found that my life was hanging by a thread. They searched my pockets and there found an exposure table which I used for the Vest Pocket Kodak to set the lens (shutter) for the time required. The table was made by myself, written by hand and had numbers both ways. All this was therefore very suspicious. I was placed under a special guard and ordered to stay in a corner and not to move. The rest of the party were soon released, the ma-

jority of them being workers and peasants.

The commissar who entered the room to clear up my case, either by releasing or by shooting me, looked at the little piece of cardboard which was found in my pocket with a face that made me shiver. He seemed convinced in what he said to me: "You are a dangerous spy of the old Czarist regime. These letters and numbers are a key to a secret letter and before we send you to the devil we will let you feel a little bit of the power of the Soviet and give you what the Czar gave to our people for centuries." I tried to explain to him what all the numbers meant, but it was hard to make a commissar understand about focus and about the radius of a lens. He laughed so heartily that the two bombs he had fastened to his belt swung like bells. Over and over again I spoke up and told him the meaning of the months, days and hours written on the little piece of paper. But I was in his eyes a dangerous Czarist officer and my perfect Russian language was another proof to him that I was only pretending to be a prisoner. So I told him the story about the little camera which was taken from me a couple of days before by Soviet soldiers in the village of Korotojak. Other commissars entered the room and allowed me to send a telegram there to prove my story about the Kodak. "It does not make any difference to us whether you are shot today or tomorrow" was the nice talk of the commissars. The answer came late but it saved my life. The camera was found as I had said.

One of the commissars, a student from Warsaw opened the door of hope for me. He gave me a sealed letter and told me that a vest pocket camera was a very rare thing in those days, especially the one I had described.

Then he said: "Here is the order for your Soviet to sent it immediately. Bring it over to me per-

sonally and then you will teach me how to handle it and your life will be safe."

I fulfilled his orders,—otherwise a bullet. And whenever I see in the stores the little Vest Pocket Kodak with the words "Eastman" and "Rochester" it reminds me of all this and how it saved my life.



## FERROTYPING GLOSSY VELOX PRINTS

**F**ERROTYPING is the process that imparts a mirror-like surface to photographs that are made on glossy paper. This mirror-like surface, which makes the picture look as though it was covered with a transparent enamel, is obtained by bringing the face of the print, while it is wet, into absolute contact with the waxed surface of a ferrotype plate, and leaving it there until it is thoroughly dry. The ferrotype plate is a piece of smooth sheet iron, one side of which is coated with a heavy enamel.

Before any ferrotype plate is used every particle of dust and all finger marks that may be on it must be washed off with warm water. Dust should not be brushed off as brushing will, in time, injure the enamel.

After the plates have been washed and dried they are coated with a solution made by dissolving 10 grains of paraffine wax in 1 ounce of benzine. The simplest way to apply this coating is by gently swabbing the plates with a

tuft of absorbent cotton that is saturated with the solution. The wax coating must cover every part of the plate. If it does not the prints will stick fast to the spots where wax is lacking.

After the benzine has evaporated the plates must be polished with a very soft cloth, preferably with the woolly side of a piece of canton flannel. The polishing must be thorough, because any spots or streaks that can be seen on the plates will show on the prints.

One coating of the waxing solution is sufficient for ferrotyping four or five batches of prints, but after each batch has been ferrotyped the plates should be washed with cold water and polished again before the next batch is put on the plates. It is not advisable to try to ferrotype more than five batches without rewaxing the plates. The wax gradually wears off and, after it is off, the prints will stick to the plates.

Glossy Velox prints may, if desired, be ferrotyped immediately after they have been developed,



SOAP BUBBLES

*Made with a Graflex by M. W. Reeves*

fixed and washed, provided they were fixed for not less than half an hour in a fresh acid fixing bath. If they were fixed for less than half an hour, or in an acid fixing bath that had previously been used,

the gelatine surface of the prints may not be hard enough to prevent their sticking to the plates. In this case they should be allowed to dry. They can then be ferrotyped at any subsequent time.

Dry prints must be placed in cold water and left there until they are wet through. When wet through they will be limp, but the gelatine will not be as soft as it was before the prints were dried.

The prepared plates should be splashed with water, or held under the tap for a moment, just before the prints are placed on them. The prints should not be drained after they are taken out of the water but laid directly, face down on the plates. The best way to do this is by taking a print in both hands, by opposite corners, and bending it slightly so that the middle of the print will first be brought into contact with the plate. The ends should then be gradually lowered, not dropped, so that most of the water that is between the print and the plate will move from the center and pass out at the ends of the print. This method is recommended for preventing air bells, which make dull spots on the prints, from forming between the prints and the plate.

A slight pressure of a finger on the center of each print will hold it in place as the plate is tilted for draining off the water. The ferrotype plate must now be laid on a piece of plate glass, or on any table top or board that is perfectly level, and the smooth side of a sheet of rubber cloth, or table oilcloth, laid on the prints. They are now ready to be brought into absolute contact with the plate. This is done by pressing firmly on a rubber print roller as it is run across the cloth. The roller should be run in one direction only. If it is run backward and forward any

air bells that may have formed might merely be moved back and forth, instead of being driven out from underneath the prints.

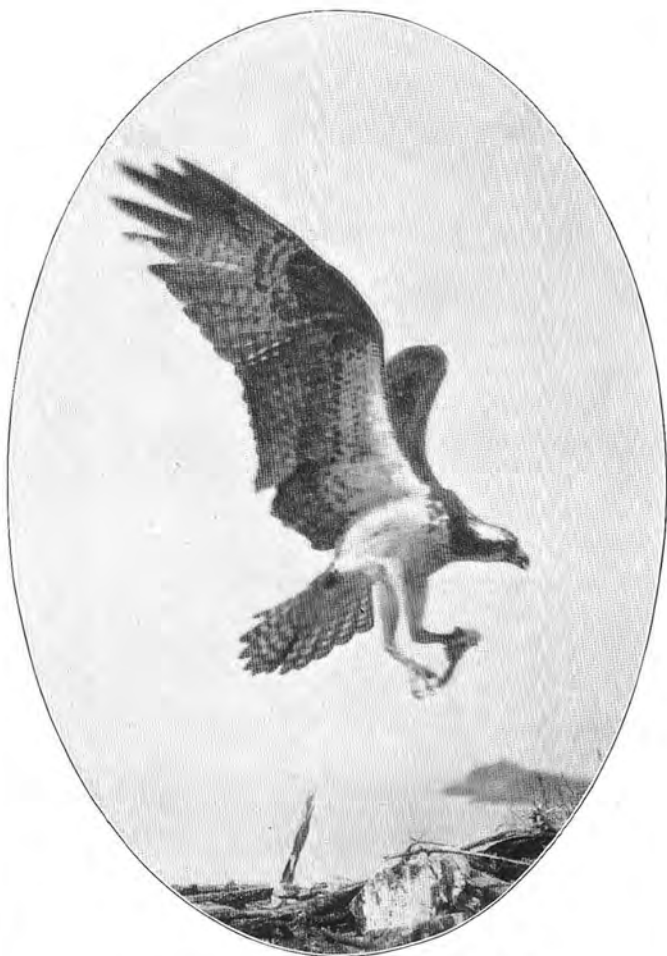
If any raised spots can be seen on the backs of the prints after the cloth is lifted they must be removed with the roller. Such spots indicate the presence of large air bells.

The plates, with prints attached, should now be placed in a current of air. As all the moisture that is in them must escape through the back of the paper the drying will, necessarily, be slower than if both sides were exposed to the air. The drying should never be hastened by placing the plates in warm sunshine, or near a stove or radiator, for the reason that the gelatine surface of the prints will soften and stick fast to the plates if they become too warm.

When the prints are thoroughly dry they should leave the plates readily if they are lifted by one corner. It is useless to try to remove prints before they are dry clear through. It cannot be done without injuring them.

The high gloss that ferrotyping produces is the result of making the surface of the prints perfectly smooth. As it is impossible to make a matte, a semi matte or a rough surface perfectly smooth by ferrotyping it is evident that the only prints that can be successfully ferrotyped are those that are made on glossy paper.

Ferrotypes plates are supplied by Kodak dealers in 10 x 14 and larger sizes. The 10 x 11 size can be obtained in both light and heavy weights. The larger sizes are furnished in heavy weight only.



*Enlarged from negative made by Eliot F. Porter with a  
No. 1 Kodak Special - Kodak Anastigmat Lens*



## SERVICE DEPARTMENT TALKS

## OUTDOOR EXPOSURES IN WINTER

IN those parts of the world where snow falls only in winter there are two types of landscape subjects that need shorter exposures in winter than in summer. One is a snow covered landscape, on which there are streaks or patches of sunlight and shadow, and the other is a picturesque ice formation.

The best way to record these subjects is by exposing for the highlights only, so as to clearly outline the shadows.

The exposures recommended for these subjects are those stated in the last paragraph of the article "Winter Night Scenes" on page 11.

For all other outdoor subjects it is best to give the same exposure in winter as in summer, even though there is snow on the ground, for the reason that winter sunlight is not as bright as summer sunshine.



*Should you desire any information regarding any  
branch of amateur photography, address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.



## *Flashlight Photography*

Add to your Kodak equipment a Kodak Flash Sheet Holder and a package of Eastman Flash Sheets (shown in use in the illustration above). You are ready for pictures by flashlight.

There's a fund of fun in flashlight photography for the winter evenings at home, and for other situations when daylight fails.

Kodak Flash Sheet Holder . . .	\$1.25
Eastman Flash Sheets, per half dozen . .	.35 up
<i>(According to size)</i>	

Ask your dealer for a copy of "By Flashlight." It explains flashlight photography by description and diagram.

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



The Optipod  
holds the camera;  
the Timer  
trips the shutter

## *Convenient Kodak Accessories*

**OPTIPOD**—A handy little device that's out of your pocket and into position for tripod duty in a moment. The felt-padded clamp holds firmly, without scratching, to table top, automobile fender, or fence rail. *Price \$1.25.*

**KODAK SELF TIMER**—Another device that is pocket small, yet photographically important. It clips to the cable release and "clicks" the camera shutter at any interval desired between  $\frac{1}{2}$  second and one minute. You can be in the picture. *Price \$1.25.*

*Add these accessories to your outfit  
At your Kodak Dealer's*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



The Kodak Anastigmat *f.4.5* is in a permanent, rigid mount, instead of in a removable lens board. This improvement permits a smaller bellows section, moving back and forth on a single, wide, metal track.

## Graflex, *Series B*, and its Lens

Any Graflex, *Series B*, includes as an integral part the Kodak Anastigmat *f.4.5* whose focal length and covering power best suit that particular model. The optical equipment is sure to be right.

Camera and lens therefore work together to fullest capacity. And the Kodak Anastigmat *f.4.5* is the proved equal of any lens in the world.

The Kodak Anastigmat is firmly mounted in a rigid, metal standard, just large enough to support the front of the bellows. The focusing section is compact and the camera balances nicely when in use.

Reflecting mirror and focal plane shutter are unchanged. Speeds are 1/10 to 1/1000 of a second and *time*.

Prices of the new models, with

Kodak Anastigmat *f.4.5* and one cut film holder or plate holder, are:

Graflex, *Series B*,  $3\frac{1}{4} \times 4\frac{1}{4}$ , \$75;  $4 \times 5$ , \$92.

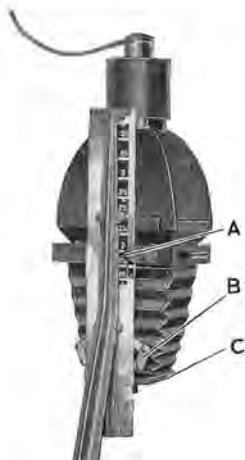
Revolving Back Graflex, *Series B*,  $2\frac{1}{4} \times 3\frac{1}{4}$ , \$78;  $3\frac{1}{4} \times 4\frac{1}{4}$ , \$100;  $4 \times 5$ , \$116.

Full descriptions are given in the September edition of the 1923 Graflex catalog. Ask your dealer or write us for your copy.

EASTMAN KODAK COMPANY

Folmer & Schwing Department

Rochester, N. Y.



The apparatus that makes enlarging for the amateur as simple as A. B. C.

## Kodak Auto-Focus Enlarger

With Enlarger set up, and negative and Bromide paper in place—

- A. Release thumb screw and slide camera up or down to secure enlargement size desired.
  - B. As you do so, automatic mechanism keeps the focus sharp.
  - C. Expose by turning down a little lever.
- (See diagrammatic explanation above).

The Kodak Auto-Focus Enlarger accommodates negatives up to 4 x 6 inches and makes prints from 1½ to 3½ times the negative size. It is supplied complete with Kodak Anastigmat Lens, negative and paper holders, six flexible metal masks and electric cord and plug. Mazda lamp for printing (75 to 200 watts capacity) is not furnished. Price . . . \$35.00.

Diffusing Disc for soft focus effects. Price . . . . . \$ 1.00.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

# No. 1A Autographic Kodak *Special*

When rigorous photographic situations are presented, the 1A *Special* is ready; when the utmost in hand camera refinement is demanded, it stands test.



*Pictures  $2\frac{1}{2} \times 4\frac{1}{4}$*

Features that stamp this *Special* for all-around excellence:

*Kodak Anastigmat lens f.6.3*—sharp-cutting, fast; at least the equal of any f.6.3 anastigmat made, regardless of price.

*Kodamatic Shutter*—scientifically accurate, speedy; seven snapshot adjustments from  $1/200$  to  $1/2$  second. A sliding exposure scale on the Kodamatic tells you the speed to use under the light condition that prevails.

*Kodak Range Finder*—convenient, practical; obviates guesswork by finding the focus for you.

*No. 1A Autographic Kodak Special*

*Price \$60.00 at your dealer's*

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ROCHESTER, N. Y., *The Kodak City*

Look for VELOX  
(readable, but unob-  
trusive) on the back.



## *Reasons Why*

When a finisher prints your films on Velox, four degrees of contrast are available—a grade of paper for every grade of negative. In short, Velox fits the film. That's one of many reasons why Velox makes the best prints.

The best print on Velox is the best print.

EASTMAN KODAK COMPANY

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# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



FEBRUARY 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*





## Silhouette Making *the* Kodak Way

The old-fashioned silhouette can easily be made the new-fashioned way with your Kodak. An evening's photographic fun at home gives you pictures novel, interesting, amusing. And there's no more to it than snapshot-making by daylight.

Just add to your Kodak equipment a Kodak Flash Sheet Holder and a package of Eastman Flash Sheets. You're ready—a free booklet at your dealer's, or from us, tells you how.

### *Prices*

Kodak Flash Sheet Holder . . . . .	\$1.25
Eastman Flash Sheets, per half dozen . . .	.35 up

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

# Kodak Cut Film

*Photographic advantages:* Kodak Cut Film, compared to plates, has wide latitude to compensate for errors in exposure, fine grain which permits enlarging to any desirable size, and it is strictly non-halation.

*Physical conveniences:* Cut Film has about one-tenth the weight of plates, is easier to handle, and it cannot break.

Regular speed Kodak Cut Film has average plate-emulsion speed, while Kodak Cut Film *Super Speed* is emphatically faster to cope with photographically difficult situations.

In Cut Film Sheaths, Kodak Cut Film can be used in any plate-holding camera, including the Nos. 3 and 3A Kodaks (regular and *Special* models) when equipped with Combination Backs.

## PRICES

	2½x3¼	3¼x4¼	3¼x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20

*Prices of film include Excise Tax*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*Made with a 3A Kodak, f.7.7 Kodak Anastigmat Lens  
By Miss M. M. Randall*



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Figure 1

## SNOW COVERED FOREGROUNDS

FROM a photographic standpoint the most important difference between a landscape that is covered with vegetation and one that is covered with snow is, that on the former there are often many more tones (gradations of light and shade) than on the latter. For this reason the pictorial effect that can

be secured in photographs of snow scenes is determined, very largely, by what appears prominent to the eye in the foreground of the subject.

Since photographic images are recorded in black and white, and since a landscape that is wholly covered with snow is white, we must rely on the dark toned



Figure 2

objects that stand above the snow, or on such shadows, tracks or footprints as may be prominent on the snow in the foreground, for the dark tones that are needed for making a picture.

In looking at a landscape picture

we instinctively try to "walk into it" by the shortest and most natural route, which is by way of the foreground. The eye travels first over the foreground and then into the middle distance. A blank foreground, whether it is white or

gray or black, never looks right, because it presents a barrier, over which the eye must jump, instead of offering a path along which it can travel.

For an example observe Fig. 1. Nothing in the foreground of this picture leads the eye to the objects of interest. Had a path, leading from the house down through the foreground, been tramped in the snow, it would have furnished a guiding line which would have led the eye to the house. This simple expedient of tramping paths, which is frequently resorted to in the picturing of snow scenes, often converts a photographic "record" into a composition that has pictorial merit.

The value of guiding lines is shown by Figs. 2, 3 and 4. In Fig. 2 it is the nearest shore line of the stream that leads us into the scene. In Fig. 3 we have lines that offer a choice of routes, but they all lead the eye into the picture. In Fig. 4 we have a still more forcible illustration. This picture not only shows the road, with wide open entrance, along which we must travel, but it keeps us in the road until we have passed beyond the fences.

Figs. 2, 3 and 4 show clearly the importance of getting detail in the foreground of snow scenes. As no far distant objects are shown, and as there is no center of interest



Figure 3



Figure 4

beyond the foreground, the pictorial interest in each of these pictures necessarily centers in the foreground. Even when a picture of a snow scene does show distance it is still the foreground that will, in most cases, determine whether the picture is of pictorial or merely record value.

In picturing snow scenes we often desire to record comparatively slight differences in tone such, for instance, as the difference in the amount of light that is reflected from the highlights (the sunlit snow) and the half-tones, which will be the faint shadows on the snow.

In such a case we must expose for the highlights only. This will suitably record the halftones but it will not record the detail in the darkest toned objects on the landscape.

In order to know what exposure to give for outdoor subjects when there is snow on the ground we must know how to classify our subjects. Fig. 5 shows a snow covered foreground, but this should not be classed as a snow scene because the object of interest is the dark toned building, and in this we need detail. The exposure that is needed for recording detail in dark toned, prominent nearby objects, even when there is snow on the ground, is the same as is needed in summer— $1/25$  of a second with stop  $f.11$  or U. S. 8, when sunlight and shadow can be seen on the subject.

Figs. 1, 2, 3 and 4 are typical snow scenes. In these subjects there are no dark toned objects in which it is necessary to record detail. What is needed is a record of the light and dark tones in the foreground. The exposures recommended for subjects that can properly be classed as snow scenes, when there is sunlight and shadow on the snow are:

With cameras having anastigmat lenses,  $1/50$  of a second with stop  $f.22$ .

With cameras having rectilinear lenses,  $1/50$  of a second with stop 32.

With fixed focus box cameras, a snapshot with the third stop.

The best records of sunlight and shadow on snow can usually be obtained from a viewpoint that shows the shadows projected to the right or left.



Figure 5

Made with a 3A Kodak Special by Louis H. Horras  
Exposure  $1/25$  second  $f.11$





DINNER TIME

## HOW THE SILHOUETTE AND ITS NAME ORIGINATED

**A**GENTLEMAN, Etienne de Silhouette by name, was Minister of Finance in the French government in 1759. This was only about twenty years before the extravagance of the French court brought about the downfall of the Empire. Silhouette tried to stem this extravagance and rid the government of financial embarrassment by putting into effect some drastic reforms. His economic energies were mainly directed against the aristocracy and, among other money raising schemes, he compelled the nobles to convert their plate into money.

These activities made him very unpopular and he became the object of much lampooning. In a spirit of subtle irony the French artists reduced their portraits to line only—"to save labor and materials." These outline pictures came to be known as "silhouettes"—a slang word at first but afterwards incorporated into the language and finally admitted to the dictionary by the French Academy.

The silhouette later took the familiar form of the outline portrait solidly brushed in with India ink or cut from black paper. It had

its greatest vogue in the eighteenth and nineteenth centuries. The art of silhouetting in this country was given the name of "skyography" by Benjamin West the American painter. In England it passed under the name of "shadowgraphy." The makers of silhouettes were also sometimes referred to, more or less derisively, as "profilists" and "scissorgraphists."

The popular impression that the only true silhouette is the black paper portrait is incorrect. Many were painted on porcelain, ivory or glass, and color was even used to enhance their life-like character.

Of course all this was long before the days of photography and "silhouette making the Kodak way."



### MAKING SILHOUETTES BY FLASHLIGHT

**P**HOTOGRAPHIC silhouettes can be made indoors, both by daylight and by flashlight, but as the brightness of daylight varies from hour to hour, and also changes rapidly when

floating clouds are alternately revealing and obscuring the sun, the surest way of obtaining correctly exposed silhouette negatives is by flashlight. Another advantage of flashlight is that it gives a brief, yet intensely brilliant illumination, which the photog-



"MUSIC HATH CHARMS"



"HEEL AND TOE"



#### IN THE HAYFIELD

*Made Indoors by Flashlight. The packing material known as excelsior was used for representing grass*

rapher can have available at any hour of the day or night.

When flashlight silhouettes are made in the daytime it is necessary to make the room, in which the

subject and the camera are placed, very dark, as any light in the room, which is strong enough to affect the film during the time that the shutter is open, would make it

impossible to secure a black image wholly void of detail. Such images can, however, easily be obtained at night, in any ordinary living room.

Two rooms, with an open doorway between, are needed. The doorway must be wholly covered with a sheet of white cloth (a bed sheet is excellent) stretched smooth so that no wrinkles can be seen. If there are wrinkles in the sheet, they will show in the prints. The subject is photographed in one of the rooms while the flashlight is ignited in the other. The subject is placed in position before the sheet, facing at a right angle to the camera. The face should be in full profile, so that not even the lashes of the eye that is farthest from the camera can be seen when the subject is viewed from the position of the lens.

The flashlight should be so placed, back of the sheet, that a line drawn from the center of the lens to the position of the flashlight would pass through the center of the sheet that covers the doorway, as is shown in the diagram on page 13. This line should



A TYPICAL PORTRAIT SILHOUETTE

also pass through the center of the subject. When the subject consists of two figures they should, of course, be so placed that this line will pass between them.

Just before making the exposure all lights in both rooms must be extinguished, then the shutter opened, and the flashlight ignited, after which the shutter should be immediately closed and the lights in the room turned on again.

As reflections from the walls of the room in which the subject is photographed should be avoided, the doorway over which the sheet is stretched should not be near the corner of the room, unless the wall paper is very dark. Should the



THE BOWLER



"TROT, TROT TO BOSTON"

door open into the room in which the subject and camera are, and remain at right angles to the sheet, it should, if it is varnished or is light in color, be covered with a dark cloth so that it will reflect no light to the subject. White or light colored costumes are less suitable for silhouettes than those that are dark.

As we are working for strictly black-and-white results, the negatives must be so contrasty that nothing but the shadow-like image of the subject will show in the print. Contrasty negatives can be obtained by developing the

films in a Kodak Film Tank for fifteen minutes, with two Tank Developer Powders, when the temperature of the developer is 65 degrees Fahrenheit. Tray developed negatives will be contrasty if a double strength developer is used and development is continued until the background (as seen from the back of the negative) is blackened to the base of the emulsion.

Unless full length figures are to be shown the lower part of a silhouette negative should usually be masked in printing. The mask may be made of any kind of opaque paper, cut or torn to the

shape desired. The mask may be laid between the printing paper and the negative, or placed over the back of the negative. If several prints are to be made the mask should be fastened to two of the margins of the negative with gummed paper. The advantage of masking is shown by the upper illustration on page 11.

Should it happen that anything that was outside of the area covered by the sheet shows in the negative, this may be gotten rid of by applying opaque with a spotting brush (both are furnished by Kodak dealers) to the back of

the negative. The outlines of costumes and accessories may also be modified by this method, if desired.

Silhouettes must be printed on a contrasty paper like No. 4 Velox. Any softer grade of paper is not suitable, unless the background part of the negative is extremely dense.

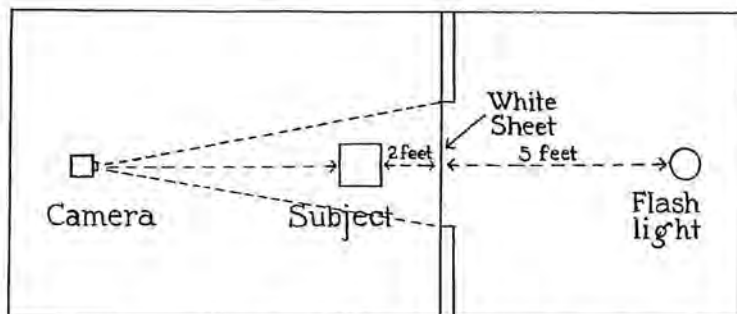
When the subject is placed 2 feet from the white sheet and the flashlight is ignited 5 feet behind the sheet, with the lens stopped to *f*.8 (U. S. 4) the following table will indicate the size of flash sheet to use with the various sizes of cameras listed.

$1\frac{5}{8} \times 2\frac{1}{2}$  }  
 $2\frac{1}{4} \times 3\frac{1}{4}$  } One No. 1 Eastman Flash Sheet

$2\frac{1}{2} \times 4\frac{1}{4}$  }  
 $2\frac{7}{8} \times 4\frac{7}{8}$  }  
 $3\frac{1}{4} \times 4\frac{1}{4}$  } One No. 2 Eastman Flash Sheet  
 $3\frac{1}{4} \times 5\frac{1}{2}$  }  
 $4 \times 5$  }

$4\frac{1}{4} \times 6\frac{1}{2}$  }  
 $5 \times 7$  } One No. 3 Eastman Flash Sheet

Be sure to read and observe the precautions that the manufacturers recommend, in the instructions that accompany all flashlight goods



*Diagram showing arrangements for making Silhouettes by flashlight*



TENANTS OF THE ZOO

*Made with a Premo*

## WHICH WAY DOES THE GROUNDHOG LOOK?

CHESTER BLAIR kept right on eating but his parents both looked up as a ray of February sunlight broke through the window and fell on the breakfast table.

"Well, well, mother, you'd better tighten up the buttons on Chester's mackinaw again," said Mr. Blair.

"Guess I'll buy him a new snow shovel, too. Looks like the old one won't last out the season."

These comments almost spoiled the flavor of Chester's third waffle. His face showed amazement, as well as maple syrup, when he raised his gaze from the plate. "Why, cold weather must be about over.

See, the sun is shining nice and warm."

Mr. Blair stopped eating and crossed his arms in the best city attorney manner.

"My boy, those statements don't jibe. You say that cold weather must be about over and in the very same breath you remark on the splendor and warmth of the sun. The idea of coupling two such assertions on the second of February is preposterous."

"Tell your father he's superstitious," suggested Mrs. Blair.

"What's so special about the second of February?" Chester wanted to know.

"This is the one day of the year when sunshine means more winter. It's the day when the old groundhog wakes up, pinches his arms, kicks his shins, pulls on his bathrobe and comes out to take a look at the weather."

"Don't you believe any such nonsense, Chester," his mother cautioned.

"And if the groundhog sees his shadow it's a sure sign of another six weeks of winter," went on Mr. Blair.

"I don't care if there's six months more winter," Chester answered. "I haven't got the taste of last year's spring tonic out of my mouth yet. Anyway there's a good sun today and I'm going to make some pictures with my Brownie."

"The groundhog story is a pure myth, Chester," scoffed Mrs. Blair. "No sensible person would pay any attention to such superstitions."

"My dear, we have changed the

subject," Mr. Blair retorted. "Chester and I are now discussing photography with the Brownie camera. As I was saying, Chester, do you remember what I said about your picture of Glenna Curtis?"

"Sure, you said that the sun made her squint and that the shadow was hid behind her back."

"I also said that the shadow of the most interesting thing in a picture is always interesting itself. The shadow should fall toward the side, however. If it is directly in front, the sun may strike the lens of the camera and fog the picture. And if it falls backward it's out of sight."

"Pick out some print that you like especially well and study it. You'll probably find that the subject is well lighted from an angle so that the shadows run sidewise. That's the rule, and it's worth keeping in mind," concluded Mr. Blair.

"Guess I can remember to watch out for the shadows on groundhog day all right," Chester readily promised.

"I wouldn't pay any attention to groundhog day, Chester," said Mrs. Blair. "It's a wonder your father doesn't tell you that the way to make pictures is to keep your fingers crossed and knock wood, and never carry your camera under a ladder. He's that superstitious."

"My dear," began her husband, "do you mind calming yourself long enough to tell me whether you started making my new shirt yesterday?"

"What? On Friday?"





## PICTURING CHA

VARIOUS MOODS  
IN VARIOUS SCENES  
WITH VARIOUS TYPES  
OF CAMERAS



# ACTER STUDIES





WINTER IN THE ALPS  
*Made with a 1A Kodak Jr.*

## KODAK BOOK PLATES

BY CARTOONIST BRADFORD

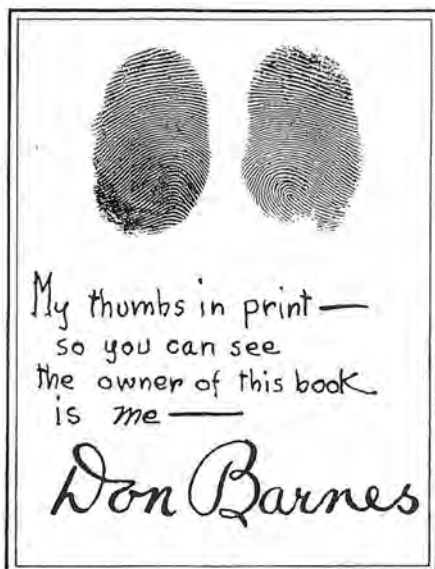
**T**HOREAU said: "There is no man so poor that he need sit on a pumpkin." Probably had he thought of it he would have added: "or so poor that he has but one book." Most of us have cases full and look upon our books as old friends, to whom we turn again and again for their message of entertainment or instruction. And for our every mood—there is a book that will fit it.

But, alas! Books, like umbrellas, are members of the Wanderlust Bund and, like other members of this tribe, they have the habit of seldom returning after once breaking home ties.

With a book plate we can discourage this habit and stamp our ownership in such a way that

everyone will know that the book has an owner to whom it should be returned. Few of us, however, have the ability to draw designs—but what of it? There is a more original way. We can make our own book plates on Velox paper, with or without a Kodak, and display as much, if not more, originality than the artist. The fact that Eastman films take ink splendidly, enables us to letter as we wish upon the back of the film, and then use this lettered film as a negative from which we can print as many book plates as we want.

We can approach the subject from many angles. If we wish to establish our claim to the ownership of a book we can use a plate



Number One

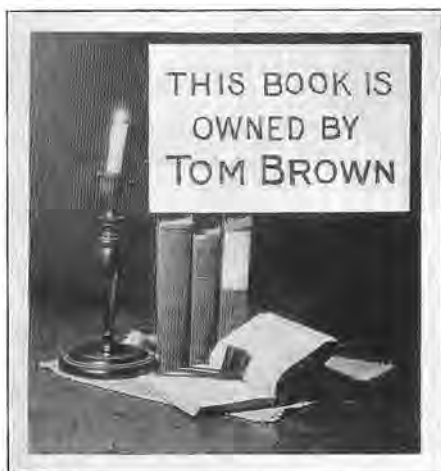
which reads: "Simon says, thumbs up," and prove our ownership with a thumb print. This would be decidedly original. As a matter of fact, the only book plate of this kind I have ever seen is shown above. The thumb prints can be made by lightly smearing both thumbs with shoe blacking and then gently pressing them on the back of a piece of Kodak film that had been fixed, washed and dried.

A book plate of this type is a decided departure from convention and is far removed from the old,

hackneyed "Ex Libris" idea. Good! All the better! It stamps this creation as a little more than "just another book plate."

An hour glass, in some sort of suitable surroundings gives a touch that warns of the time-wasting of too much book indulgence at the expense of our other duties. "How flies the time—how runs the sand? I care not how, with book in hand" would emphasize this point.

It took a brave man to add a bit of rhyme to his book plate, but it was done, in the thirteenth century, and after looking at the book plate the Grand Inquisitors decided that the owner was just crazy, and



Number Two

let him live on. But a bit of verse is a sort of latch string hanging out, that invites the observer to enter into our thought, or message and is, therefore, a part of our book plate.

If we print our plates from a negative that was made with a camera our usual Kodak technique is all that is required, so that we can enter into the work with the "know" that our finished book plate will look just as we arranged it for friend Kodak to take.

EDITOR'S NOTE: Everyone who uses a camera can make book plates by the method Mr. Bradford suggests. For a plate that is to contain no photograph, it is only

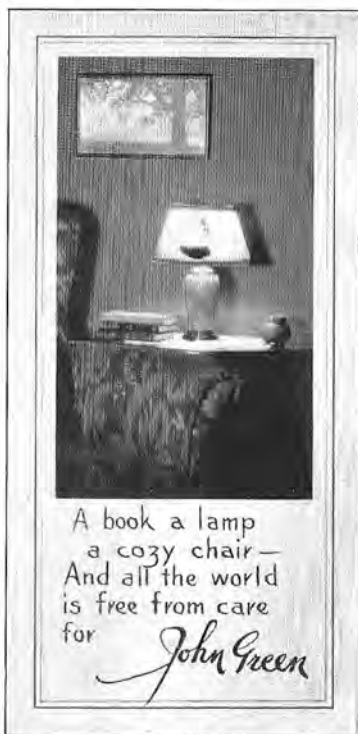
necessary to put an undeveloped film in a fresh acid fixing bath, leave it there for about 20 minutes, then wash it for half an hour in running water, hang it up and, after it is dry, place the lettering and, if desired, the thumb prints on it in the way that Mr. Bradford has explained. This will serve as a negative from which book plates can be made, on Velox paper, that will show white images and letters on a black ground. By making a contact print from this negative, on a film that has not been exposed, developed or fixed, and then developing this print in the usual way, the book plate that is printed from this film will have black images and black letters on a white ground as is shown by plate number one.

Book plate number five was printed from a negative that was made with a camera.

Silhouettes can be made by flashlight and also by daylight. The flashlight method is explained in the article entitled "Making Silhouettes by Flashlight," on page 9. To make them by daylight we place our subject in front of a window, cover the entire window with a bed sheet, make the room as dark as possible, so that the only light that enters the room is that which comes through the bed sheet, and then make a photograph of the subject, giving an exposure of, say,



Number Three



Number Four

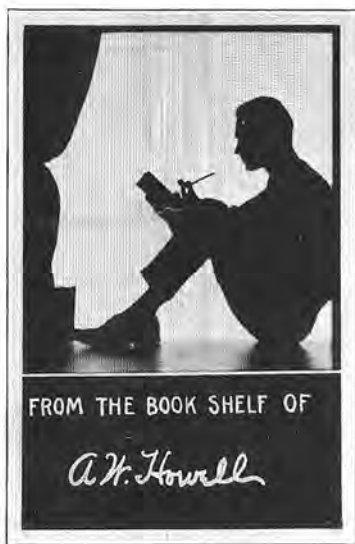
1 second with the smallest stop. The negative should be developed for contrast, as is explained on page 12.

The white letters on a black ground that are shown in plate number five were placed on the negative with India ink. This part of the negative represents the wall below the window seat. This wall received so little of the light that came through the window that it remained practically transparent in the negative. The white

line which indicates the edge of the window seat was drawn on the negative with pen and ink.

The picture part of book plates, numbers two and three and four was printed from a negative made with a camera, but the lettering was not. The white space containing the lettering, in numbers two and three, was obtained by pasting a piece of black paper on the back of the negative. The lettering was placed on the book plates, with pen and ink, after the prints had been made in the usual way.

Book plates can be printed on any of the Velox papers. Carbon Velox is especially appropriate as this has a matte surface that is without gloss or lustre.



Number Five



WHAT IS IT MOTHER?

*Made with a Graflex by Austin K. Hanks*

## MAKING BUST PORTRAITS WITH A KODAK PORTRAIT ATTACHMENT

**P**ICTURES of people that show head and shoulders only are known as bust portraits. These can be made with modern, compact hand cameras by placing a Kodak Portrait Attachment in front of the regular camera lens. As this attachment slips over the flange of the camera lens, it can be instantly put in place and also instantly removed.

The aim in making portraits should be to secure a good likeness. Since the excellence of the likeness depends, primarily, on the expression of the face and, secondarily, on the way that the face is lighted, it is to these two things that we must pay particular attention.

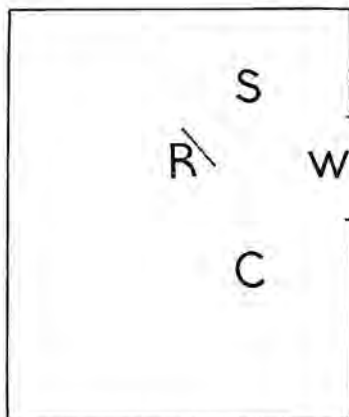
It is well to remember that people prefer portraits that show pleased and animated expressions, and that one of the surest ways of securing such expressions is by making them feel at ease while they are being photographed.

A good lighting can be arranged in any ordinary living room that has a window through which the unobstructed light from the sky enters. As we are to work by one window only, the shade on this window should be run up as far as it will go, and the shades on all other windows that may be in the room should be drawn so as to shut out the light.

The chair, in which the subject is to sit, should be placed about 3 feet from the window, at position

S shown in the diagram below. This chair should be so placed that the subject, when seated and looking straight ahead, will face a point that is about midway between the window and the camera. Now, when the subject is viewed from the position of the camera, more of one shoulder than of the other can be seen. This is the way to avoid the objectionable square front position, which gives equal prominence to both shoulders.

If a full face portrait is to be made, the subject's head (not the body) should now be turned until the nose points directly toward the camera. At this stage it is necessary to observe, from the viewpoint of the lens, the angle at



*Diagram showing how Portraits can be made by the light of one window*

S—Subject    C—Camera  
W—Window    R—Reflector





*Made with a 3A Kodak and Kodak Portrait Attachment*

*The shadows show that too much light came through the lower part of the window. Such a lighting gives "flatness" instead of "roundness"*

which the light reaches the face. extends downwards at an angle of  
If the shadow cast by the nose about 45 degrees the lighting is



*Same subject as is portrayed on opposite page*

*Photographed with the same Kodak and the same portrait attachment  
Note the "roundness" that a 45 degree angle lighting gives*

right. If it extends sideways the fainter shadows, which are needed for showing the "roundness" of the cheeks, will be eliminated by

the light which comes through the lower part of the window. This light can be gotten rid of by fastening a piece of cloth across the lower (probably  $1/3$ ) part of the window.

The shadow side of the face should now be examined from where the camera stands. If it looks *much* darker than the lighted side it will be necessary to place a reflector, at the position shown in the diagram. This reflector should be a piece of white cloth or paper, 3 feet square or larger. It may be held by an attendant or, better still, supported by one or two T-shaped sticks which are tied to the back of a chair.

Since the reflector is used for aiding in illuminating the shadow side of the face the position and the angle at which it is placed are important. The commonest mistakes in using a reflector are, placing it very close to and exactly beside the subject, so that both subject and reflector are about the same distance from the background and, setting it parallel with, instead of at an angle to, the window. When a reflector is used in this position it will destroy the "roundness" of the shadow side of the face. This can always be avoided by placing the reflector in the position and at the angle shown in the diagram.

The distance that the reflector should be from the subject depends on the distance that the subject is from the window, and also on how light or dark it is desired to have the shadow side of the face recorded. For a lighting similar to

that shown in the picture on page 25 the reflector should be about  $2/3$  the distance from the subject that the subject is from the center of the window. It is, of course, obvious that the farther a reflector is from an object the less light it will reflect to that object. The way to determine just where to place the reflector is by moving it toward and from the subject and watching the changes that occur in the lighting on the shadow side of the face.

The background for a portrait made in the home should be, preferably, a wall of the room. Any wall that shows no conspicuous decorative design is suitable. The farther from the wall the subject can be photographed, without sacrificing the lighting effect that we have recommended, the less prominent any background design will be in the picture.

In making portraits we should use large lens stops. Stop 4 on rectilinear lenses, and stop  $f.7.7$  or  $f.8$  on anastigmats are recommended. With single lens cameras it is best to use the largest stop.

While it is possible to make indoor portraits, on sunny days, with exposures as short as  $1/5$  of a second, when an  $f.6.3$  anastigmat lens is used wide open, and the subject is not more than 3 feet from the window, it is, nevertheless, better to give a more ample exposure, whenever it is possible to do so. Too short an exposure fails to record some of the shadow detail that is needed for giving "roundness" to the face. An exposure of from 1 to 3 seconds, on a bright day, is none too long.

## PRINTS FROM FLAT NEGATIVES

A NEGATIVE or a print that lacks contrast is said to be flat. Lack of contrast in a negative is due either to under-development, to extreme over-exposure or to lack of contrast in the subject that the negative represents.

When a flat negative is so thin that its densest parts are almost transparent it was either seriously under-exposed or considerably under-developed, or it may have been both under-exposed and under-developed. If it lacks detail in the middle tones, that is, the tones that should be recorded lighter than the shadows but darker than the highlights, it was under-exposed, while if it contains plenty of detail in all of the tones, but lacks density, it was under-developed.

A flat negative that is extremely dense was considerably over-exposed and fully developed.

If a negative that was correctly exposed and correctly developed is flat it is because there was insufficient contrast in the light reflected by the subject.

Whatever may be the cause of lack of contrast in a negative, a print that has ample contrast can usually be made from it on number 4 (formerly known as Contrast) Velox, provided a clearly defined image can be seen when the negative is held up to the light and examined by the daylight that passes through it.

The reason why number 4 Velox will yield a good print from such a negative, when other grades of

paper will not, is because number 4 Velox is especially made for recording much more contrast than the negative contains.

Number 4 Velox is made in three surface finishes, known as Carbon, Velvet and Glossy. Carbon is a matte surface paper that has neither gloss nor lustre. The surface of Velvet has a slight sheen or lustre. The surface of Glossy is, as its name indicates, shiny or glossy.

Number 4 Carbon Velox is furnished in both single and double weight papers, but number 4 Velvet and Glossy are furnished in single weight only.

WHEN YOUR KODAKERY  
SUBSCRIPTION EXPIRES

LETTERS are constantly being received from readers who are anxious not to miss a single copy of KODAKERY, asking when their subscription expires.

The expiration date is always printed on the envelope in which KODAKERY is mailed. This date is represented by a number which indicates the month and year. For instance, should the number be 524 it would mean that your subscription expires the fifth month (May) of the year 1924. By observing the number at the time KODAKERY is received you will always be reminded of the date when your subscription will expire.

## SERVICE DEPARTMENT TALKS

### FOCUSING WITH A KODAK PORTRAIT ATTACHMENT

**A**N error of three or four feet in estimating the distance from the camera to a subject that is fifty feet, or farther, away may have no appreciable effect on the sharpness of the picture, but an error of three or four inches in close-up work, such, for instance, as making a portrait of a subject that is only three or four feet from the camera, will always produce a "fuzzy", out-of-focus picture.

These facts tell us that the closer the camera is to the subject the more accurate must be the focusing. This is why the instructions that are furnished with all Kodak Portrait Attachments emphasize the necessity of *measuring*—not guessing at—the distance from the portrait attachment to the subject.

If you wish to make sharp focus portraits be sure to measure the distance. If you prefer diffused focus portraits use a Kodak *Diffusion* Portrait Attachment. This produces softly blended lines, which are not "fuzzy."



*For any information that you may desire regarding  
amateur photography, address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.



*For Bromide Enlargements*

# Kodak Auto-Focus Enlarger

Slide the camera up or down  
and the image size changes  
— *but the focus stays sharp.*

THE table below shows the wide enlargement range which this equipment provides.

Negative Size	Enlargements	
	From	To
1 $\frac{5}{8}$ x 2 $\frac{1}{2}$	2.4 x 3 $\frac{3}{4}$	5.6 x 8 $\frac{3}{4}$
2 $\frac{1}{4}$ x 3 $\frac{1}{4}$	3 $\frac{3}{8}$ x 4 $\frac{1}{2}$	7 $\frac{7}{8}$ x 11 $\frac{3}{8}$
2 $\frac{1}{2}$ x 4 $\frac{1}{4}$	3 $\frac{3}{4}$ x 6 $\frac{3}{8}$	8 $\frac{3}{4}$ x 14 $\frac{7}{8}$
2 $\frac{3}{8}$ x 4 $\frac{7}{8}$	4.5 x 7.4	10 x 17
3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	4 $\frac{1}{8}$ x 6 $\frac{3}{8}$	11 $\frac{3}{8}$ x 14 $\frac{7}{8}$
3 $\frac{1}{4}$ x 5 $\frac{1}{2}$	4 $\frac{1}{8}$ x 8 $\frac{1}{4}$	11 $\frac{3}{8}$ x 19 $\frac{1}{4}$
4 x 5	6 x 7 $\frac{7}{8}$	14 x 17 $\frac{1}{2}$
4 x 6	6 x 8 $\frac{3}{4}$	14 x 20 $\frac{1}{4}$

Kodak Auto-Focus Enlarger is furnished complete with Kodak Anastigmat Lens, negative holder, set of flexible metal masks in six sizes, and electric cord and plug. The ventilated lamp house has a capacity for Mazda lamps (not supplied) of from 75 to 200 watts.

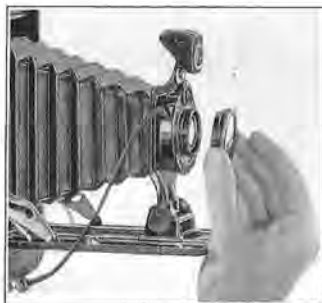
Kodak Auto-Focus Enlarger (including Excise Tax) . . . \$35.00

Diffusing Disc for soft focus effect . . . . . 1.00

*Descriptive booklet "Large Pictures from Small Cameras"—  
free from your dealer or from us*

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



## Kodak Portrait Attachment

SLIPS over the regular lens and puts your camera in sharp focus at short range. You can make arm's length portraits, and close-up pictures of pottery pieces, heirlooms, art treasures. The Portrait Attachment does not at all alter the customary way of working your Kodak.

*Kodak Portrait Attachment, 75c.*

## Kodak *Diffusion* Portrait Attachment

WORKS like the Kodak Portrait Attachment, but gives results in *soft*—rather than *sharp*—focus. Prints are diffused and warm; harsh lines of features are pleasingly reduced; effects are artistically interesting.

*Kodak Diffusion Portrait Attachment, \$1.25 and \$1.50*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

## Story-telling pictures with a Graflex



Most interesting of all story-telling pictures are those that show *animation*, a quality easy to attain with a Graflex. Indoors a slow snapshot, for example  $1/5$  of a second at  $f.4.5$ , with Kodak Cut Film *Super Speed*, can often be used where "time" would otherwise be required. Stiff posing is avoided: there is life in the Graflex picture.

Out of doors the fast shutter speeds—up to  $1/1000$ —catch the swiftest motion. Here again, *Super Speed* film safeguards ample exposure.

Prices of Graflex cameras with the Kodak Anastigmat lens  $f.4.5$  now range as low as \$62.50. All models, including the *Series B*, are described in the September edition of the 1923 catalog. Ask your dealer, or write us, for your copy.

EASTMAN KODAK COMPANY

Folmer & Schwing Department

Rochester, N. Y.





## Illumination *plus* Safety

EASTMAN SAFELIGHT LAMP — (Illustrated above). Provided with electric cord and plug to hang vertically over developing trays and hypo bath.

*Price with Series 1 Safelight, \$3.00*

KODAK SAFELIGHT LAMP—Can be moved about at will to the extent of its electric cord. Spendidly adapted for all-around darkroom use.

*Price with Series 00 Safelight, \$3.25*

BROWNIE SAFELIGHT LAMP—Screws into electric light socket.

*Price with Series 1 Safelight, \$1.50*

While these lamps are all supplied with safelights, electric bulbs are not furnished. Safelights of other series, obtainable at your dealer's, may readily be used in any lamp.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



## Motion Pictures the Kodak Way

CINÉ-KODAK, the new Eastman motion picture camera, gives you pictures in *motion* just as easily as your folding camera now gives you "stills." Make pictures with the Ciné-Kodak, project them in your own home with the Kodascope, and story-telling incidents happen all over again.

Nor are you confined to pictures that you make yourself. Charlie Chaplin comedies and dramas featuring such artists as Constance Talmadge, Alice Brady and Thomas Meighan may be rented through Kodascope Libraries Inc., and shown on your own screen.

Through ease of operation and economy, Ciné-Kodak has definitely overcome the obstacles to personal motion pictures. Compared with cameras using standard width film, it reduces the operating expense of

motion pictures over 80%.

Development and reversal of the Ciné-Kodak negative so it becomes a positive, is done in the Eastman laboratories and the charge is included in the price of the film.

*Price of complete outfit—Ciné-Kodak, Kodascope, Screen, etc. \$335  
Descriptive booklet on request*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



*If your photographic  
print was made on*

# VELOX

*the name is on the back*

Velox, as the only paper made exclusively for amateur negatives, meets their requirements as no other paper can. Accordingly, Velox is the paper used by finishers who want to produce the best obtainable prints. The presence of this trade name, in faint letters on the back of the print, not only identifies it as Velox but definitely indicates conscientious work in the finishing plant. Your films have been in careful hands.

*Look for "Velox" on the back*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



MARCH 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*

# Kodak Cut Film

Regular—*Super Speed*

WITH Kodak Cut Film *Super Speed* you have the speed that is sometimes essential to success; with both regular and *Super Speed* you have advantages that are always worth getting.

When the light is dull and the shadows deep—even when snapshots indoors are required—*Super Speed* film gets the picture if it's possible. And Kodak Cut Film in either speed, compared to plates, is lighter and easier to handle, unbreakable and non-halation. It has all the advantages of plates—plus convenience—with none of their drawbacks.

Through Kodak Cut Film Sheaths the advantages of Kodak Cut Film are brought to all plate holding cameras—for example, Nos. 3 and 3A Kodaks (regular and *Special* models) when equipped with Combination Backs.

## PRICES

	2½x3½	3½x4½	3½x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20
Combination Back for Nos. 3 or 3A "Regular" . . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above . . . . .					1.50

*Prices of film include Excise Tax*

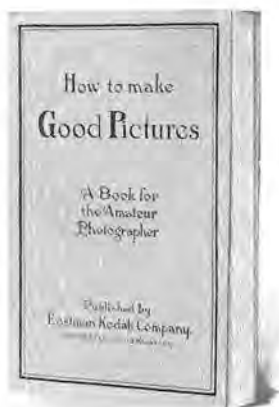
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VOL. XI

MARCH, 1924

No. 7



*Made with a Kodak*

### WHEN THE FLEECY SNOWFLAKES FALL

THE large, fleecy looking snowflakes that often bend down the branches of trees, and put a suggestion of fairy land on lawns and gardens, are more apt to fall in the early and late days of winter,

when the temperature is near the freezing point, than at any other time. As these snowflakes melt quickly after the sunshine reaches them they should be pictured as soon as possible after the sun has



put highlights and shadows on the scenes that they create.

A record can, of course, be secured without the aid of sunshine, but as direct sunlight adds snap and brilliancy to the lighting the best pictures can always be made while the sun is shining.

Since it is the newly fallen snow on the branches that furnishes the motive for the pictures this snow should be so recorded that it will look as though it was white and clean.

We have seen many pictures of such subjects in which the snow on the trees looked gray, while most of the snow on the ground appeared white. Such pictures do not look right. They are not the result of photographing the subjects on dull days, because on dull days all newly fallen snow appears to be of one tone. These unsatisfactory pictures can only be made on sunny days, under favorable conditions, when there are two distinct tones—sunlight and shadow—on the snow, and they give an unsatisfactory rendering of the subject solely because the subject was photographed from a wrong viewpoint.

We must remember that from any viewpoint we may select on a sunny day, both sunlight and shadow can be seen on the snow that is on the ground. By choosing a viewpoint which places the sun directly in front of the camera we will photograph the shadow side of the tree. This will make the snow on the tree look darker than the sunlit parts of the snow that is on the ground.

By selecting a viewpoint which

places the sun directly behind the camera the snow on the trees can be seen brightly lighted and it will, in consequence, photograph white. The result obtained from such a viewpoint will be pleasing, but it will not be the best that is obtainable, because from such a viewpoint we cannot see enough of the shadows that are cast by the tree trunks.

The best lighting effect is one that shows as much sunlight as possible on the trees and as many shadows as possible on the ground. This will place the emphasis of light where it belongs for such subjects—on the snow that is on the trees. This lighting effect can be recorded from any viewpoint from which the sun can be seen both in front of the subject and either to the right or left of the camera, or, in other words, from a viewpoint which places the sun behind and to one side of the camera.

After selecting the viewpoint from which the best lighting can be secured it is necessary to observe the background against which the snow on the trees is seen. If this background is any other color than blue or white it will photograph darker than the snow, so that no filter need be used.

If the background happens to be a mass of white clouds the exposure should not be made until after they have floated away, because white clouds will photograph white whether a filter is used or not, and it is, obviously, impossible to clearly outline a white object against a white background.

With a blue sky for a background we can always outline our subject,

as we can make blue photograph darker than white by merely placing a Kodak Color Filter in front of the lens.

Since we are more interested in recording the lights and shadows on the snow than in securing detail in landscape objects we should expose for the highlights only.

The exposures recommended, when the sun is shining and no filter is used, are:

With cameras that have either anastigmat or rectilinear lenses,

1/50 of a second with stop 16.

With single lens cameras that have stops marked 4, 8, 16, 32 and 64, 1/50 of a second with stop 16.

With single lens cameras that have stops marked 1, 2, 3 and 4, 1/25 of a second with stop 3.

With single lens cameras of the box type (like the box Brownies) a snapshot with the second stop.

When a Kodak Color Filter is used the exposures should be from 5 to 7 times as long as those we have mentioned.



ANVIL MUSIC

*Made with a Premo by E. W. Donaldson*



AT "ATTENTION"  
*Exposure 1/25 second f.4.5*

## A COTTONTAIL CAMERA CHASE

BY HOWARD TAYLOR MIDDLETON

*Illustrated by the Author*

IN many parts of the United States the wild cottontail rabbit is, undoubtedly, the most persistently hunted of all our small furred game, but I do not happen to know of a rabbit hunt being seriously undertaken with a camera, instead of with a gun, prior to my own attempts during the past season.

I found the sport itself highly enjoyable and the results of the hunt very gratifying, as I did all my shooting with a Graflex which, with its focusing mirror, focal plane shutter, and fast lens, is the ideal camera for wild life photography.

When I went out for pictures of

adult rabbits in the open season, I made it a point to accompany a gunning party, every member of which considerably gave the camera the first chance at the game.

When a bunny was discovered in a "form," and the conditions were such as to make a picture possible, that is, if the little animal had chosen a spot in the open for his day nap, and was not entirely obscured by grass or dead leaves, the photographer was summoned and allowed to stalk the game. This was fortunate for the rabbit as well as for the Graflex hunter, because occasionally, when the quarry was flushed in the unsuc-



BUNNY IN HIS "FORM"

*Enlarged from part of a 4 x 5 negative*

cessful effort to gain a close-up picture, he was missed by the gunners as well.

During the early winter months it so happened that all of the best portrait opportunities came at moments when the sun was totally obscured by dark clouds, but an *f. 4.5* lens, working at full aperture, and Kodak Cut Film *Super Speed* overcame that serious handicap very nicely.

For a bedroom portrait of Bunny, under poor light conditions, I endeavored to make the exposure from a distance of approximately ten feet, and while such a distance could not bring a big image to the film, it did afford greater depth of focus than a closer "shot" would have done, while an enlargement made from the desired portion of

the negative gave a satisfactory effect.

A rabbit usually bounds from his "form" at high speed, but if surrounded by a circle of men so that his retreat is apparently cut off on all sides, he may become bewildered after running a few yards, and hesitate just an instant, with ears cocked high, and sensitive nose a-quiver, before resuming his flight toward a distant rail pile and freedom.

As camera hunting knows no game laws, it is quite possible to stage a rabbit hunt in the season when grassy burrows in field and meadow are overflowing with gray-coated, long-eared, and puff-tailed babies. If you are so fortunate as to find a rabbit nursery when its inmates are old enough to be taken



A CARE-FREE MOMENT

*Exposure 1/110 second f.8*

in safety from their fur-lined cellar and photographed in group formation, intensely interesting as well as humorous poses may be achieved. Since young rabbits are as active and as playful as kittens, it takes a shutter speed of at least  $1/100$  of a second to stop motion in their wriggling bodies.

A rabbit burrow is sometimes difficult to find, due to the fact that it is most cleverly concealed. However, the parents, while they rarely visit their children in daylight, are always near at hand. If you flush a rabbit in an open field, and it circles from you slowly instead of running swiftly and directly away as though enticing

you to follow, this is almost positive evidence that a burrow is near at hand, which a patient search will usually reveal.

There comes a time in early autumn, after the last home ties are severed, when the young rabbits scamper nimbly about the countryside, self-supporting but not yet camera shy. At this stage of their existence, the young Cottontails make many an easy mark for the camera. They are not full grown, it is true, but when seen amid the grass blades and dandelion blooms of overgrown lawn or garden, they are cunning indeed.

To make a cottontail portrait series complete it is necessary to



THE BABIES

*Exposure*  
1/110 second f.8

include a foot-print record. Rabbit tracks may be photographed at all seasons of the year in mud or sand, but the most satisfactory period is in winter, just after a snowfall, when the white carpet of every field and woodland is a bulletin board which tells the latest news of the wild folk. You will find both comedy and tragedy plainly written there. A maze of criss-cross trails about the base of some giant forest tree chronicles a bunny dance beneath the midnight moon, but impressions left by pads of hound, fox or weasel, which approach and mingle with those of Cottontail's fur boots, tell a far more pathetic story.



DOG AND RABBIT TRACKS



DOLLY'S BOBBED HAIR  
*Made with a 3A Kodak by F. Assink*



A CANAL IN STRASBURG, ALSACE  
*Made with a 3A Kodak, Exposure 1/25 second f.16*

## DEFECTS IN PRINTS

### THEIR CAUSES AND PREVENTION

THE development of prints, like the development of negatives, is a chemical process, which proceeds from cause to effect strictly according to the laws that govern chemical action.

When we change the composition, or the strength, or the temperature of the developer which we use for making prints, we are introducing a cause which will produce an effect. If the change in the developer is slight the effect on the print will be slight, but if the change in the developer is pronounced the effect on the print will be very marked.

Practically all of the defects that we find in prints are due either to the use of an unsuitable developer or fixing bath or to faulty manipulation. Even should the composi-

tion of the developer be exactly right the solution will be unsuitable for making prints if the temperature at which it is used is much too high or much too low.

The temperature at which the developer is used should be about 70 degrees Fahrenheit. If the developer is much colder the prints will develop so slowly that they may become fogged before they are fully developed.

Should the temperature of the developer be much higher than 70 degrees Fahrenheit the prints will develop so quickly that it will be difficult to tell when to stop development, and, as too warm a developer oxidizes rapidly, it may cause red or brown stains to appear on the prints.

A developer that has been once



used should be discarded. If it is set aside and used again a few days later it will be very apt to produce brown or red stains on the prints.

Brown or red stains are also caused by a developer that has become too weak from overwork.

If the developer is too dilute, that is, if it contains too much water for the quantity of chemicals, irregular shaped, undeveloped spots or streaks will appear on the prints.

The temperature of a fresh acid fixing bath should never be higher than 65 degrees Fahrenheit. If the bath is used a second time its temperature should be kept at 60 degrees Fahrenheit, or lower. If it is much too warm yellow or brown stains will result.

The cause of purple stains, which later turn brown, has puzzled many

because they seldom make their appearance until after the print has been washed and dried. These stains indicate uneven fixing, in consequence of which some of the silver salt is left in the print, and when this is exposed for some time to strong light it turns purple and then brown.

To make sure that prints are thoroughly fixed see that the fixing bath has free access to the entire surface of each print. Do not let one print remain on top of another in the fixing bath. This can be prevented, no matter how many prints there are in the bath, by handling the prints so that each one will be, alternately, on the top of the pile.

Prints should be left in a fresh acid fixing bath not less than 15 minutes. Leaving them there for



THE IRON PILLAR AND RUINS IN OLD DELHI

*From a negative by Meri La Voy*



A CLOSE-UP PORTRAIT  
*Made with a Graflex by A. K. Hanks*

an hour will do no harm, but leaving the prints in the fixing bath all night is risky, as such long fixing in a *fresh* bath will bleach the prints. They should be left for not less than half an hour in a fixing bath that has previously been used.

When those parts of a print that

should be white are gray, it will be due, either to developing the print in an unsafe light, to an unsuitable developer, to too little bromide in the developer, or to paper that was too old. The date before which the paper should be used is stamped on the package.

No photographic paper, or other products that contain silver salts, can remain in perfect condition indefinitely. It is only after the silver salts have been converted into metallic silver by the developer that the silver becomes permanent.

Grayish mottled markings will sometimes appear on time-expired paper, and also on fresh paper that was kept in a damp place or was exposed to illuminating gas, coal gas, or to the fumes of ammonia, turpentine or other strong smelling chemicals.

Round white spots on prints are caused by air bells that are allowed to form and remain on the prints while they are developing. These air bells are apt to form if the developer is *poured* on the prints, and when prints are developed face down. They will very seldom form if the print is immersed in the developer by sliding it under the surface of the solution *face up*. Prints should *always* be placed in the developer and the fixing bath face up.

Round or irregular shaped *dark* spots may be caused by air bells which form when prints are placed in the fixing bath face down. Should they appear on prints that are placed in the fixing bath face up it will be because the prints were not moved about for a few moments, under the surface of the bath, immediately after they were immersed in the bath.

Blisters are apt to occur if prints are transferred from the developer to a rinsing water that is much colder than the fixing bath, and also when water from the tap is allowed to fall directly on the prints. They may also occur when prints

become creased or broken in the wash water and when prints are fixed in hypo to which no hardener or too little hardener has been added.

Always use the fixing bath that is recommended by the manufacturers of the paper. They recommend it because they know, from daily experience, that it is suitable for the paper.

A print should never be held up to the light and examined between developing and fixing. If the light is unsafe it will fog the print, and even if the light is perfectly safe the developer that remains in the print will oxidize and stain it. If the print is to be closely examined, in a strong light, before it has been fully fixed this should be done *after* it has been kept moving under the surface of the bath for about half a minute.

One of the surest ways of staining a print is to take it out of the developer and let it develop in the hand. Oxidation of the developer is bound to result.

A moist finger placed on the surface of a print before it is developed will cause a finger print record, of the one that is guilty of doing this, to appear on the print.

The result of carrying hypo into the developer by the fingers that move the prints about in the fixing bath quickly becomes evident. A developer that is being contaminated with hypo will produce progressive changes in the tone of the prints and will, when it contains enough hypo, refuse to develop any but the dark tones. The Eastman Hard Rubber Print Paddle is made expressly for moving prints

about in the hypo. This paddle makes it unnecessary to put the fingers in the bath.

Since the causes that produce the defects we have mentioned are known and can be produced at will by the expert worker, and since the way to avoid them is equally well known and has been pointed out

in this article, every one who happens to make a print which has any of the defects we have mentioned can easily avoid duplicating it.

It is just as easy to form the habit of making prints by right as by wrong methods, and it is more economical and a vast deal more satisfactory.



### SHOULD YOU NEED ANOTHER MANUAL

**I**F the manual that tells how to operate your camera has disappeared you would probably like to get another so that you can always have information

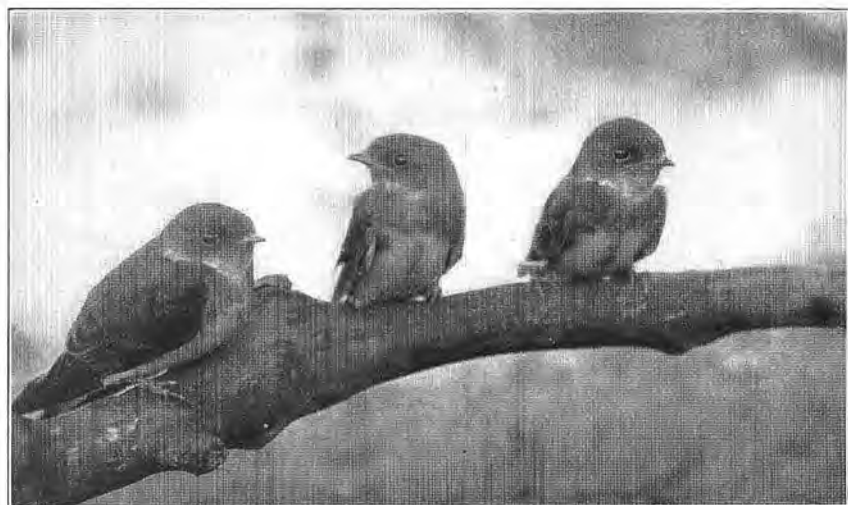
available that will help you to make better pictures. Ask your dealer for one, or write to the Eastman Kodak Company, Rochester, N. Y.



A SCENE IN THE FRENCH PYRENEES

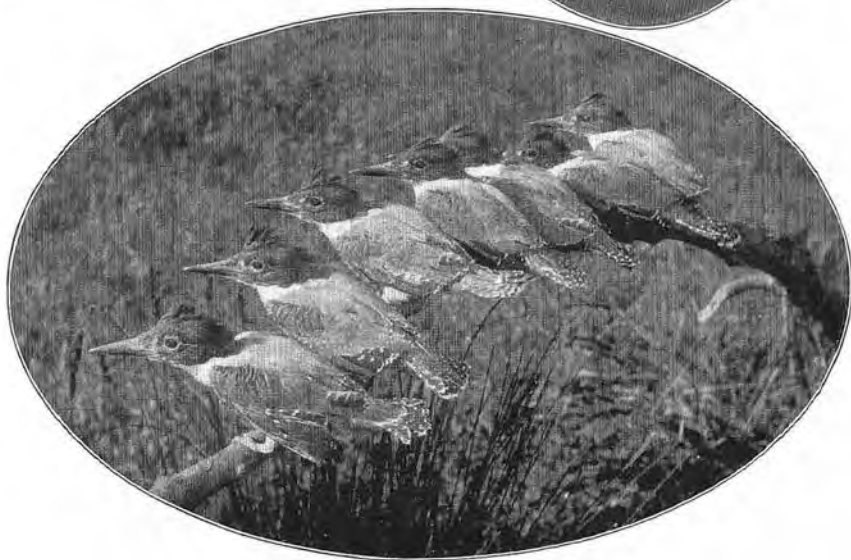
*Made with a Premo*

# VISITS TO THE AS RECORDED



# HAUNTS OF BIRDS

BY THE CAMERA





THE ABANDONED MILL

*Made with a No. 1 Kodak Special by Walter N. Pierce*

## MAKING ENLARGEMENTS WITH A KODAK AUTO-FOCUS ENLARGER

BY STEPHEN D. WALL

THERE is many an attractive outdoor subject which can only be pictured to the best advantage from a viewpoint which includes some objects that we do not want to photograph. The camera cannot eliminate these, neither can the photographer halt traffic or rearrange the fixed objects on a landscape. Whenever he is compelled to include more than he wants in his negative the fault need, in many cases, get no further than the negative, because the surplus sky or foreground, and the undesirable objects at the right and left of those that he wishes to pic-

ture, can be trimmed from the print.

But, it may be objected, this procedure will make the prints smaller. This is true, but if large prints are wanted they can easily be obtained by making enlargements from the negatives. And enlarging is so easy and fascinating, now that self-focusing apparatus is available.

On my vacation last year I made enough pictures to fill a Kodak album. Each roll of film was carefully developed soon after the exposure and the negatives were filed away to be sorted and printed at home. Even then,

during the gay days of my vacation, I looked forward eagerly to the many evenings of interesting work I'd have making the prints, each of which was to recall vividly some incident of the summer.

But I ran into trouble. Some of the prints didn't look exactly right. In one picture appeared an object that was absolutely foreign to the real picture. In another the subject was so small and far away as to appear quite uninteresting. Others included too much sky or foreground.

I wanted pictures, of fairly uniform size, that would emphasize the objects that interested me, and I knew I could get them by enlarging and trimming. Yet enlarging with ordinary equipment was too tedious to tempt me.

Before I saw the self-focusing enlarger I assumed that there was only one way to make big prints. Endless focusing, pinning up the paper and dropping the pins on the darkroom floor, had taught me that an enlargement made in the old fashioned way wasn't worth the trouble unless I had a negative of prize-winning quality.

But since I became acquainted with the self-focusing enlarger my interest in picture-making has increased by leaps and bounds, as with this enlarger I can make prints of the size I want from any part of the negative, just as easily as I can make contact prints.

With the self-focusing enlarger it is easy to expand little details to any reasonable size—as effective as telephoto work but involving less expense and trouble.

A self-focusing enlarger belongs

in every enthusiast's outfit. Then he needn't carry a 5 x 7 or an 8 x 10 camera, however useful such equipment may be for some purposes. To a large extent I make my 1A Kodak *Special* do the same work.

The essential thing is to get a good negative. Be sure that the focusing indicator is set for the correct distance, and that the camera is held steady or placed on a tripod. Always give an ample exposure.

The rest is still easier. After the negative has been made insert it in the enlarger, with a mat of the desired size. Raise or lower the camera until the picture that the enlarger projects to the table top is of the size desired. All this is done so simply because the apparatus is always in focus.



## LEVELING THE CAMERA

Sandy, stony or boggy ground, cement walks, smooth pavements and steep hillsides are places where it is sometimes impossible to make a tripod stand straight.

If the tripod can be made to stand rigid enough to hold the camera at any angle whatever, the camera can be leveled with an Optipod, attached to the tripod head. This attachment fits all tripods and all hand cameras. It can be carried in a pocket, and can be quickly attached and quickly removed from the tripod.



## THE KODAK AUTO-FOCUS ENLARGER

IN the article on pages 18 and 19 Mr. Wall mentions some of the advantages that a self-focusing, that is, an automatic focusing enlarger has over all other types of enlarging equipments.

In order that those who have never made enlargements may appreciate the great advantages of an automatic focusing enlarger we will, before describing the automatic method, explain the method by which enlargements are made with focusing cameras that are not equipped with automatic focusing devices.

Large pictures are made from small negatives by placing the negative in a suitable holder and photographing the negative image by the light that passes through it. The size of the enlargement thus obtained depends on the distance between the lens and the paper on which the picture is printed, but the sharpness of the enlargement depends on the distance between the lens and the negative.

In order to secure a sharp enlargement of the size that is wanted it is, therefore, necessary to have both of these distances exactly right. If one is wrong the picture will be of the right size but will not be sharp, or vice versa. If both distances are wrong the picture will not be of the right size neither will it be sharp.

The only way it is possible to get both of these distances exactly right, with any but an automatic focusing enlarger, is by trial. The camera must be moved toward and from the paper to which the image



Fig. 1

is projected, for securing the size of picture that is wanted, and then the lens must be racked back and forth for securing a sharp image. As the sharpness of the image can only be determined by watching it as the focus changes, only those who have good eyesight can depend on getting it sharp.

These handicaps, which have prevented many from making enlargements, have now been wholly overcome by an enlarging camera which focuses automatically, that is, it always projects as sharp an image to the paper, on which the picture is to be made, as the negative can yield, and it does this

regardless of the size of the picture.

This camera is known as the Kodak Auto-Focus Enlarger. Fig. 1 shows it attached to an ordinary table, with the paper lying on the

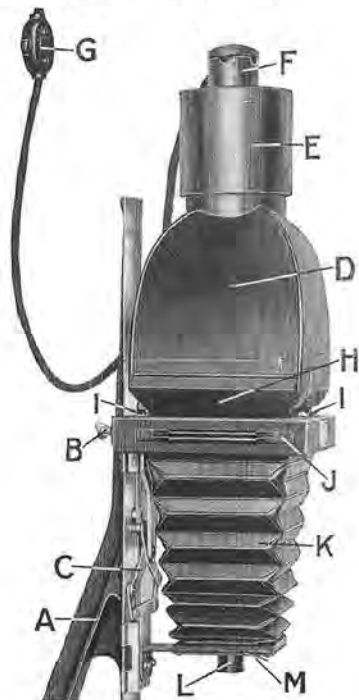


Fig. 2

- A—Standard
- B—Thumb screw
- C—Focusing Device
- D—Reflector or Lamp House
- E—Collar
- F—Socket
- G—Switch
- H—Hinged Door
- I—Catches
- J—Negative Holder
- K—Bellows
- L—Lens
- M—Exposure Lever

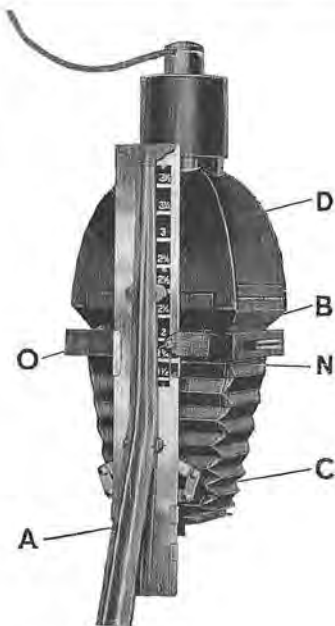


Fig. 3

- A—Standard
- B—Thumb screw
- C—Focusing Device
- D—Reflector or Lamp House
- N—Indicator Line
- O—Frame containing Negative Holder

table, where it is held in position by the paper holders.

To make clear how this camera does what we have stated we will refer to Fig. 2.

By moving the frame, into which the negative holder (J) slides, upward or downward on the standard (A) the distance between the lens (L) and the negative, which is in the negative holder (J), and also the distance between the lens and

the paper, are so changed by the focusing device (C) that the image is kept sharp, no matter at what position on the standard the frame is locked.

The focusing scale (Fig. 3) shows that the Kodak Auto-Focus Enlarger will make enlargements ranging from  $1\frac{1}{2}$  to  $3\frac{1}{2}$  diameters, that is, from  $2\frac{1}{4}$  to  $12\frac{1}{4}$  areas, or, in other words, enlargements that are from  $2\frac{1}{4}$  to  $12\frac{1}{4}$  times as large as the contact prints that can be made from the negative.

Fig. 3 shows that the indicator line (N) is set opposite the  $1\frac{3}{4}$  mark on the scale. This means that the negative holder, in the frame O, is locked (by the thumbscrew B) at that position on the standard where the enlarger will make a  $1\frac{3}{4}$  diameter enlargement.

The Kodak Auto-Focus Enlarger will make enlargements of any size between  $1\frac{1}{2}$  and  $3\frac{1}{2}$  diameters, from the whole, or a part, of any film or glass negative that is not larger than 4 x 6 inches.

The enlarger is fastened to a table with a long thumbscrew, which is not shown in any of the illustrations. When a sheet of white paper is placed on the table, and the lever M (Fig. 2) is turned to point downward, the negative image can be plainly seen on the paper. The size of picture that is wanted can then quickly be obtained by moving the frame upward or downward on the standard, and, whatever the size of the picture is to be, it will be sharp.

The lever M moves an orange colored safelight shield, which is inside the bellows. When this lever is at the position shown in Fig. 2

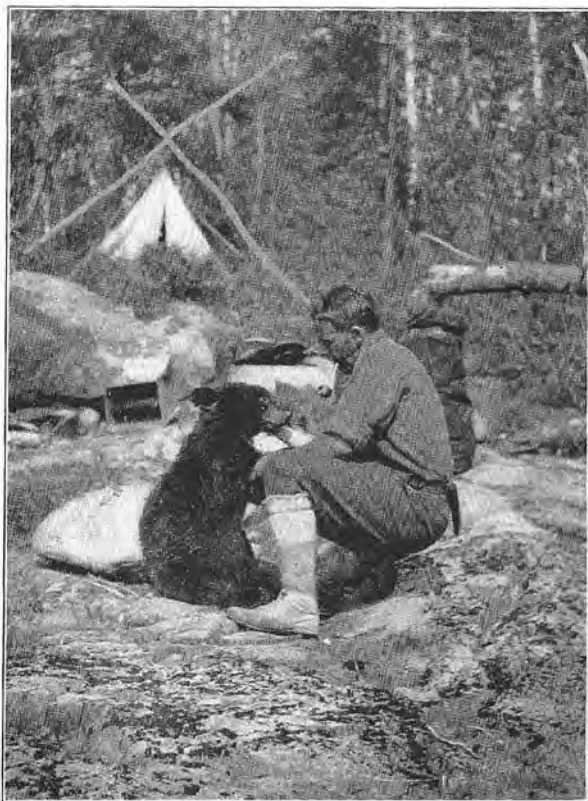
it covers the lens; but as it acts as a filter, through which the light passes, the image remains visible on the paper. As soon as the white paper has been removed and a sheet of bromide paper has been put in its place the exposure can be made by turning the lever downward.

By eliminating the necessity for focusing the Kodak Auto-Focus Enlarger has, as Mr. Wall states in his article, made enlarging as easy as contact printing.

Those who prefer enlargements that have softly diffused instead of sharply defined lines can make them, from even the sharpest of negatives, by merely slipping the Diffusing Disc which is made expressly for this purpose, over the hood of the lens that is fitted to the Kodak Auto-Focus Enlarger. This Diffusing Disc, does not change



THE STUDY HOUR  
*Made with a No. 1 Kodak*



## MAKING FRIENDS

*Made with a 3A Kodak Jr. by C. D. Aldrich*

the focus, nor does it have any appreciable effect on the length of the exposure.

As either 75, 100, 150 or 200 watt Mazda C (pear shaped, nitro-

gen filled) lamps can be used in the lamp house of the Kodak Auto-Focus Enlarger, the photographer can print very quickly, or slowly, as he prefers.



NIAGARA FALLS

*Made with a 3A Kodak Special by Wm. Manning*

### WHEN DEPTH OF FOCUS COMES FIRST

**W**HEN it is desirable to get sharp images of both nearby and distant objects it is sometimes puzzling to know what stop to use, at which distance mark on the focusing scale to set the focusing indicator and what exposure to give.

Suppose, for instance, that you have a 3A Autographic Kodak and wish to photograph a flower bed that is seventy feet long, from a viewpoint that is only twenty feet from the bed, and want to get a sharp picture of the whole bed. The only way that you can do this is by stopping down the lens and setting the focus so that everything between twenty and ninety feet from the camera will be sharp.

The Range of Sharpness table in the 3A Kodak manual states that

everything from fifteen to ninety three feet will be sharp when the focusing indicator is set at the twenty-five foot mark on the scale, provided the lens is stopped down to U. S. 32 or *f.* 22.

Having set the camera for the depth of focus the next thing is to set the shutter for giving the right exposure. We will assume that it is a sunny day, on which ordinary landscape subjects showing sky would be given an exposure of  $1/25$  of a second with stop 16. Since stop U. S. 32 or *f.* 22 admits only half as much light as stop 16 the exposure must be twice as long, or about  $1/10$  of a second.

A Range of Sharpness table will be found in the manual that accompanies all sizes of Kodaks that are now being manufactured.

## FOCUSING FAR DISTANT OBJECTS

THE rays of light that are reflected by an object are so bent in passing through a lens that they will meet again at a certain distance behind the lens and form an image of the object.

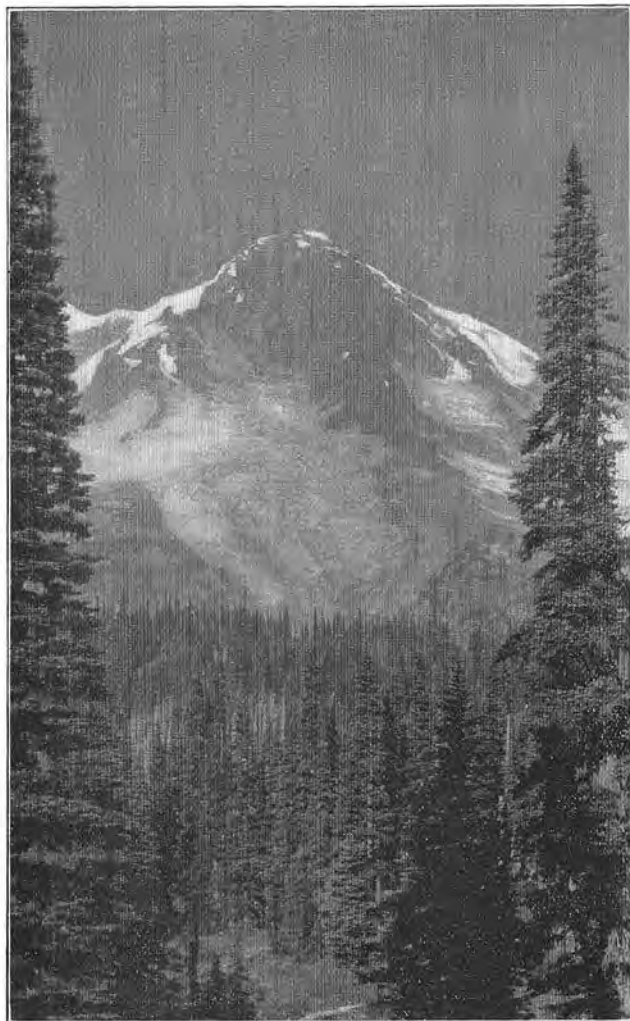
In order to obtain the sharpest possible images of objects that are 100 feet distant the focus must be set for 100 feet, and when it is so set objects that are considerably nearer and, when a compact folding focusing camera that makes pictures not larger than  $3\frac{1}{4} \times 5\frac{1}{2}$  or  $4 \times 5$  is used, all objects that are farther than 100 feet from the camera will also be in focus.

The marks on focusing scales show that for nearby subjects the lens must be placed farther from the film than for distant subjects, but there are no marks on the scales for distances greater than 100 feet. The reason for this is that the equivalent focal length of a lens determines how far from the film a lens must be placed in order to make a sharp image of extremely distant objects. This distance is indicated by the 100-foot mark on focusing scales. If a lens is placed less than this distance from the film it cannot form a sharp image of any object whatsoever, no matter

what its distance from the camera may be. Therefore, when you wish to make sharp pictures of extremely distant subjects with a folding Kodak or Brownie be sure to set the focusing indicator at the 100-foot mark on the scale.



JEWISH WAITING PLACE, JERUSALEM  
*Made with a 1A Kodak Jr.*



MOUNT RAINIER, FROM INDIAN HENRY'S HUNTING GROUND

*Made with a 3A Kodak Special by L. W. Barnard*

## PHOTOGRAPHIC THEORY AND PRACTICE

ALL who are interested in photography should read *The Fundamentals of Photography*, a book that was written by Dr. C. E. K. Mees, the Director of the Research Laboratory of the Eastman Kodak Company.

While it was written primarily for giving an account of the theoretical foundations of photography, it also discusses the practical results that have followed the application of those theories. It is profusely illustrated with diagrams and photographs.

Of the 120 pages that the book contains only 7 are devoted to sketching the historical background that is needed for a comprehensive presentation of the subject. Though it is a scientific work it is written in simple language that anyone can understand. It deals almost solely with modern processes—obsolete methods being referred to only when necessary for explaining underlying principles.

The chapter on light and vision offers an explanation of the nature of light, and it discusses aerial waves—those impulses that, when projected into the ether, produce the sensations of light.

The chapter on lenses tells, among other things, how a lens forms an image, the methods adopted for making light rays of different wave lengths come to a focus at the same point and it explains the differences between non-achromatic, achromatic, rectilinear and anastigmat lenses.

The book makes clear why some

thin negatives have considerable contrast and some dense ones have very little, and vice versa.

Reduction and Intensification are discussed under the title *Finishing the Negative*. In this chapter every statement regarding the action of intensifiers and reducers is illustrated with diagrams and photographs.

The cause of Halation is explained in a more comprehensive and more accurate way than was possible before scientific research had disclosed what happened when light passed through an emulsion and was reflected back into it. The cause of irradiation, which is often mistaken for halation, is also explained.

In this brief review we have directed attention only to the unusual features. The book discusses every step of the photographic process, in a way that will enable all, even those who know little or nothing about photography, to understand on what theories the foundations of photography rest.

Another book, one that is complementary to *Fundamentals*, because it deals with practice instead of with theory is, *How to Make Good Pictures*. This book explains all the details of picture making by photography. Many editions of this have been issued, but now much of the book has been entirely rewritten and such new matter has been added as was necessary to make it a complete text book of present day amateur photography.

Both of these books are sold at a nominal price by Kodak dealers.



## SERVICE DEPARTMENT TALKS

## KODAK SERVICE

**A**DVANCED workers as well as beginners, who wish to undertake some branch of photographic work with which they are not familiar, frequently ask us for the specific information that they need. This we always furnish, gladly.

Others who encounter problems in the kinds of work with which they are familiar, submit them to us. We always tell them how to solve these problems.

This is one branch of Kodak Service. The value of this service is indicated by the following extracts from a few of the many appreciative letters we receive daily:

*"I wish to thank you for the information which you sent me some time ago on the subject of pictures by moonlight—and also for the friendly interest which you have shown in the problems of the amateur."*

*"I am just in receipt of the booklets 'By Flashlight' and 'At Home With The Kodak.' They certainly contain just the information I wished to secure."*

*"I wish to thank you very much for the manual and the prompt answer I received. I am very much pleased with it as it covers all that I wanted to know. I also wish to thank you for your offer to help me any time with my photographic work."*

If you wish to profit by Kodak Service, which is extended to all photographers, without charge, address

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY

ROCHESTER, N. Y.



# Kodak Auto-Focus Enlarger

*For Bromide Enlarging*

THIS time-saving, trouble eliminating, up-to-date apparatus brings to enlarging a degree of ease and speed heretofore associated only with contact printing.

*Ease:* Slide the camera up or down and while the image size changes *the focus stays sharp*. Auto-acting mechanism keeps it so.

*Speed:* With a capacity for Mazda lamps (not supplied) of from 75 to 200 watts, enlargements can be made almost as rapidly as contact prints.

Kodak Auto-Focus Enlarger accommodates negatives up to 6 x 4 inches and makes prints from  $1\frac{1}{2}$  to  $3\frac{1}{2}$  times the negative size. It is supplied complete with Kodak Anastigmat Lens, negative and paper holders, six flexible metal masks and electric cord and plug. Price . . . . \$35.00

Diffusing Disc for soft focus effects. Price . . . . . 1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

# *For Personal*

*You press the button;*



CINÉ-KODAK with Kodak Motor Drive gives you "movies" as easily as your hand camera gives you "stills." Simply press the button—the motor cranks the camera.

THE new Eastman outfit for motion pictures—Ciné-Kodak and Kodascope—brings cinematography to your home just as, many years ago, Kodak brought photography. You get personal motion pictures with typical Kodak ease.

Nor are you limited to pictures you make yourself. Through Kodascope Libraries, Inc., a wide range of productions successfully shown in regular theatres may be rented for projection on your screen with your Kodascope. Charlie Chaplin comedies and dramas featuring such artists as Constance

EASTMAN KODAK COMPANY,

# Motion Pictures

*we do the rest*

KODASCOPE projects motion pictures—puts interesting incidents of your trips and story-telling episodes of the household on your own screen in your own home.



Talmadge, Thomas Meighan, Alice Brady, Tom Mix are included in the list of films available.

*Economy:* The operating expense of the Ciné-Kodak is less than 20 per cent of that of an outfit using standard width film. The development and reversal of Ciné-Kodak Film are done at the Eastman laboratories and the charge is included in the price of the film. When you have bought your film your finishing is paid for. *You press the button; we do the rest.*

*Price of complete outfit, including Ciné-Kodak with either motor drive or crank and tripod, Kodascope, Screen, etc., \$335. Descriptive booklet at your dealer's or from us.*

ROCHESTER, N. Y., *The Kodak City*



$2\frac{1}{4} \times 3\frac{1}{4}$

Revolving Back  
**GRAFLEX**  
*Series B*

### **A Small Graflex with Revolving Back**

This new camera boasts the improved front and the ability to photograph tall objects the long way of the film without turning on its side—plus the basic features that make extraordinary pictures easy to get with a Graflex.

As in all *Series B* models, its lens is the Kodak Anastigmat *f*.4.5, permanently mounted in a compact, rigid, metal standard. Since lens and camera are designed for each other they are sure to work well together, to full capacity.

The price of the  $2\frac{1}{4} \times 3\frac{1}{4}$  Revolving Back Graflex, *Series B*, with a cut film holder (plate holder optional) is \$78; other Graflex cameras range as low as \$62.50. Ask your dealer, or write us, for a Graflex catalog.

**EASTMAN KODAK COMPANY**

*Folmer & Schwing Department*

Rochester, N. Y.



## Kodak Color Filter

For more accurate reproduction of color values this attachment lightens yellows and darkens blues. In photographing snow scenes against a blue sky background, for example, its use is well worth while.

*Price \$0.75 to \$1.50*

*According to size*



## Kodak Sky Filter

For recording cloud forms with snapshot exposures, or, when used upside down, for recording detail in snow. A definite pictorial value is added to the picture in either case. You'll be pleased with it.

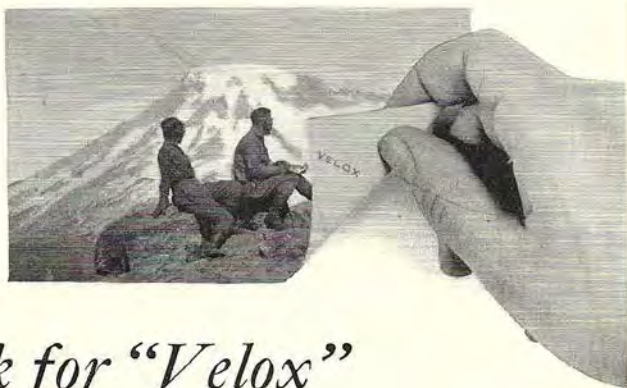
*Price \$0.75 to \$1.50*

*According to size*

*At your dealer's*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



## *Look for "Velox" on the Back*

EVERY amateur print should be made on Velox. As the only paper made exclusively for amateur negatives, it meets their requirements as no other paper can.

Finishers know this and that is why so many of them use nothing but Velox in their contact printing rooms.

For your protection, and to identify quality finishers with quality work, each sheet of Velox is faintly marked with the trade name.

*Look for "Velox" on the back*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



APRIL 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*



*Certain sizes reduced in price*

## Kodak Portrait Attachment



A supplementary lens that slips over the regular lens and gives you pictures in sharp focus at arm's length—head-and-shoulder portraits, for example.

There is no change in the operation of the camera—simply place the subject close-up and expose as usual.

The accompanying paragraph gives a partial list of cameras for which the Kodak Portrait Attachment may now be secured at the reduced price.

- |  |        |
|--|--------|
| No. 0 Kodak Portrait Attachment. . . . .               | \$0.50 |
| For No. 2 Film Pack Hawk-Eye.                          |        |
| No. 1 Kodak Portrait Attachment. . . . .               | .50    |
| For Vest Pocket Kodak (regular model with single lens) |        |
| No. 0 Brownie (with single lens)                       |        |
| No. 2 Brownie (with single lens)                       |        |
| No. 2 Kodak Portrait Attachment. . . . .               | .50    |
| For No. 2A Brownie (with single lens)                  |        |
| All other sizes of Kodak Portrait Attachments          | .75    |
| (As heretofore)  |        |

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*Without DIFFUSION DISK*



*With DIFFUSION DISK*

*Announcing*

## Kodak Pictorial Diffusion Disk

**N**OVELTY, pictorial interest, artistic appeal — with the Kodak Pictorial Diffusion Disk you can get these qualities in your landscapes. The disk slips over the regular lens; there is no deviation from the customary method and time of exposure—the effects you want are secured with utmost ease.

Highlights lose their chalky whiteness; undesirable detail is softened down; an intangible atmosphere, like that of a masterpiece in oils, is obtained.

The Kodak Pictorial Diffusion Disk is now supplied for Kodak and Folding Brownie cameras that the Nos. 3, 5, 6 and 7 Kodak Portrait Attachments fit, and any Graflex camera whose Kodak Anastigmat lens *f*.45 bears the number 31, 32, 33 or 34.

*Prices at your dealer's*

For Kodaks and Folding Brownies

No. 3	\$1 75
No. 5	2 50
No. 6	2 50
No. 7	2.50

For Graflex Cameras

No. 31	\$5 00
No. 32	5 00
No. 33	5.00
No. 34	6.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



AN OUTDOOR PORTRAIT  
*Made with a Graflex by R. A. Barber*



PUBLISHED MONTHLY - YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

APRIL, 1924

No. 8



A HUNGRY TRIO

## THE ELEGANT WAXWINGS

BY HOWARD TAYLOR MIDDLETON

*Illustrated by the Author*

**T**WO small boy naturalists, of my corps of wild-life scouts, their chubby legs black with mud below high-rolled trousers,

brought me tidings of the waxwings.

"We've found a new bird home for you!" cried Arthur.



THE BABY WAXWINGS

"It's down in the swamp at the top of an alder bush!" echoed Douglas.

"What is it like?" I asked, greatly hoping that the statement in reference to a *new* bird might prove authentic.

"Well, it's bigger than a sparrow; this new bird is," vouched Arthur.

"And smaller than a robin," attested Douglas.

"Let's go and see," said I.

Down into the slimy depths of the alder swamp I followed the pair of young adventurers, my rubber-booted feet trailing their bare ones, until suddenly they paused, pointing skyward.

The first glimpse of the brooding bird above me brought the thrill that ever accompanies the finding of a fresh contribution to my picture collection. The crested head with the black patch running through the eye, the back of dark fawn color, the light blue breast, the red appendages, like sealing wax, on the ends of several wing quills, immediately identified the stranger as a cedar waxwing.

The nest, a bulky and rather clumsily constructed dwelling of roots, twigs, moss, grass and mud, was situated in a crotch about twelve feet from the ground, and the only practical way of getting



MOTHER AND BABIES

a peek at the interior was to climb a nearby willow and look across. Trying this out, after Lady Waxwing had flushed, I found the distance too great to give me the "inside" information I sought. I therefore instructed my assistants to grasp the stem of the alder, and, working very slowly and carefully so as not to disarrange the eggs or young, whichever there might be, bend the bush top toward me. The investigation thus made possible, resulted in the discovery of three exceedingly cunning youngsters in feathers, although their coats really resembled finest fur, and while they were already well advanced in age, I decided to wait a day or two longer before attempting any juvenile sittings.

There is a psychological moment for young bird photography and, when possible, it is wise to await that time in order that the best results may be achieved.

When next I visited the waxwing home in the swamp (two days later) I found the young birds at just the right stage for portraiture, so lifting them tenderly from the nest I posed them upon a horizontal twig in a spot where wild flowers nodded their heads in the bright sunlight, and made their portrait. (1/25 second at *f.11*).

Then back among the alders, 'neath the home bush, the waxwing children were posed again. This time it was my desire that Mother Waxwing should be photographed in the act of bringing a

luscious berry (the waxwing's favorite food) to her hungry family.

The light here was very poor, only a few scattered sunbeams penetrating the deep shade of overhanging limbs. However, I had great confidence in my *f. 4.5* lens and Kodak Cut Film, *Super Speed*, to produce *good* pictures under unfavorable conditions.

So miry was the floor of the swamp that I had difficulty in putting my tripod into service. A tripod works better than a stake where the ground is very soft because with the former there are three bearing points instead of one. I finally accomplished my purpose by lashing saplings to the tripod legs, and after they had sunk to a depth of about three feet in the yielding ooze, I was able to set up the Graflex in a fairly steady position.

It was at this point that I found an Optipod of inestimable value. The foundation was softer in some spots than in others, and once the tripod was settled, its head was tilted at a sharp angle, making level focusing impossible without the aid of an Optipod.

No sooner had I gone into seclusion behind a screen of bushes, after attaching a stout thread to shutter release lever and carrying it with me to my sylvan retreat, than Mother Waxwing came with a berry for her children. That she showed no fear of the camera was most exhilarating to the operator lying in wait to match his wits against the wild. The exposure given was  $1/40$  second at *f.8*, in the shade.

The greatest test for film and camera came at about 3 p. m. when the waxwings came to the studio, for the sun had gone behind a cloud bank and semi-dusk settled o'er the swamp. Realizing the difficulty of obtaining a picture under such circumstances, I opened the lens to *f.4.5* and slowed the shutter to  $1/25$  second, taking a chance on the young birds, who were not nearly so hungry now, remaining fairly quiet during the period of exposure. That the *Super-Speed* Film, the Graflex camera, and the birds, all proved equal to the heavy task assigned them is shown by the picture on the preceding page.



LOWER SARANAC LAKE  
*Made with a Panoram Kodak*

TWO GLIMPSES

OF CAMPING



*Made with  
a 2A  
Brownie*

*by  
George W.  
Taylor*



*Made with a 3A Folding Brownie by P. G. Freeman*



## INTERPRETING NATIONAL BEAUTY

BY AMOS BALLARD



A BROWNIE GIRL

*Made with a Graflex by M. W. Reeves*

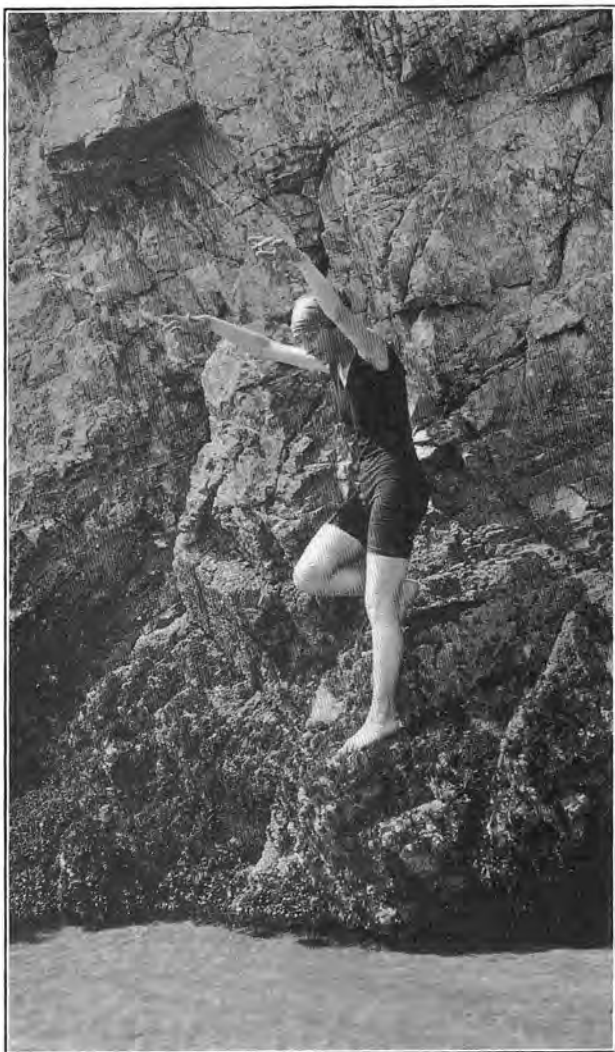
A GREAT deal has been written about the world's beautiful girls. From the very beginnings of pictorial art fair faces have been the subject of the artists' most ardent labors. And there have grown up theories of national traits. Each nation, if it is being

honest, invariably claims that its types represent the high mark of feminine beauty. We assume that he is a poor patriot who does not believe something of this kind. Within a nation the same process of selection goes on. Each state, each county, each town, is likely to have a theory that nature has been discriminating in its favor.

The artist learns after a while that beauty, wherever it may begin, has to end in the eye of the artist—that there is a singular average in the records brought back from all parts of our country and all parts of the world. The artist's Kodak tells us that there are wonderfully pretty girls in Georgia, Europe, as well as in Georgia, United States. We begin to see that art has disseminated ideals

that come to have the same measure; that photography builds up a kind of universal taste that does not ask so much as it used to ask about locality.

This country likes to flatter itself by believing that all national types are improved a bit by being



FRENCH BATHING GIRL

*Made with a 3A Kodak Special, 1/25 second f.11*



THE RIDER

*Made with a 3A Kodak by Arthur A. Dailey*



IN PARIS  
*Made with a 3A Kodak*



SUNSHINE

*Made with a 2A Brownie by Mrs. A. G. Wuest*

reared here. This may be true. But I suspect that beauty has its own secrets.

The hand that holds the camera is particularly concerned with the job of being interpreter to beauty, with the delicate obligation to bring out, by the assisting magic of sunlight, the charms of all types. The photographer has much to do

with the charm of the result. Beauty may be a little less so when wrongly reflected. It may be accentuated by a clever eye. The Kodak is a faithful servitor with no race prejudices. "Give me light," it says, "and I won't quarrel about your choice of subject." Surely that is being fair enough.



IN THE CONSERVATORY  
*Made with a 3A Kodak*

## WHEN THE SUN SHINES ON THE NORTH SIDE OF BUILDINGS

**W**HEN photographing a building from different viewpoints we should make some pictures in which the emphasis is placed on the most attractive side of the building. The way that this can be done is by making the pictures at a time when sunlight can be seen on the side of the building that we wish to render most conspicuous.

The front of a building is usually its most attractive side, but in the north temperate zone it is impossible to make a picture in winter that will show sunlight on the front of a building that faces north. Such a picture can, however, be made during the spring and summer months, when the sun rises north of east and sets north of west, provided that the north side of the building is not shaded by trees. If the north side is shaded by trees the only times when sunlight can reach it are during the early morning and late afternoon hours in springtime, before the leaves come.

The early morning and late afternoon hours of a sunny day are especially favorable for picturing architectural subjects as it is during these hours that long shadows, which add so much to the pictorial effect, can be recorded.

When photographing buildings we must make sure that the camera is held level. If the lens is pointed upward the picture will represent the building as tapering upward and leaning backward. When the vertical lines of the building are

parallel with the sides of the finder or ground glass, the camera will be level and the vertical lines of the building will be parallel in the picture.

For a light colored building, when the sun is shining brightly, between 6 and 8 in the morning, or between 5 and 6 in the afternoon, in late April or in May, an exposure that is not shorter than  $1/25$  of a second with stop 8 on rectilinear lenses, or stop  $f.11$  on anastigmats should be given.

For a dark colored building the exposure should be not shorter than  $1/10$  of a second with the same stops. If a  $1/25$  second exposure is preferred it will be necessary to use larger stops—No. 4 on rectilinears and stop  $f.8$  on anastigmats.

With a box Brownie, and with folding cameras that have single lenses with stops marked 1, 2, 3 etc., the pictures should be made not earlier than 7 in the morning or later than 5 in the afternoon. The exposure recommended for light colored buildings is a snapshot with the largest stop. For dark colored buildings the camera should be placed on a tripod, or on some other perfectly rigid support, and a 1 second exposure given, with the smallest stop.



Always use a tripod for time exposures.

## DRY MOUNTING PRINTS

THE only way that a print can be made to remain flat when it is firmly attached to a thin mount is by using an adhesive that will not expand the print.

When prints are mounted with paste, or with any other adhesive substance which contains moisture, they will expand before the adhesive dries, and while it is drying the print will contract and curve the mount.

The problem of mounting prints so that they will remain permanently flat is effectually solved by Kodak Dry Mounting Tissue. This tissue is very thin. It is not soluble in water and, as it contains no moisture, it is suitable for mounting either single weight or double weight prints in books, on album leaves and on paper and cards of any thickness.

The way to use it is to lay a sheet of the tissue on the back of a print and touch it, in one or two spots, with the tip of a hot flatiron. This attaches the tissue to the print. The print and the attached tissue are then trimmed to the size desired. After the trimming the print is laid on the particular spot it is to occupy on the mount and held there while two of its corners are lifted and the tissue, which is under these corners, is tacked to the mount with the tip of the hot iron. This holds the print in position for attaching it to the mount. The final step is to lay a clean sheet of paper on the face of the print and press it with the hot iron. The iron must not be moved on the paper or the picture may be dis-



AN IDLE MOMENT

*Made with a Vest Pocket Kodak*

placed on the mount, as the heat softens the tissue, which hardens and sets firmly almost immediately after the hot iron has been removed.

Though the heat will sometimes slightly curve a thin mount, the curve is only temporary. It can usually be removed by laying the mounted print face down and leaving it there for an hour or two, and it can always be removed by placing the mounted print under light pressure over night.

Kodak Dry Mounting Tissue is supplied in cut sheets that will fit all the standard sizes of pictures, and it is also furnished in rolls that are 20 inches wide by 5 yards long. It can be obtained from all Kodak dealers.





*At 8 Months*

# A PICTORIAL BIOGR

AS COMPILED BY R. A. BARBER



*At 10 Months*



*At 3 Years*



*At 4 Years and 4 Months*

# RAPHY OF A GIRL



*At 11 Months*



*At 1 Year and 6 Months*



*At 4 Years and 9 Months*



*At 5 Years*



A TYPICAL LANDSCAPE

*As rendered by the lenses that are regularly fitted to cameras*

### SOFT FOCUS PICTURES

THERE was a time when many landscape photographers regarded sharpness of image one of the most desirable qualities that a photograph could possess. They wanted everything that their eyes could sharply focus, as they examined the subject, to be represented by sharply defined lines in the picture.

Others regarded sharpness as an abomination and claimed that since no one possessed eyes that could sharply focus all the objects on a landscape *at the same time* it was all wrong to make pictures that were sharp all over. They preferred to have the subject represented by lines that had blended or diffused edges.

For a long time the advocates of sharpness were satisfied with their work, and they could easily get

the results they wanted by stopping down their lenses. But the advocates of diffusion were not satisfied with such results as they were obtaining because they could not get the effects they were striving for with any lenses that were available.

Some of those who wished to make diffused focus pictures tried the experiment of placing the lens nearer to the film than it would be if the focusing indicator was set at the 100 ft. mark on the focusing scale, so that the lens would make an out-of-focus image of every part of the subject. This was one way of producing the "fuzzytype"—a crude style of diffused focus picture, which some praised and others condemned.

The best of the "fuzzytypes" left much to be desired, but they



*The rendering obtained by placing a Kodak Pictorial Diffusion Disk in front of the camera lens*

performed a valuable service, as they emphasized the desirability of securing just what the pictorial workers wanted—diffusion without fuzziness. The demand thus created presented a problem, which the Kodak opticians have so satisfactorily solved that many who were formerly ardent advocates of sharpness now regard the diffused focus pictures that are being made with the aid of a Kodak Pictorial Diffusion Disk as the most artistic type of landscape photograph that they have ever seen.

The Kodak Pictorial Diffusion Disk is made from optically plane glass on which the concentric rings and radiating lines that produce the diffusion are polished. The disk is mounted in a flanged metal cell, which holds it in position when it is slipped over the hood of the regular camera lens.

The center of each disk contains

an area within which there are neither rings nor radial lines. When the lens is stopped down so far that none of the rays of light that are reflected from the subject to the lens, except those that pass through this central area, can reach the film, the disk will have no diffusing effect whatever.

On the other hand, when the lens is used with its largest stop, the disk will produce the utmost diffusion of which it is capable.

As the amount of diffusion that the Kodak Pictorial Diffusion Disk produces is determined by the size of the lens stop that is used, the photographer can readily introduce much or little diffusion into his pictures.

The comparative illustrations on this and the preceding page were reproduced from 3A Kodak prints. The sharp picture on page 18 was made with the regular camera lens,

without using a disk. The diffused focus picture on page 19 was made with the same camera and the same lens, after a Kodak Pictorial Diffusion Disk had been placed in front of the regular camera lens.

For those who admire diffused focus landscape pictures but have had no experience in making them, we wish to point out that if there is no pictorial interest in the subject, neither a diffusion disk nor any other kind of optical equipment can introduce it into the picture. The Kodak Pictorial Diffusion Disk will, however, greatly enhance the pictorial rendering of any subject that contains pictorial possibilities.

The pictorial possibilities of any subject depend, primarily, on two factors—composition and lighting. The composition must direct attention to a principal object of interest, as is explained in the article entitled "Adding Pictorial Interest To A Scene," which appears on page 22. When a diffusion disk is used the lighting should, preferably, be snappy and brilliant—sunshine in contrast with shadow. By bearing these facts in mind, the photographer can, by placing a Kodak Pictorial Diffusion Disk in front of the lens that is fitted to the camera he uses, make pictures that will possess a charm which mere records never have.



A GRAFLEX PORTRAIT  
*Made by N. E. Brooks*



FLORAL TREASURES

*Made with a 3A Kodak, exposure 1/2 sec., stop 16*



THE FORD

*Made with a 3A Kodak Special by E. A. Beckwith*

## ADDING PICTORIAL INTEREST TO A "SCENE"

MANY of us who love the woods and fields make photographic records of our favorite haunts for the sake of the memories that they perpetuate. When we show these to our friends we find that, no matter how excellent the photographic work may be, none of the records that are lacking in pictorial quality prove of interest to those who are unacquainted with the scenes that they portray.

These records are, however, of value to us because they remind us of many a pleasant outing, and for this reason they are well worth the making.

But of some of our haunts we can, if we wish, make photographs that are more than records, by merely placing a figure of some

sort in such a position that it will be the principal object of interest in the picture. This figure will often convert, what without it would be but the record of a scene, into a picture that possesses pictorial merit.

Mr. Beckwith's picture, shown above, represents a kind of scene that a suitably placed figure would readily convert into subject matter for a story telling picture, and do it in such a way that the picture would contain both a record of the scene and also the record of a story that everyone would pause to read.

A glance at this picture reminds us that wherever a shallow stream flows across a roadway it invites horses and cattle to stop and drink. It is a place where children would

love to play in the water and where a fisherman might practice casting flies. It forms a scene into which many other kinds of figures, that would harmonize with the surroundings, could be introduced for adding a point of interest, or for balancing the composition.

There are often several positions that a figure may occupy in a landscape picture, in order to lend it pictorial interest. In fact the only places in such a picture that should never be occupied by the principal object are at the center and very near any of the margins of the picture area.

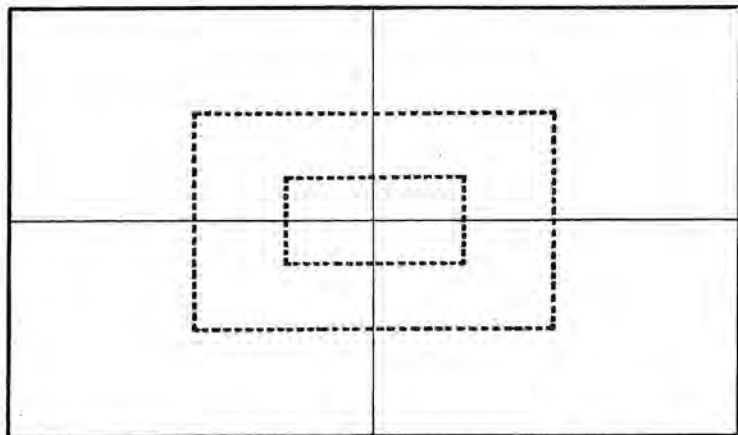
An old rule, which we will make no mistake in observing, tells us to place the chief object of interest at any suitable place within the space bounded by the inner and outer dotted lines shown in the diagram.

Whatever the size or shape of the picture may be the outer

dotted lines should be about  $\frac{1}{2}$  and the inner ones about  $\frac{4}{5}$  the distance from the nearest margins to the lines that are drawn horizontally and vertically through the center of the diagram.

By laying a sheet of tracing paper, or any other translucent paper, over the diagram we have drawn for Mr. Beckwith's picture, tracing the lines of the diagram on the paper and then placing it over the picture, we can see where this rule would suggest placing a figure. This will show us that it should be placed at some position, between the inner and outer dotted lines, that is below the line that passes horizontally through the center of the diagram.

If we wish to make pictures that will appeal to all observers we must make them pictorially interesting, and the way to do this is to include in each picture the image



*Diagram showing the area (between the dotted lines) where the chief object of interest should be placed*



of some object that commands more attention than any other.

But where will the photographer, who goes afield alone, find such an object if none happens to be included in the scene that is to be pictured?

Even though none may be included in the scene there is, how-

ever, always an object that commands attention on every landscape that any photographer visits. The photographer needs but to place himself or herself at the point where the object of interest should be in order to add pictorial interest to a scene, and then let a Kodak Self Timer make the exposure.



WHERE WORK BECOMES PLAY  
*Made with a 3A Kodak*

## WHAT THE KODAK PORTRAIT ATTACHMENT DOES

THE nearer the lens is to the object that is photographed the larger will be the image of the object in the picture.

On focusing cameras it is the length of the bellows that determines how close to the subject the lens can be placed without making an out-of-focus picture.

Long bellows cameras are necessarily so much bulkier and so much heavier than the modern, compact hand cameras that make the same size of picture, that few people are willing to carry them about.

Modern hand cameras have bellows that are long enough for making sharp pictures of objects that are not nearer than six or eight feet, and if the images the lens makes at these distances are not as large as desired, larger ones can be obtained by placing a Kodak Portrait Attachment in front of the regular camera lens.

When a Kodak Portrait Attachment is used on a focusing camera that has a 6-foot mark on the focusing scale, sharp pictures can be made with the subject only thirty inches from the lens. The exact distance that the front of the portrait attachment must be from the subject, when the focus is set at any of the various distance marks on the focusing scale, is stated in the instruction sheet that is furnished with every portrait attachment.

When a Kodak Portrait Attachment is used on a fixed focus box Brownie, or on a single lens fixed focus Kodak, the subject must be placed three and one half feet from the front of the portrait attachment.

For making head and shoulder portraits, and for photographing flowers and other small objects at short range, the Kodak Portrait Attachment is indispensable to the users of compact hand cameras as it enables them to do what could otherwise only be done with a long bellows camera.



*At just this part of the story the Kodak Self Timer tripped the shutter*

## DEVELOPING KODAK FILM PACK FILMS IN ORDINARY ROOMS

**T**HE Film Pack Tank is made for the photographer who wishes to develop his own film pack films.

Tank development is more convenient and more economical than tray development, and it is also the surest method of obtaining correctly-developed negatives, because in tank development nothing is left to the judgment of the worker, while in tray development the worker must rely solely on his own judgment for determining when to stop development.

Film pack films must be removed from the pack and placed in the developing tank, and must also be taken out of the tank and placed in the fixing bath, in a darkroom. By a darkroom we mean a room that is totally dark when all the lights are extinguished. As the films are not readily affected by a deep red light it is customary to illuminate the darkroom with a ruby darkroom lamp.

Amateurs who have no room available that can conveniently be made totally dark in the daytime can easily fit up an extemporized darkroom in the evening, and, when this is done the room can speedily be restored to its former condition after the films have been developed and fixed.

When traveling, the writer has frequently developed film pack films, without fogging them, in the bedrooms and bathrooms of hotels. These rooms were made totally dark by placing a rug or a coat on the floor for shutting out the light

that came in under the door, and hanging bed blankets over the windows for shutting out such light as came in around the window shades after they had been drawn down.

This method was recently applied to a kitchen that had one glass outer door and five other doors leading to inner rooms. It also had two windows. Though the moonlight was shining on one of the windows the room was made totally dark in a few minutes by the method mentioned. A Brownie Safelight Lamp was attached to a light fixture above the kitchen sink, and the films were handled by the light of this lamp. After the films were developed and fixed every negative was found to be wholly free from fog, which proved that this extemporized darkroom was a perfectly safe place for developing film pack films.

The method suggested for converting an ordinary living room into a darkroom can be employed in any home, but there are two simple precautions which must be carefully observed. If either of them is ignored an entire batch of films will be ruined. These precautions are: To make sure that the room is really light-tight, and to permit no one to enter the room while films are being removed from the pack for placing in the tank, or while they are being transferred from the tank to the fixing bath.

The way to determine whether the room is really light-tight is to remain in it for five minutes after



*Made with  
a Graflex*

*by  
R. A. Barber*

all lights have been extinguished. If at the end of five minutes no light can be seen entering the room it is wholly light-tight, but if light can be seen, the openings through which it comes must be closed.

In developing film pack films in a Film Pack Tank be sure to use the Kodak Film Pack Tank Powders that are prepared for the size of tank you are using, and develop the films for 20 minutes, if the temperature of the developer is 65 degrees Fahrenheit. If the temperature is not 65 degrees then develop for one minute longer than 20 minutes for every degree that it is below 65, and one minute less than 20 minutes for every degree that it is higher than 65 degrees. Do not develop films or plates

in any developer that is warmer than 70 degrees F., or the emulsion will swell and may leave its support. (Those who wish to develop films in the Tropics are invited to write to us for special instructions).

After the films have been developed the developer should be poured out and the tank filled with clear water. The films should be left in this water for about one minute, then washed in two more changes of water, after which they are ready for placing in the fixing bath.

It is important to leave negatives in the fixing bath for at least five minutes after all traces of the creamy color have vanished. If this is not done stains will appear, in the course of time, which may ruin them.

## SERVICE DEPARTMENT TALKS

### CLEAN CAMERAS AND LENSES

**A**LL lenses that have been exposed to the atmosphere need cleaning occasionally. The best way to clean a lens is to dust it with a camel hair brush, then breath on it and wipe it with a clean linen handkerchief that has been made soft by repeated washing.

If there is dust inside the camera it must be removed or it will settle on the film and make transparent spots in the negatives. These will make black spots on the prints.

Should your camera have suffered any injury it may need the attention of the makers. In this case have your dealer send it to the makers, without delay, so that it may be ready to use when you need it.



*For any information you may desire regarding  
amateur photography address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.

## *Another Graflex Advantage*

Any Graflex, except the 1A and 3A Autographic models, will take cut film, roll film, plates or film packs.

The Graflex Cut Film Magazine, for Kodak Cut Film, has a capacity of 12 exposures, each in a metal septum. The Plate Magazine is the same in principle and in price.

Eastman Graflex Roll Film, used in the Roll Holder, offers the advantages of daylight loading and easy development. The Film Pack Adapter, for Kodak Film Packs, also loads in daylight.

Each of these attachments has a dark slide so that they can be interchanged between exposures. For example, if you wish to use roll film ordinarily but to switch to Kodak Cut Film *Super Speed* for action pictures or indoor snapshots, it's easy.

This ability to suit the sensitized material to the subject is just another of the advantages that make every Graflex owner approach any picture opportunity with confidence.

*Ask your dealer, or write us,  
for a Graflex catalog.*



Cut Film Magazine  
\$12.00 to \$17.00



Roll Holder  
\$9.75 to \$14.00



Film Pack Adapter  
\$4.50 to \$7.50

**EASTMAN KODAK COMPANY**

*Folmer & Schwing Department*

Rochester, N. Y.

# Kodak Cut Film

Regular Kodak Cut Film has the speed of fast portrait plates while Kodak Cut Film *Super Speed*, identified by the white SUPER SPEED label across the corner of the carton, has the added sensitiveness that makes difficult pictures possible.



Compared with plates, Kodak Cut Film takes up considerably less space, is emphatically lighter, and unbreakable; it has width of latitude to compensate for errors in exposure, is strictly non-halation and has the fine grain so desirable in enlarging.

By using Cut Film Sheaths in plate holders, Kodak Cut Film may be used in any plate holding camera, including the Nos. 3 and 3A Kodaks, regular and *Special*, when equipped with Combination Backs.

## PRICES

	2½x3½	3½x4½	3½x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20
Combination Back for Nos. 3 or 3A "Regular" . . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above . . . . .					1.50

*Prices of film include Excise Tax*

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*Ideal for amateur enlarging—*



## Kodak Auto-Focus Enlarger

**S**IMPLICITY features the operation of this Bromide enlarger and makes the process as easy as contact printing and at least as interesting.

As you raise or lower the camera the size of the image changes but automatic mechanism keeps the Kodak Anastigmat lens in sharp focus—a distinct convenience. Printing is unusually rapid because the ventilated lamp house permits using a powerful Mazda lamp.

Either film or plate negatives up to 4 x 6 inches are accommodated and prints from 1½ to 3½ times the negative size are made; maximum print size, 14 by 21 inches. Equipment includes Kodak Anastigmat lens, negative holder, paper holder, set of flexible metal masks in six sizes and electric cord and connection, but not the Mazda printing lamp (75 to 200 watts capacity) required.

Kodak Auto-Focus Enlarger (including Excise Tax) . . . . \$35.00  
Diffusing Disc for soft focus effects . . . . . 1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



## Kodak Self Timer

Clip it to the cable release; set it to "press the button" at any interval desired from  $1/2$  second to one minute. Then take your position in front of the lens and—"click," you're in the picture.

*Kodak Self Timer \$1.25*



## Kodak Metal Tripods

Compact and light to carry, easy to set up, rigid. Just what you need indoors and out for steady support when exposures slower than  $1/25$  second are required.

*Kodak Metal Tripods . \$2.75 up*  
*Leather Carrying Cases . 2.70 up*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*





## *Ciné-Kodak for Motion Pictures*

PICTURES *in motion* of crucial moments of your favorite sport, interesting incidents of your trip, story-telling happenings of the household, are yours for pressing the Ciné-Kodak button. And projection of motion pictures in your own home on your own screen is merely a matter of threading the film and turning the Kodascope switch.

Motion pictures the Kodak way is a new pleasure.

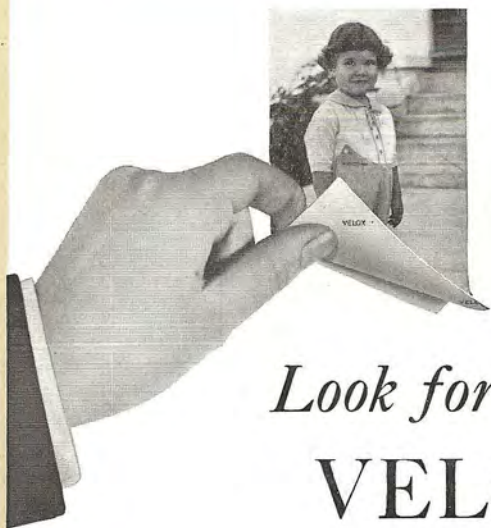
The development and reversal of Ciné-Kodak Film are done at the Eastman laboratories and the charge is included in the price of the film. When you have bought your film your finishing is paid for. *You press the button; we do the rest.*

Price of complete outfit, including Ciné-Kodak with either motor drive or tripod and crank, Kodascope, Screen, etc., \$335. The operating expense is less than 20% of that of an outfit using standard width film.

*Descriptive booklet free on request at your dealer's or from us*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



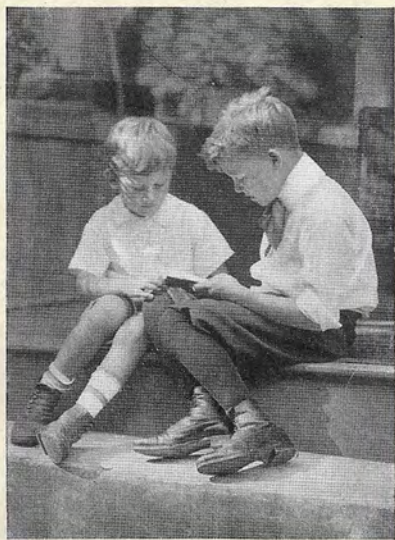
*Look for*  
**VELOX**  
*on the back*

AND *know* the prints your finisher makes for you are the best the negatives will yield.

EASTMAN KODAK COMPANY  
ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



MAY 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*



*Make enlargements from  
your choice negatives  
with a*

## Kodak Auto-Focus Enlarger

SLIP the negative into the holder, then as you raise or lower the camera for different sized enlargements the automatic mechanism keeps the focus sharp. Bromide enlarging is thus made nearly as easy as contact printing and fully as interesting.

The Enlarger takes negatives up to 4 x 6 inches and makes enlargements from  $5\frac{1}{4} \times 8\frac{1}{4}$  inches to 14 x 21 inches. Equipment includes Kodak Anastigmat lens, paper holder, set of six flexible metal masks and electric cord. The 75 to 200 watt Mazda lamp is not furnished.

Kodak Auto-Focus Enlarger (including excise tax) . . . \$35.00  
Diffusing Disc for soft focus effects . . . . . 1.00

**EASTMAN KODAK COMPANY**

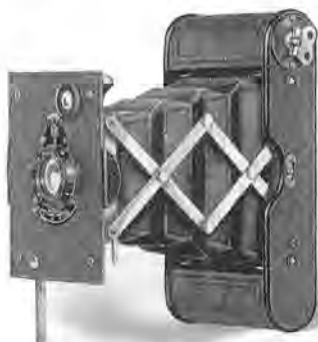
ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*A new focusing model*

Vest Pocket  
Autographic  
KODAK  
*Special*

with Kodak  
Anastigmat lens *f*.7.7  
Pictures  $1\frac{5}{8} \times 2\frac{1}{2}$



A TURN of the mount puts the sharp-cutting Kodak Anastigmat lens, *f*.7.7, in focus through a distance range starting at three feet. This ideal equipment enables you to make close-ups without a supplementary lens.

Tiny as this camera is, it may be depended upon for negatives that will furnish clean-cut pictures and pleasing enlargements.

*Details:* Kodak Ball Bearing Shutter,  $1/25$ ,  $1/50$  second, time and "bulb" actions. Brilliant finder. All metal body covered with Morocco grain leather. Autographic feature.

*Price \$13*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

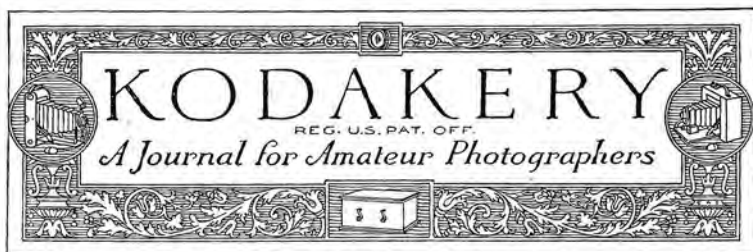
*At your dealer's*



BETTY JANE

*Made with a 3A Kodak Special by Frank D. O'Brien*





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VOL. XI

MAY, 1924

No. 9



BROTHERS

## GRANDCHILDAKERY

BY ALBERT CRANE WALLACE

*Illustrated by the Author*

WELL, you know what I mean—an enthusiasm for photographing grandchildren. Or, maybe I ought to make that the name for the *processes* of photographing grandchildren.

Really, it is scientific and artistic as well as long and difficult.

Naturally I mean your own grandchildren. Any grandchildren wouldn't do. That wouldn't be grandchildakery in the strict sense





JUDY'S COMING OUT

of the word (not yet copyrighted!). They have to be your very own.

This is what makes the process so long; because first you have to have children. That takes years and years. Then the children have to have children, and that takes years and years.

Of course, if you have as many as seven, there really isn't anything you can't do—except keep them still.

You don't wait until you have seven before you get out your Kodak. No, you get out your Kodak as soon as the nurse in charge of the first one says she will let you. You begin at the beginning when the first one

is fearfully non-actinic—that is to say, *red*. Anything red is awfully indigestible for a camera. But you can't wait.

Everybody is tremendously interested in those first pictures—at the time. When the owner of the red face grows up, and sees the pictures, it nearly ends the friendship. Nevertheless, you go and do it again when there is a new red face.

By and by there begin to be little people whose faces are just right. Somewhere in between the time when they have their backs powdered and the time they begin powdering their own noses you can get wonderful pictures—that is to say, you



WITH THE TWO BROTHERS



RICHARD



MADONNA

ought to. You may have hard luck now and again, as I have, or meet the humiliation of finding that their mothers, who all have Kodaks, make better pictures than you make yourself—you who have been at it since Kodaks began.

It's hard enough to explain anything to a grandchild, but hardest of all is explaining that you are after a certain effect, and that it must keep right on looking in-

telligent while you are getting it. Fathers are philosophic about the matter. Mothers are critical. They want the child to look like a little angel. You know yourself that children seldom do. They are likely to look the way they *are*.

Anyway, I have had great



A CHARIOT RACER



MARGARET

times. So have all the owners of Kodaks who have hovered about my grandchildren. My greatest excitement, I must confess, was making a motion-picture fairy

#### FROM THE MOTION PICTURE FAIRY STORY





BETTY

story with the grandchildren acting all the parts. This is what the Ciné-Kodak is for. Was the fairy story a success? Ask the grandchildren who sat in the front row at the "first night" (in the afternoon).

That "first showing" was, in fact, a real thriller. Good thing that it was the "silent drama." There wouldn't have been much of an opportunity to hear any speeches. Too much of an uproar from the audience.

Applause! Lots of it when the curiosity had subsided a bit and

there was a second showing. Such *acting!* The fairy queen was a regular Mary Pickford—with a wand. And the poor boy who was turned into a prince (by the wand) was a kind of blend of Doug Fairbanks and Harold Lloyd, with slight touches of Thomas Meighan and Charlie Chaplin. Perhaps you would say that Betty was most like Lillian Gish.

I can't pretend that it won't make a difference what sort of grandchildren you have. Mine happen to be remarkable. Or maybe it's the camera. I'm not sure.



THE HURDLES

Made with a  
Graflex



LILY OF THE VALLEY

## WILD FLOWER PHOTOGRAPHY

BY CYRIL E. LAMB

*Illustrated by the Author*

ONE of the most fascinating branches of photography is picturing our beautiful wild flowers. Expensive apparatus is not needed for this work as any camera, from the simplest to the most elaborate, can be used.

By imprinting the image of the flower on the sensitive and perishable surface of the film pictures can be obtained that will provide enjoyment throughout the year and for many years to come, instead of lasting for only a few hours, as happens when a flower is plucked simply to provide pleasure until it fades.

All the equipment really necessary for the successful photograph-

ing of wild flowers is a camera, a Kodak Portrait Attachment for working close to the subject, a tripod for supporting the camera rigidly and, possibly, a Kodak Color Filter. Some workers prefer a tripod to hold the Kodak, while others prefer to use a Kodapod or Optipod, either of which may be used with equal success by attaching it to a stick that is driven in the ground.

When the beginner in this field of endeavor reaches the spot that he has selected as the scene of his first attempt he will probably be confused by the profusion of flowers which are all about him. Unless he wishes to picture a carpet of



TRILLIUMS

flowers, such as is sometimes found on the floor of a forest, he must restrain the almost irresistible tendency to include too much in the field of view. A simple cluster of blooms will make a much more artistic and pleasing picture than a large number of them, many of which would of necessity be more or less out of focus.

It is important to observe carefully from which side a group of flowers shows the most artistic arrangement and the best lighting effect. Often it will be found that there are obtrusive objects in foreground or background which spoil the composition. Those in the foreground should be carefully removed, so as to disturb the natural conditions as little as possible, while those in the background may either be removed or hidden by an artificial back-

ground. This latter may consist of a smooth cloth of some neutral shade, or an old window shade of tan or green may be used, but in



JACK IN THE PULPIT



LOCUST BLOOMS

any case care must be taken to see that it is perfectly smooth, for if there are any wrinkles they will show plainly in the finished print. The trunk of a large tree makes a pleasing background in some cases.

After the details are arranged, the shutter should be stopped down to U. S. 32 or to  $f.22$ , depending on which system is used on the camera, and the shutter set for a "bulb" exposure. Snapshots are seldom possible, for this kind of work must be done very close to the subject and the light is often dim where the best flowers are found.

After waiting for a lull in the slight breeze which usually keeps the flowers in more or less constant motion the shutter release should be pressed and released again almost as quickly as is possible, for

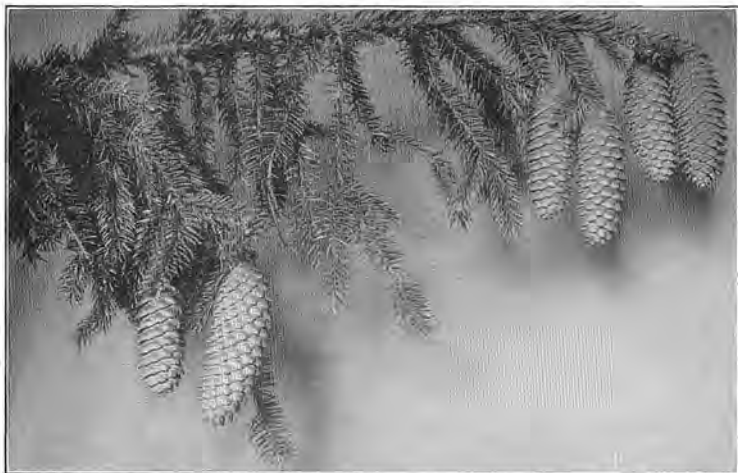
if the shutter is kept open too long the film will be badly over-exposed.

White, blue or pink flowers may be very successfully photographed without the use of a filter, but for yellow ones a yellow filter is absolutely necessary. When using both the filter and the portrait attachment they may be fastened together, face to face, by means of adhesive tape and then slipped over the flange of the camera lens. When this is done it is imperative that the Kodak Portrait Attachment be placed on the lens mount. If the color filter is slipped over



JACK IN THE PULPIT





SPRUCE CONES

Copyright by C. E. Lamb

the lens mount with the portrait attachment in front of the filter, it will be impossible to get a sharp picture.

Flower photographs may also be made indoors if it is possible to carry the flowers without wilting them. In such cases many beauti-

ful conventional designs may be worked out, as well as the usual photographs. Indoor work is best done near a north window as the light is more constant there.

Best results in developing the films or plates are obtained by using a tank, being certain that the correct temperature of the developer is maintained.

Enlargements of the flower studies made on bromide paper will be found to make beautiful pictures for hanging on the walls of the home, or for making up a very interesting Kodak album.

Colored with Velox Water Color Stamps the photographs will be found to be even more beautiful, and one will find that he treasures them not only for their intrinsic beauty but for the memories of pleasant spring-time days which they will always call to mind.



BLUE VIOLETS



COCOANUT PALMS

*From a negative made by Robert B. Wylie*

## FINISHING IN FIJI

WHEN Robert B. Wylie, professor of botany in the University of Iowa, makes pictures around home, development is no more of a problem than it is for any other amateur. He simply gets out the film tank or drops the roll at a finishing station downtown.

But conditions are different in some of the islands of the South Seas. Before setting sail toward the Fiji Islands, Professor Wylie sought advice concerning picture-making in equatorial regions. He was told that films should be specially packed for protection against a hot, damp atmosphere,

and that they should be developed as soon as possible after exposure. Armed with this information, there was no trouble until the party scattered. Thereafter Professor Wylie was never near the developing equipment.

Professor Wylie informs us that the films from which the pictures of the taro field and the fern trees were printed were "carried after exposure for several days wrapped in a woolen shirt, and were then developed in trays by finishers who had no tank and used no ice, either in developing or in washing."

In commenting on the negative



WILD VEGETATION BORDERING A TARO FIELD

*Made with a 3A Kodak Special by Robert B. Wylie*

from which the picture of the cocoanut palms was printed, Professor Wylie states: "Seated outdoors, I developed this film in an old tin pan, under the open sky, within an hour after sunset, so quickly does the tropical night settle down. A sheet of orange

and ruby fabric, fastened with a rubber-band over the end of my flashlight, afforded occasional glimpses of the process of development. Developed with Eastman Tank Powders."

If your vacation is likely to lead you to the Fiji Islands or to other



FERN TREES

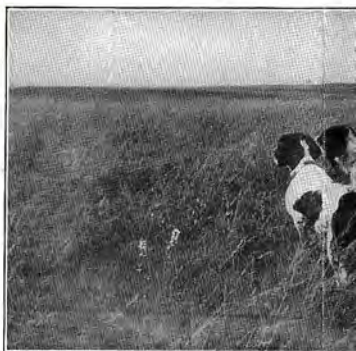
*Made with a 3A Kodak Special by Robert B. Wylie*

hot, moist regions, you will do well to consult the Service Department of the Eastman Kodak Company concerning the proper photographic procedure. But in no part of the United States—not even at the tip of Florida or in balmiest California—is it neces-

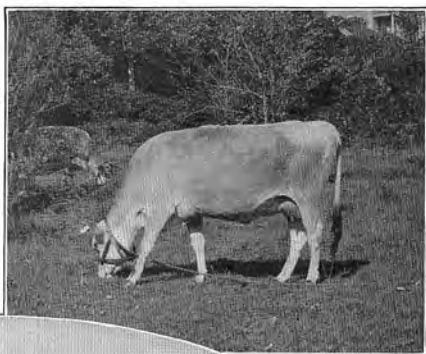
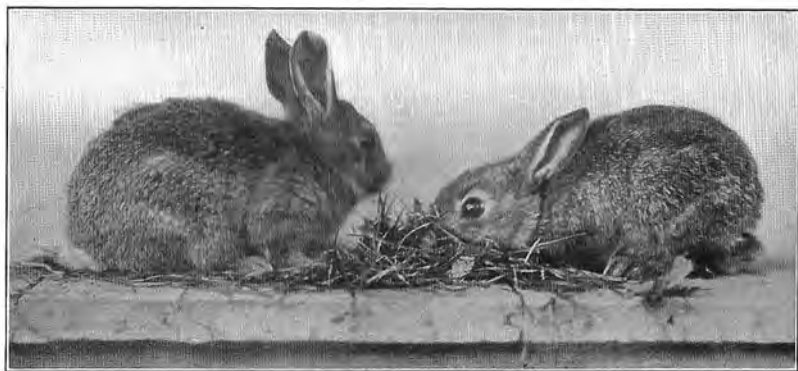
sary to take any special precautions. Regular Kodak Film and regular developing materials are exactly suited. It's only when the traveler enters the moisture-laden tropics that he need alter the easy program that he follows when at home in the United States.

# ANIMAL STORIES WITHOUT WORD

AS TOLD BY  
VARIOUS KINDS  
OF  
EASTMAN  
CAMERAS



DS





A GOOD BACKGROUND FOR SMALL CHILDREN

*Made with a Graflex by J. H. Saunders*

## BACKGROUNDS FOR OUTDOOR PORTRAITS

IN no branch of photography is it more important to make pictures in which emphasis is placed on the point of greatest interest than in single figure portraiture. Since in this kind of work the object is to secure a likeness of a person the picture should contain nothing that will forcibly draw the attention of the observer from the likeness.

The way to avoid including undesirable objects in the picture is by photographing the subject before a background which contains nothing that will appear as prominent in the picture as the chief object of interest.

In indoor portraiture we can use a blanket, a bed sheet, or a wall that has no conspicuous designs for a background, but in outdoor portraiture we must, if we wish our pictures to show that they were made out in the open, use something that is a part of the out-of-doors for a background.

Of all the outdoor backgrounds that are used none is more undesirable for portraiture than the bare side of a clapboarded house. A lot of straight parallel lines, whether they extend horizontally or vertically, always lead the eye of the observer away from the point of interest in a picture.



A brick wall that plainly shows the outlines of the bricks is little better than a lot of clapboards, but if the wall happens to be painted and is thrown out of focus, the outlines of the bricks may be so indistinctly rendered as not to be objectionable.

An ivy covered wall makes a splendid background, provided no

bright reflections from the leaves can be seen in the finder. This suggests using an ivy covered wall at a time when sunlight does not shine on it. Mr. Bradshaw's picture (page 20) shows how bright light, reflected from foliage to the lens, will draw the attention of the observer from the point of interest in a picture.



THE BACKGROUND LINES LEAD TO THE SUBJECT

*Made with a 3A Kodak by P. A. Bennett*





SHOWING SUNLIGHT REFLECTED FROM LEAVES

*From a negative made by B. B. Bradshaw*

In making the picture shown on page 18 Mr. Saunders made use of a kind of background that is available wherever grass abounds. When photographing children the writer has often used a lawn as a background with gratifying results. Since this necessitates pointing the camera downward, at an angle, we should be careful not to include the corner of a building, or anything else that should always be vertical in a picture, within the field of view of the lens.

Many amateur photographers picture people leaning against tree trunks. The result is rarely satisfactory. If the tree is small the picture may suggest that it is balanced on the head of the subject. If it is large the detail in the bark will be very conspicuous, unless the picture is a close-up and is made with a large aperture anastigmat lens that is used with its largest stop. Mr. Barber's picture (page 22) is the best portrait, in which a tree trunk was used for a background, that the writer has seen.

Mr. Bennett shows us, by the picture on page 19, how to handle bare branches of trees when they appear in the background. He has not only thrown them out of focus by using a large lens stop, but has placed his subject in such a position before the background that the lines of the branches

lead the eye of the observer to the subject.

The photographer who wishes to make portraits on a beach, with nothing but the beach, the water and the sky for a background, should pay particular attention to where the horizon line shows in the finder. This line should never divide the picture into two equal parts. It should be either consid-



ON THE BEACH

*A Graflex Portrait by M. W. Reeves*



SHOWING HOW TO USE A TREE TRUNK FOR A BACKGROUND  
*Made with a Graftex by R. A. Barber*

erably above or below the center. Many prefer to place it so that the sky will occupy about  $\frac{1}{3}$  or  $\frac{2}{3}$  of the picture area. This can always be done by raising, lowering or tilting the camera. Mr. Reeves' picture, on page 21, is a splendid example of a portrait made on a beach in full sunlight.

In making outdoor portraits we should give an ample exposure. What is needed is detail in the face; that is, we should make pictures that record such light and dark tones as we can see on the face of our subject.

For portraits in the open shade, with nothing but the sky overhead the following exposures are recom-

mended:  $1/25$  of a second with stop 4 on rectilinear, or with stop *f.* 7.7 or *f.* 8 on anastigmat lenses.

With folding cameras that have single lenses, a 1 second exposure with stop 4.

With fixed focus box camera, 1 second with the third stop.

The writer has secured very good negatives by giving these same exposures for portraits that were made on a beach, with the beach, the water and the sky for a background, even on days when the subject was in full sunlight. Though these exposures were longer than were necessary the latitude of the film took care of the over-exposure.



PLAYING DOCTOR  
*Made with a No. 3 Kodak*



FOR FUN OR KEEPS?

*Made with a 3A Kodak by Robert Rowbottom*

## MAGNESIUM RIBBON

**P**HOTOGRAPHIC films, plates and development papers are extremely sensitive to the light that is obtained by burning metallic magnesium. This is due both to the brilliancy of the light and to the colors of which it is composed.

Magnesium powder is the light-producing ingredient in many flash-light preparations, and magnesium ribbon furnishes a light that is especially well adapted for various kinds of photographic work.

Magnesium ribbon is often used for lighting pictures and other objects that are to be photographed where they cannot be satisfactorily illuminated with daylight. When interiors are photographed by day-

light the ribbon can be used for illuminating parts of rooms that are only faintly lighted by daylight.

Because of the quality of the light it gives and the fact that a short or long exposure can be made—depending on how much ribbon is burned—some workers prefer magnesium ribbon light to any other light for printing Velox and other development papers.

Negatives which are so dense that it may take from one to several minutes to print them by any of the lamps that are available, can be printed in a few seconds by exposure to magnesium ribbon light.

The actinic brilliancy of this light may be judged from the fact

that with one-half inch of the ribbon that is supplied with the Kodak Magnesium Ribbon Holder, ignited at a distance of fifteen inches from the printing frame, the writer has always obtained fully timed prints on Number 3 Velox from tank developed negatives.

The Kodak Magnesium Ribbon Holder is a small metal case which contains a compartment for storing a long coil of ribbon. A section of the ribbon can be drawn out of the holder by a movement of the thumb, which rotates a wooden wheel over which the ribbon passes. A gauge is placed at the open end of the holder for measuring the length of ribbon that is to be used.

Magnesium ribbon can be ignited with a match, but the most

convenient way is to ignite it by holding it in the flame of the small alcohol lamp that is made expressly for the purpose.

As magnesium ribbon is not explosive and will only burn when freely exposed to the air, the flame is automatically extinguished as soon as the strip of ribbon that projects from the holder has burned.

Prolonged exposures can be made by feeding the ribbon from the holder while it is burning, and any exposure can be instantly terminated by rotating the wheel backward, thus drawing the ribbon back into the holder.

Both the Kodak Magnesium Ribbon Holder and the alcohol lamp can be obtained through Kodak dealers.



HAULING SUGAR CANE TO MILL IN MEXICO

*Made with a Kodak by Sumner W. Matteson*



LUNCH FOR ONE  
*Made with a 2C Kodak Jr.*

### WHEN YOU BUY TWO CAMERAS

THE subscription blank that is bound in the manual furnished with every Eastman hand camera entitles the purchaser of the camera to one year's free subscription to KODAKERY.

If you purchase two cameras in the course of a year and send us, properly filled out, the subscription blanks from both the manuals, each blank will bring you KODAKERY for one year from the date it is received by us; but, unless you notify us that you have purchased two cameras within the year we cannot know this fact and your two subscriptions will overlap. You will receive two copies of some issues but will not receive the magazine for the full two year period. For instance, if you purchased a camera in July, 1923, and promptly sent us the subscription

blank you would receive KODAKERY for one year—until July, 1924, and then, if in December of 1923 you purchased another camera and promptly sent us the subscription blank, this would bring you KODAKERY until December, 1924. Consequently you would receive duplicate copies of the numbers published between December, 1923, and July, 1924. If, however, you notified us of the two purchases at the time you sent in the second blank, and stated the date your first subscription expired, we would extend the date of your second subscription so it would continue for one year from the expiration of the first and, as a consequence, you would receive the benefit of the magazine, free of charge, for a full two year period—that is, until July, 1925.

## ORDER FILM BY NUMBER

THERE are many models of roll film cameras in use that make negatives of the same size but require film spools of different lengths. This is owing to differences in the styles of the cameras.

Should you order a certain size of film from your dealer, without mentioning the style of camera you are using, he might not know what you need, but if you order by number he will know exactly what to give you. To illustrate: The No. 3 Folding Pocket Kodak, the No. 3 Cartridge Kodak and the No. 3 Brownie all make  $3\frac{1}{4} \times 4\frac{1}{4}$  negatives, but they are different styles of cameras and require film spools of different lengths. The film made for one of these cameras will not fit either of the others.

Eastman N. C. Film and Eastman Autographic Film are packed in cartons. A number is placed on the ends of each carton. This number refers to the style and size of camera in which the film can be used.

The  $3\frac{1}{4} \times 4\frac{1}{4}$  size of Eastman roll film is listed under four numbers, and is made for use in eight styles of Eastman cameras. Three styles of these cameras use film No. 118, three styles use film No. 124, one style uses film No. 119 and only one style requires film No. A118.

The 3A size of film is listed under three numbers, the  $4 \times 5$  size under four numbers and some other sizes are also listed under two or more numbers, for cameras of various styles.

The letter A preceding the number on a film carton indicates that the film is autographic. If you are

using an Autographic Kodak, a Kodak fitted with an Autographic Back, or an Autographic Brownie, make sure that you order Autographic Film. Autographic records cannot be made on old style film.

Every year has witnessed improvements in Eastman Cameras. Some of these improvements have necessitated changes in the film spools. Since all models of Eastman cameras, from the oldest to the most recent, are in constant use, films must be supplied for all these models.

The number of the film used in any size or style of Eastman roll film camera is printed in large type in the manual that accompanies the camera.

Always order film by number that you may be sure of obtaining the film you need.

## CHANGE OF ADDRESS

KODAKERY is mailed as third class matter which, like all other printed matter that does not require first class postage, cannot be forwarded from one address to another, free of charge.

If you change your address without notifying us, KODAKERY will not reach you. Requesting the postmaster to forward your mail will not insure your receiving KODAKERY, unless you pay him the postage for forwarding it.

Should you move from one place to another be sure to inform us promptly, giving both your old and new addresses, and also the date when your subscription expires.



## SERVICE DEPARTMENT TALKS

## WHEN TO USE A COLOR FILTER

THE function of the Kodak Color Filter is to prevent blue from photographing in too light and yellow in too dark a tone.

The way it does this is by absorbing some of the blue in white light, that is, preventing an excess of blue from reaching the film.

The Kodak Color Filter is, therefore, especially useful for picturing landscapes when there are white clouds in a blue sky, and for photographing light blue or yellow flowers.

When this filter is used with Kodak Film the exposure should be 7 times as long as would be needed if no filter was used.



*For any information you may desire regarding  
amateur photography address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.



*A simple and safe  
method of providing  
strong actinic light*

## Kodak Magnesium Ribbon Holder

WHEN you desire extra light for photographic purposes this handy little device provides brilliant illumination by the burning of magnesium ribbon.

Any desired length of ribbon automatically burns out when it reaches the holder, thus providing a convenient standard of exposure. You will find this apparatus especially useful in photographing dark interiors, copying, and for exposing Velox or other developing papers.

An easy way of lighting the ribbon is furnished by means of an alcohol lamp specially constructed for this purpose.

Magnesium Ribbon Holder . . . . .	\$0.35
Alcohol Lamp . . . . .	.30

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*Supplementary lenses that lend  
added interest to your pictures*

## Kodak Color Filters

When you desire a more exact reproduction of color values, as in photographing of flowers, for instance, this attachment obtains it by lightening yellows and darkening blues.



*Price 75c to \$1.50 according to size*

## Kodak Portrait Attachment



By slipping this attachment over your regular lens you can make close-ups of pottery pieces, miniatures or art treasures as well as arm's length portraits.

Using the Portrait Attachment does not alter the customary way of working your camera.

*Price 50c and 75c*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



## Auto Graflex Junior

CARRY this little camera—five inches high when closed, forty-four ounces in weight—and you can challenge every picture chance that you meet.

While small in size, the Auto Graflex Junior is big in ability. Reflecting mirror, focal plane shutter, fast lens are exactly like those that bigger models boast.

Picture size is  $2\frac{1}{4} \times 3\frac{1}{4}$  inches, economical to buy film for and large enough for most purposes. When there's need for a bigger print it is easily made from the sharp, sparkling negative that the Kodak Anastigmat *f.4.5* produces. For this lens equals any in the world.

Twenty-four instantaneous speeds of  $1/10$  to  $1/1000$ , a slow snapshot of  $1/5$  and *time*, cover every requirement.

The price of the Auto Graflex Junior with Kodak Anastigmat *f.4.5* and one cut film holder (plate holder optional) is \$62.50, the lowest at which a Graflex with *f.4.5* lens has ever been offered.

EASTMAN KODAK COMPANY

*Folmer & Schwing Department*

Rochester, N. Y.

*For your difficult pictures*

# Kodak Cut Film

*Super Speed*

FOR such conditions as fast action, weak light, or heavy shadows the super sensitiveness of this film reduces the percentage of failures and can be counted on to get the picture where film or plates of ordinary speed would fail to cope with the situation.

By means of Kodak Cut Film Sheaths, Kodak Cut Film may be used in any plate holding camera, including the Nos. 3 and 3A Kodaks, regular and *Special*, when equipped with the Combination Back.

## PRICES

	2½x3½	3½x4½	3½x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20
Combination Back for Nos. 3 or 3A "Regular" . . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above . . . . .					1.50

*Prices of film include Excise Tax*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



MAKING MOTION PICTURES WITH A CINÉ-KODAK

## *You press the button; we do the rest*

CINÉ-KODAK, the new Eastman invention, and its projector, the Kodascope, enable you to show in *motion* on your screen the sort of pictures you turn to first in your album. Train the camera, press the button and the motor cranks the camera. The result is a reel of personal motion pictures that for you and yours will be priceless.

And the fascination of personal photoplays isn't all. Through Kodascope Libraries, Inc., professional releases may be rented for projection in your own home.

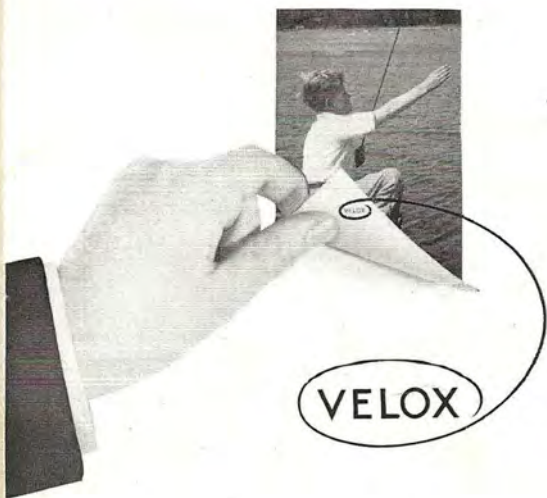
Price of complete outfit, Ciné-Kodak, with either motor drive or tripod and crank, Kodascope, Screen, etc, \$335. Cost of operating is less than 1/5 of the operating expense of

equipment using standard width film, and your finishing by Eastman experts in Eastman laboratories is paid for when you buy the film. *You press the button; we do the rest.*

*Descriptive booklet at your dealer's or from us*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



*Look for*  
**VELOX**  
*on the back*

**VELOX**

**VELOX**, faintly tinted on the back of your prints identifies your finisher's work with quality.

As the only paper made exclusively for amateur negatives, **VELOX**, only, should be used for your prints. It meets *exactly* the requirements of your negatives.

*Look for VEOX on the back*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



JUNE 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*





ILLUSTRATIONS 1/3 ACTUAL SIZE

*Showing the relative proportions of a Vest Pocket Kodak contact print and its maximum enlargement made by the*

## Kodak Auto-Focus Enlarger

As you raise or lower the camera, the picture changes to the desired size while the focus is automatically kept sharp. By this simple procedure, Bromide enlarging is made extremely easy and fascinating.

Negatives up to 6 x 4 inches are accommodated and prints from 1½ to 3½ times the negative size are easily made. The largest print possible from a Vest Pocket Kodak negative is 5½ x 8¾ inches, and the maximum enlargement made with the Kodak Auto-Focus Enlarger is 14 x 21 inches.

The Kodak Auto Focus Enlarger is equipped with Kodak Anastigmat lens, negative and paper holders, six flexible metal masks, electric cord and plug. Equipment is complete except for a Mazda bulb of 75 to 200 watts which is not supplied.

Price (including excise tax) . . . \$35.00

Diffusing Disc for soft focus effects . . . 1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*Developing your films is fun with a*

## **Kodak Film Tank**

THIS convenient outfit enables you to see results within half an hour after the last exposure. And as far as quality of developing goes, these results could not have been improved on, even by experts.

No darkroom is required.

*Price \$3.00 up according to size*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*All dealers'*



PORTRAIT BY MRS. WM. H. KUYLER. *Made with a Premo*



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION 60 CENTS; SINGLE COPIES, 5 CENTS

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No. 10



"WHERE CATTLE DROWSE THE SUMMER HOURS AWAY"

## ORPHANS OF THE WILD

BY HOWARD TAYLOR MIDDLETON

*Illustrated by the Author*

**T**HOUGH a water fowl, the wood duck frequently builds its nest far from its natural environment. In one case that I know of a wood duck's home was discovered in oak timber, fully a mile from water. In another instance a nest

was found in a haymow, in a barn that was still more distant from the nearest stream.

Just across the lush green meadows from the softly-flowing Ran-cocas—by the side of a smiling pool where cattle drowse the sum-



YOUNG WOOD DUCK AT NESTING HOLE

mer hours away—a wood duck set up housekeeping in the hollow trunk of a gnarled old apple tree. It was only through sheerest accident that I discovered the nesting site. The brooding wood duck seldom ventures abroad save at dawn or dusk, and the nest is, therefore, difficult to find. As this pool is the drinking place of a multitude of birds, I visit it often; it is indeed an ideal spot for pictures.

One sparkling summer morning my casual glance came to rest upon an apple tree against which a cow

was rubbing in an effort to rid her body of troublesome flies.

Suddenly there came a flutter of pinions and a feathered streak burst from the hole above Bossy's head. In mild wonder at what all the disturbance was about, Bossy moved slowly onward to join her bovine companions at the brink of the pond, while I hastened to the home of Lady Wood Duck. "Chinning" the hole, I looked upon a circle of down within which gleamed thirteen greenish-white eggs.

Of course, it followed naturally that from this moment forward, I

bent every thought upon ways and means of capturing the fleeting image of Lady Wood Duck upon a Kodak Cut Film, *Super Speed*. Being conversant with her ability to hurtle through space at a terrific rate, I realized that I had set for myself a Herculean task. However, the next morning Walt and I motored to the old gnarled apple tree beside the pool, and between us laid out our action portrait campaign. When all was in readiness, I took my stand in front of the hole, with Graflex lens open at  $f.4.5$ ,



BOSSY

and shutter set at  $\frac{1}{1000}$  second. Having focused carefully, I placed my trigger finger upon the release

lever, and nodded to Walt. He immediately tapped lightly upon the tree trunk with a switch, at which slight sound Lady Wood Duck emerged with almost the speed of lightning. At the first commotion within the hole, I released the shutter, but so ultra-rapid was the bird's departure that I was not sure I had procured her picture until the development of the negative showed that my doubt was altogether baseless.



THE FLIGHT

*Enlarged from a 4 x 5 Graflex negative*



THE ORPHANS WERE ORPHANS NO LONGER

Another sunny day, and we were back again knocking at the door of Lady Wood Duck's home. This time I stood farther away from the tree, for it was now my great desire to catch the agile aviatrix in all the glorious freedom of meteoric flight. The most difficult problem that confronted me was to secure a portrait that would show the image of the bird silhouetted against the open sky. As there was a great deal of foliage in the background and very little clear space, it became necessary to trust largely to luck in the working out of this experiment. Focusing the Graflex upon the spot which seemed best adapted to bring the sought-for result, I nodded the signal. As the bird dashed from the hole,

the release was pressed, and while the point upon which the camera was focused was at least six feet from the tree, the negative showed the subject in exactly the correct position—luck was kind for once.

In due time the wood ducklings hatched. At a distance, we witnessed the evacuation of the nest, and an intensely interesting sight it was. The mother, from her station beneath the tree, called to her *dozen* downy children (one egg failed to hatch) in their nursery eight feet above her head, and they answered her by tumbling out. For a full minute it literally rained young ducks, and why they were not injured by that long drop to hard earth is more than I can understand. Then, still calling



THE MUSCOVY NESTS IN A TREE

softly, the proud mother marshalled her brood in line, and led them to the pool a few yards away.

Anxious for a picture, I hastened forward, at which the distracted parent indulged in a performance suggestive of broken wings, and

many another grave injury besides, in a frantic effort to lure me from her young.

During the excitement the flock of ducklings became divided, seven swimming upstream while five remained near their mother. After



centering my attention for a time upon the larger group, while preparing the Graflex for portraiture, I looked again for the mother and the remainder of her brood, but they were gone. The seven ducklings in the smiling pool were now orphans of the wild—and I felt a bit guilty for I knew only too well that it was our abrupt appearance upon the scene that frightened Lady Wood Duck to the point of deserting a portion of her family.

It was at this spectacular crisis that Senora Muscovy sailed majestically round the bend, and solved the problem for me. She was escorting her yellow fleet of twelve newly-hatched Muscoves, and seeing the seven wild orphans, her generous heart went out to them while she quacked a motherly invitation. Then the dark-brown and yellow mingled, and the orphans were orphans no longer.

No other foster-mother could so well fulfill all the requirements demanded by the wood ducklings as Senora Muscovy. She, like Lady Wood Duck, nests in a tree, never foregoing the ways of her wild ancestors in Brazil and the Guianas,

and while thoroughly domesticated, she still retains many of the traits of the truly wild, including that of strong, rapid and sustained flight. Most wild fowl when domesticated become too heavy to fly; not so the Senora.

Two more weeks have sped by, and the wood ducklings have grown and prospered; i. e., four of them have—the other three I fear have gone from this world via snapping turtle and water-snake routes. Behold the cunning quartette en route to their home in the pool after a raid upon a neighboring pasture for bugs and seeds and all good things, that such a nature's storehouse affords.

Let us hope they may survive until that joyous time not far distant when they can spread wing and drift across those lush green meadows to the softly-flowing Rancocas where mother and sisters and brothers await their coming amid the flowering water lilies.



Use a tripod for time exposures.



THE QUARTETTE



PACK HORSES ON THE RIDGE OF AMISKWI PASS

## ON THE TRAIL AND OFF

WITH ILLUSTRATIONS BY H. POLLARD

WHILE any mountain climber requires a ration of three good thrills a day he expects extra excitement in the Canadian Rockies. There the route is sure to be rough. One of the worst trails was tackled last summer by a party of venturesome Americans headed by Mr. Dean Peabody, Jr., of the Massachusetts Institute of Technology, and conducted by Mr. Harry Pollard, of Calgary, Alberta.

More than the usual quota of thrills was experienced, possibly because one division of the party contained thirteen people, saddle horses and pack ponies.

A veteran photographer, Mr. Pollard found many a splendid chance to picture beautiful mountain scenes. Jagged peaks and glistening glaciers fenced all sides. His equipment suffered considerably, however, and some of his choicest exposures were water-soaked for several days before they could be developed.

Almost from the start the adventurers picked their own path through regions virtually unknown. Each day's program was a tough struggle against treacherous footings and rushing fords. Keeping the train together was sometimes a difficult task as the mountain pack



FORDING HOWSE RIVER

pony is an individualist of the rankest sort. He hates to stick with the crowd.

The summer sun's attack on the glaciers made each river a roaring torrent. Yet the entire party, which included nine courageous women, kept up its spirits throughout the expedition. Now and then it was necessary to halt for a day to relieve the weary horses. But the people usually passed up the chance to rest, preferring to challenge some sheer ascent and explore a glacier.

Interesting, indeed, were Mr. Pollard's photographic experiences during the five weeks that the party was out of touch with the world of affairs. Picture-making was quite important, as none of the

crowd expected to fight the same trail twice.

Exposures were made all along the route, using Eastman Film in sheaths. Loading was done at night, under blankets. The films were wrapped in a rubber sack and kept in a sleeping bag.

One morning, three weeks out, the horse that carried the exposed films decided that he shouldn't work on Sunday. He glanced at the hazardous trail that lay before him and then, pack and all, dove into a swift mountain stream and disappeared.

He was next seen quite a distance below, hurling along, defenseless against the swift current. Two hours passed before a rescue was made—on the wrong side of the



ICE CREVASSE ON CASTLEGAR GLACIER

river. After the packs were ferried across on saddle ponies there was still a long trek to reach the party's camp, many miles ahead.

It was late that night before the anxious Mr. Pollard got a look at

the bag in which the films were stored. It was soaked—a discouraging discovery, as they might be ruined.

Then it occurred to Mr. Pollard to try an experiment. Perhaps



NIGEL PEAK AS SEEN FROM THE SUNWAPTA RIVER



ICE FIELD NEAR MT. BRYCE

they might be saved if they were kept moist and cold until they were developed. As they were high up in the Canadian Rockies, where the waters are always icy cold, the canvas bundle in which the films were packed was dropped into the icy water each morning before packing. As the inner layer of canvas never got dry and never had a chance to get warm this treatment prevented the "cooking" of the emulsion. Seventeen days passed before a darkroom was reached. When the films were developed Mr. Pollard found that a much larger percentage of his exposures than he had dared to hope made printable negatives. In some cases only parts of the film were usable. But enough remained to recall the grandeur that each

hour of the risky journey had witnessed.

The accompanying illustrations were made from negatives that shared the pack horse's icy bath in the Sunwapta River.



Unless special effects are desired, prints should always be developed for the length of time the instruction sheet recommends for the grade of paper that is used. This insures correct development.

If a correctly developed print is too dark it was exposed to the printing light too long. If it is too light it was not printed long enough.



*Made with a Graflex by H. F. Blanchard*



A ROCKY PERCH  
*Made with a 3A Kodak*

## THE FOREGROUND FIGURE

BY ALBERT CRANE WALLACE

I REMEMBER seeing some very beautiful scenic photographs in which appeared strange, towering rock formations, including sharp pinnacles of immense height.

One who looked over my shoulder asked, "How high do you suppose they were?"

I happened to know they were of great height, but there was no way of proving the case, or offering a suggestion, because there was no adjacent figure. The "human interest" of a living figure is thus very useful in estimating the massiveness of stones in a Pyramid or the architecture of a castle. A living figure does, too, add a note to the composition of a picture. There is likely to be one right place for it, and there can be an artistic

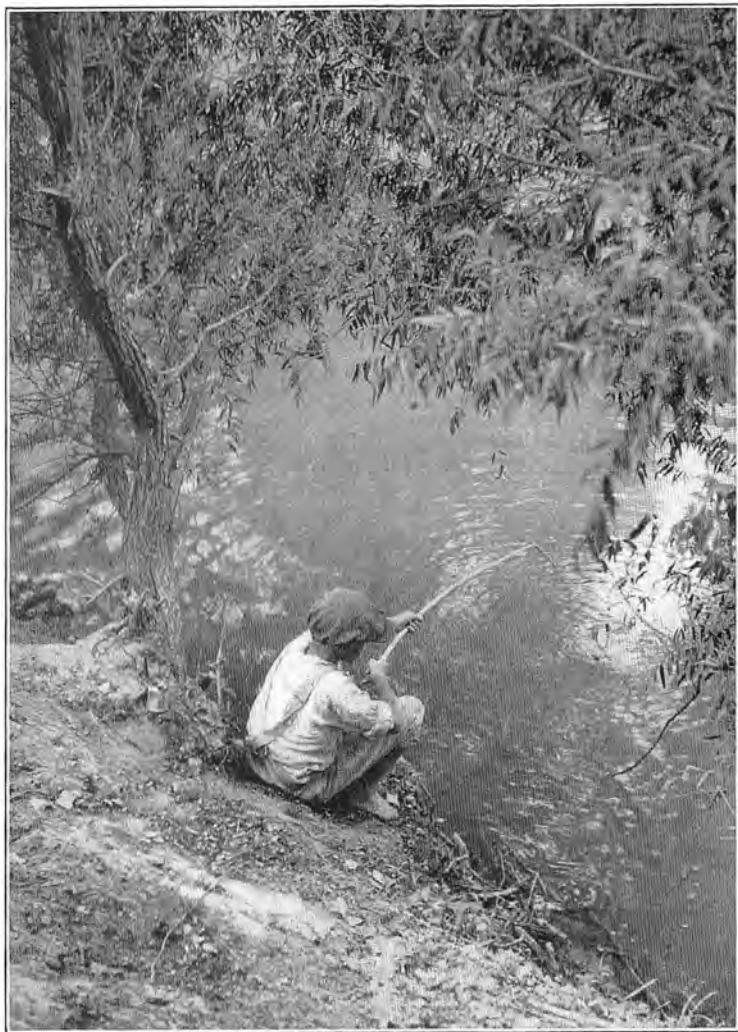
excitement in choosing the place.

Above all it humanizes a picture, gives the living touch we all can understand.

Sometimes I have felt guilty for imposing the foreground figure job on a traveling companion. It *can* become a job—to be asked again and again to be a fragment of scenery! On the other hand I have insisted that such participation is a kind of glory.

In fact, sometimes the foreground figure ends by being the whole thing. You move up the camera and forget the scenery!

With a figure in your picture you will be likely to welcome particularly the autographic feature, for the date and place memoranda will have a meaning not to be found in the scene alone.



EXPECTATION

*Made with a Speed Graphic by W. L. Thompson*



# COMPAN

THE CAMERA CHATS ABOUT  
SOME OF ITS FRIENDS



# N I O N S H I P





THE KODASCOPE BRINGS MOTION PICTURES INTO THE HOME

### YOU PRESS THE BUTTON; WE DO THE REST

**J**UST as the Kodak made "still" photography practicable for the amateur, the Ciné-Kodak has placed motion picture photography within his reach. He can now make his own "movies" with surprising economy and ease.

Ciné-Kodak, the camera, and KodaScope, the projector, are the results of patient search for equipment that would avoid the complexity and costliness of operation which, until their introduction, had denied cinematography to the amateur. The Eastman outfit is as easy to use as the simplest folding camera and its operating expense is less than one-fifth that of machines taking standard width film. Yet it is so complete and so capable that Ciné-Kodak pictures challenge professional comparison.

The secret of the saving in operating cost is that Ciné-Kodak Film is but 16 millimeters wide instead of 35 and that during development the negative is converted into a positive. The same film that was exposed in the Ciné-Kodak is projected in the KodaScope. This economy in material and handling cuts the expense more than four-fifths.

Ciné-Kodak Film is developed by the Eastman Kodak Company's laboratories in Rochester; Chicago; Toronto, Canada; London, England. The charges for developing, reversing and return postage are all included in the original price of the film. Hence the expression, "You turn the crank, we do the rest"—the slogan with which the Ciné-Kodak outfit was introduced last summer.

But that phrase has since been superseded by "You press the button; we do the rest." You no longer need turn the crank, for the Ciné-Kodak is now motorized. A tiny electric motor and battery can be used in place of the crank.

This improvement offers three advantages: excellent pictures are easier to get, the equipment is more convenient to use, the operator can be in the scene himself.

Electric drive insures making the exposures at the same rate per second that the Kodascope projects the successive images to the screen. This guards against the action being reproduced faster or slower than it really occurred.

Still more important is the fact that for most kinds of pictures the motor drive makes the tripod unnecessary. When there is plenty of action in the subject the motor-driven Ciné-Kodak can be held steadily enough in the hands to render a slight shifting of stationary objects in the scene unobjectionable on the screen.

An interesting accessory is the Unipod, a handsome walking stick that screws into the tripod socket to help steady the camera when no tripod is used.

A tripod is a useful possession, however. Not only does it assure steadiness during exposure, but with the camera thus supported, one can press the button to start the motor, step into range and be the hero of the picture himself.

Landscapes must be photographed from a firm support, whether motor drive or crank is used. But since one wants a motion picture camera chiefly for

the purpose of photographing motion, its use for landscapes is only incidental. Action episodes are a more exciting field and for them the motor-driven Ciné-Kodak can be held in the hands.

Electrification of the Ciné-Kodak means that one can carry the camera anywhere and that he can use it on crowded streets, in the grand stand and at other places where he couldn't manage a tripod. Around home he can grab the camera and shoot the sudden action scene in the back yard without "setting up." The advantages of the motor drive are definite, indeed.

The Kodascope is also electrically driven, projecting an image that fills the 30 x 40-inch screen at a distance of 18 feet. For use in churches, lecture rooms and similar places, however, a special lamp-house, rheostat and 200-watt lamp are provided. With these fittings the Kodascope throws a brilliant image, 6 feet wide on the screen, 33 feet away.

While personal motion pictures are unbeatable for interest, the Kodascope program need not be limited to them. It can include professional releases by popular stars. Through Kodascope Libraries, Inc., 35 W. 42nd St., New York City; Kodascope Library of Chicago, Inc., 710 First National Bank Bldg., Chicago; and Kodascope Library of Boston, Inc., 80 Boylston St., Boston, famous features are available for a moderate rental fee. Alice Brady, Constance and Norma Talmadge, Thomas Meighan and Charlie Chaplin are among the long list of favorites whose films are listed in the Libra-

ries' catalog. Then there's a big variety of animated cartoons, travelogs, educational reels and juveniles.

When the Ciné-Kodak and Kodashcope were introduced a year ago, easy, economical equipment for amateur motion pictures had long been in demand. They found

an immediate following. And now, with a motor-driven camera the outfit is still more convenient to operate and its usefulness enlarged. For a genuine thrill, nothing can compare with making one's own "movies" and showing them in the home.



THE FLICKER'S DOORWAY  
*Made with a Graflex by M. W. Reeves*

## PICTURING FAR DISTANT LANDSCAPES

SOME of our readers, who make excellent pictures of landscape subjects in which the objects of interest are in the foreground, have asked us to explain why their pictures of distant landscapes do not show the far distant objects more plainly.

On examining their negatives we found that some showed excessive over-exposure, and others indicated that the pictures had been made at times when the distance was obscured by haze.

In distant landscape work we are confronted by the problem of recording enough contrast between the tones of far distant objects to make them clearly visible in the picture. The farther away the objects are the less contrast we can see between them and their surroundings, and, since it is contrast that we need, it is obvious that the best pictures can be made when sunlight can be plainly seen in contrast with shadows on the distant parts of the landscape, at times when the distance is not obscured by haze.

Under such conditions pictures that will show contrast between the objects in the distance often can be secured, without using a color filter, by merely giving one half as long an exposure as would be needed for ordinary landscape scenes that contain foreground objects in which it is desired to record detail.

The most common difficulty that is encountered in distant landscape photography is, however, one that cannot be eliminated by

shortening exposure, as this difficulty is caused by the haze which is so often visible in the distance.

At all but high altitudes the air usually contains minute particles of dust and water vapor. On a clear day the quantity of dust and vapor suspended in the air that is between the camera and objects that are a few hundred feet away is too small to be noticed, but the quantity that is suspended between the camera and objects that are a mile or more away is often sufficient to make it impossible for us to see the far distant objects clearly.

If the haze is of a bluish color it consists very largely of water vapor, the particles of which are transparent for all of the colors of which white light is composed excepting the blue-violet. The effect which such minute particles have on the blue-violet is to reflect and scatter it. Since all films and all plates are more sensitive to the blue-violet than to any other color the only way that we can photograph through a bluish haze is by using a filter that will absorb some or all of the blue-violet, that is, a filter that will prevent all or a part of it from reaching the film.

A comparison of our illustrations (reproduced from photographs that were made with and without a filter) shows that far distant objects which are but faintly visible, or wholly invisible, in the pictures that were made without a filter can be distinctly seen in the ones that were made with a filter.



*Made by H. E. Orne, with a 3A Kodak Special. No Filter*



*Made with a No. 3 Kodak. Without Filter*



*Same subject shown on opposite page. Photographed with a Wratten K2 Filter*



*The rendering that a Wratten G Filter gave of subject shown opposite*



The distinctness with which far distant objects that are obscured by haze can be recorded in a photograph, when a filter is used, depends on how much of the blue-violet is absorbed by the filter. The greater the absorption the more distinctly they will be rendered, and, as a consequence, *the nearer to the foreground they will seem to be in the picture.*

It is because of this latter effect—the apparent lessening of the distance between the nearby and the far away objects—that we should not use a filter which absorbs nearly all of the blue-violet unless we want the distance to be rendered with the utmost clearness, or unless the far away objects are wholly obscured by a bluish haze.

The writer prefers to use a filter that will insure as clear a rendering of far distant objects as is possible without making them appear nearer than they are, and for this reason uses a Kodak Color Filter when a blue haze slightly obscures the distance, a Wratten K2 Filter when a haze considerably obscures the distance, and a Wratten G Filter when the distance is wholly obscured by haze.

The Kodak Color Filter absorbs all of the ultra violet and most of the violet.

The Wratten K2 Filter absorbs all of the ultra violet, practically all of the violet and some of the blue.

The Wratten G Filter absorbs all of the ultra violet, all of the violet and nearly all of the blue.

The Kodak Filter will, therefore, add the least and the G Filter the most contrast to the picture.

Since filters absorb some of the colors to which films and plates are especially sensitive they necessitate an increase in exposure. The number of times the exposure must be multiplied is called the multiplying factor, or the filter factor.

When Kodak Film is used the factor for the Kodak Color Filter is 7. For the Wratten K2 it is 20, and for the Wratten G it is 100. These factors are calculated for exposures that will record shadow detail.

Since in distant landscape work contrast between the tones of far distant objects is of much greater importance than shadow detail in nearby ones, many workers prefer to use 3 as the factor for the Kodak Color Filter, 10 for the K2 and 50 for the G.

The exposures that are recommended for distant landscapes when no filter is used are:

With cameras that have rectilinear or anastigmat lenses,  $\frac{1}{60}$  of a second with stop 16.

With single lens folding cameras,  $\frac{1}{25}$  of a second with stop 3.

With single lens fixed focus box cameras, a snapshot with the next smaller stop than the one that is used for ordinary snapshot work.



After you have composed the picture, set the shutter for a snapshot and have taken your position in the group, the Kodak Self Timer will make the exposure. It can be used with any camera that has a cable release.



DIPPING FOR MINNOWS

*Made with a Graflex*

## PICTURING THE HOME

BY EARL A. YOUNG

*Illustrated by the Author*

"A BOOK filled with pictures which suggest past moments of pleasure, regret, happiness or humor is a book filled with memories written by the hand of time."

This was burned in the leather lining of my first Kodak album over twenty years ago, and such a flow of memory as this and its companion albums bring can only be known by those who have kept such records.

We all photograph our children in their different moods—their friends and pets. We keep a record of our travels and sports, but I wonder if we all appreciate what can be done with a record of the home building in which we live. It

has its moods and seasons, its quiet hours and gay hours, all expressed in the lights and shadows that are so easy to catch with a little study.

I took a moonlight of our home with my Graflex. The moon moved very little during the six minute exposure with stop *f*.4.5. The lights in the windows were secured by burning a small piece of Kodak Magnesium Ribbon in each room at the front of the house. This picture was used for the invitation to an evening party. We often use portions of different pictures for place and greeting cards, and have a great many ways of using pictures of our home to express a personal touch not possible in any other way.



NOONTIDE

EDITOR'S NOTE—Mr. Young has shown how easy it is to make pictures of the home suggest different moods by photographing it when it reflects the various lighting effects that are created by sunlight and shadow, by diffused light

and even by moonlight combined with artificial light.

The exposures recommended, when both sunlight and shadow can be seen on the building, from the viewpoint of the lens, are:

With cameras that have anastig-



MORNING



BY THE LIGHT OF THE JUNE SUN

mat lenses,  $\frac{1}{25}$  second with stop *f.11*.

With cameras that have rectilinear lenses,  $\frac{1}{25}$  second with stop No. 8.

With folding cameras that have single lenses and stops marked 1, 2,

and 3,  $\frac{1}{25}$  second with stop No. 1.

With box cameras that have single lenses, a snapshot with the largest stop.

These exposures are for  $2\frac{1}{2}$  hours after sunrise until  $2\frac{1}{2}$  hours before sunset.



BY THE LIGHT OF THE JANUARY MOON

## SERVICE DEPARTMENT TALKS

### WHEN WRITING FOR INFORMATION

**W**HEN you write to us for information about any kind of photographic work which is to be done with a camera, or send us prints for criticism, or ask for a copy of the manual that tells how to operate your camera be sure to tell us:

The name of your camera, and whether it is of the folding or the box type.

The size of picture that it makes.

The kind of lens it has—whether an anastigmat, a rectilinear or a single lens.

By telling us these things we will be able to promptly send you the right manual, or specific instructions for the kind of work you wish to do.



*Address all communications*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.



Made indoors with a No. 3A Kodak Special,  
using Super Speed film. Exposure  
1/25 second

## Kodak Cut Film

Regular—*Super Speed*

Just as regular speed Kodak Cut Film is superior to plates for average conditions so the added sensitiveness of *Super Speed* is necessary to meet the difficult situation with confidence.

Exceptional uniformity, width of latitude and freedom from halation give Kodak Cut Film decided photographic advantages

over plates. In addition to these photographic qualities Kodak Cut Film is thin, unbreakable and light in weight—all of which assure handling convenience.

With Kodak Cut Film Sheaths inserted in plate holders, Cut Film may be used in any plate holding camera, including the Nos. 3 and 3A (regular and *Special*) models when equipped with Combination Backs.

### Prices

	2½x3½	3½x4½	3½x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheath, each . . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each . . . . .					.20
Combination Back for Nos. 3 or 3A "Regular" Kodak . . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above . . . . .					1.50

Prices of film include Excise Tax

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., The Kodak City

At your dealer's



The 4 x 5 Revolving Back Auto Graflex with 10-inch Kodak Anastigmat *f*.4.5 now sells for \$225, a considerable reduction.

## Revolving Back Auto Graflex

WHILE the reflecting mirror, focal plane shutter and *f*.4.5 lens are the basis of Graflex ability, this model offers valuable supplementary advantages. It has a revolving back, long bellows and a rising front.

Revolving Back Auto Graflex is made in two sizes,  $3\frac{1}{4} \times 4\frac{1}{4}$  and 4 x 5, for which Kodak Anastigmats *f*.4.5 with focal lengths of  $7\frac{1}{2}$  and 10 inches, respectively, are recommended. Bellows capacities are  $15\frac{1}{2}$  and  $18\frac{1}{2}$  inches, so that close-up copying is easily done. And the long focus lenses produce big images of distant objects.

*Exactly the camera for the advanced amateur.*

Price of the Revolving Back Auto Graflex with one cut film holder (plate holder optional) but without lens— $3\frac{1}{4} \times 4\frac{1}{4}$ , \$108; 4 x 5, \$124. With Kodak Anastigmat *f*.4.5— $3\frac{1}{4} \times 4\frac{1}{4}$ , \$161; 4 x 5, \$225. Ask your dealer, or write us, for catalog.

EASTMAN KODAK COMPANY

Folmer & Schwing Department

Rochester, N. Y.



*Accessories that  
aid with your  
outdoor pictures*

Press the trigger,  
take your position  
and the Timer  
trips the shutter

**Kodapod**—When you have time exposures to make, this handy little device proves its usefulness for tripod duty. Strong toothed jaws enable it to grasp firmly trees or fence rails. A convenient swivel permits adjusting the camera to almost any position.

*Price \$1.75*

**Kodak Self Timer**—This attachment gets you in the picture. It clips to the cable release and “presses the button” for you at any interval from  $\frac{1}{2}$  second to 1 minute.

*Price \$1.25*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*





*Without DIFFUSION DISK*



*With DIFFUSION DISK*

*For a new kind of landscape picture*

## Kodak Pictorial Diffusion Disk

**N**EW soft-focus pictures can be made of old outdoor subjects with this attachment. Just slip it over your regular lens, expose as usual and your landscapes will be novel, pictorially interesting, delightfully diffused. And it's no more difficult than making any other snapshot.

Pictures made with the Kodak Pictorial Diffusion Disk have highlights toned down, harsh lines are blended, details lose their sharpness, yet there is no trace of "fuzziness" or out-of-focus effects.

The Kodak Pictorial Diffusion Disk is now supplied for Kodak and Folding Brownie cameras that the Nos. 3, 5, 6 and 7 Kodak Portrait Attachments fit, and any Graflex camera whose Kodak Anastigmat lens f.4.5 bears the number 31, 32, 33 or 34.

### *Prices*

#### For Kodaks and Folding Brownies

No. 3	\$1.75
No. 5	2.50
No. 6	2.50
No. 7	2.50

#### For Graflex Cameras

No. 31	\$5.00
No. 32	5.00
No. 33	5.00
No. 34	6.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



## *Ciné-Kodak gets the picture in motion*

PRESS the button on your Ciné-Kodak, and as the dependable little motor steadily cranks the camera, you're making motion pictures just as easily as a Brownie would give you a single snap-shot.

Eastman experts finish your film without extra charge. You thread it in the Kodoscope, turn the switch and the practice spin on the river, the race itself, or some less spectacular incident around the home is right before you in motion on your own screen, in your own home.

Besides personal "movies", professional releases for Kodoscope pro-

jection may be rented as desired from Kodoscope Libraries, Inc.

Ciné-Kodak has reduced the operating cost over 80 per cent as compared with outfits using standard width film.

Price of complete outfit, Ciné-Kodak with either motor drive or tripod and crank, Kodoscope, Screen, etc., \$335.

*Descriptive booklet at your dealer's or direct from us*

**EASTMAN KODAK COMPANY**

ROCHESTER N. Y., *The Kodak City*



*Look for*  
**VELOX**  
*on the back*

**W**HEN you find the word Velox on the back of your prints it is certain that your finisher is not satisfied with ordinary developing and printing. It shows that he is using up-to-date methods as well as the best possible paper, Velox. In other words he is giving you the best prints on the best possible paper.

*Look for "Velox" on the back*

**EASTMAN KODAK COMPANY**  
ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



JULY 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*

*For your Kodak record of the children*



## “Childhood Days” Album

IN most homes, snapshots of the youngsters take first place among the photographs. At every age they make fine subjects for your camera, and their pictures are always charming.

The “Childhood Days” Book is the new Eastman-made album, designed especially to keep those precious pictures you make of the children, safe, clean and ready to be shown and enjoyed.

It is exquisitely finished, with an embossed childhood scene, hand colored, and is durably made for years of use.

*Price \$2.50*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*

*It saves the difficult situation*

# Kodak Cut Film

*Super Speed*

WITH *Super Speed* in your camera you are equipped to challenge picture possibilities that would ordinarily be prohibited.

Snapshots indoors, or outdoors with weak light, swift exposures made necessary by movement of the subject—under such conditions Kodak Cut Film, *Super Speed*, reduces failures and gets the picture if it's possible.

By first inserting Kodak Cut Film in Kodak Cut Film Sheaths, it may be used in any plate holding camera, including the Nos. 3 and 3A Kodaks, regular and *Special* models, when equipped with the Combination Back.

## *Prices*

	2½x3½	3½x4½	3½x5½	4x5	5x7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
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Eastman Film Sheath No. 3, each . . . . .					.20
Combination Back for Nos. 3 or 3A "Regular" Kodaks. . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above . . . . .					1.50

*Prices of film include Excise Tax*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*





MAKING FRIENDS  
*Made with a Graflex by H. Armstrong Roberts*



PUBLISHED MONTHLY - YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

JULY, 1924

No. 11



*Made with a 3A Kodak Special by Forrest W. Bassett*

## CAMP FIRES

BY C. HAZEN TRAYVOR

LET me whisper a personal secret: I'm not much good at camping. Somehow camping suggests those little hardships that are often harder to endure than the big ones. But I believe in camping—sentimentally I believe

in it. In fact, it promises adventure and even romance. Theoretically we all want these things.

However, one can have camp fires without going in too heavily for camping. There are picnic fires, maple sugar experiments,





*Made with a Premo by Mrs. Alice F. Foster*

fishing trip fires that all include the glamor of outdoors. You get the flavor without too heavy an investment. You can think, when you have them, of how it would be if you *were* a thousand miles from anywhere in the deep wilds of the world, making terms with nature.

And the woodland fires do make pictures. I am always enormously interested in other people's camping, in other people's primitive fires, with the picturesque settings and all the hints of happy chumming. I once watched two famous woodsmen in a water boiling contest. They were to find twigs, cut the necessary small wood, get their fires going (with not more than three matches) and bring little cans of water to the boiling

point—all against time. My recollection is that John Burroughs was the judge, that the contestants were only a few seconds apart and that there was a quarrel as to whether a simmer was really a boil. I ought to remember the time. Maybe it was four minutes and a half. I'm not sure.

The pictures before me are very charming. They have the real effect of happy companionship, and they show how good a companion the Kodak is on the occasion of such excursions. Many camp fire places present difficulties of light. To manage composition and light, the story-telling and the negative-making, often implies a good deal of skill—enough skill to make the thing extremely in-



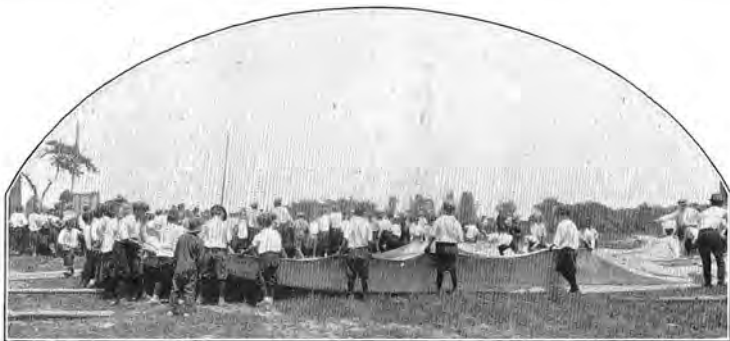
*Made with a Premo*

teresting. Often the job is simply to find the best point of view, the angle that will tell most as to the story—and the surroundings are all part of the story. Of course the Kodak

Self Timer—a device for setting off the camera—so that all present may be in the picture—is not complicated. KODAKERY has often told about it, and shown the entertaining results.



*Enlarged from a 2A Brownie negative*



WILLING HANDS

## DICK'S DAY AT THE CIRCUS

BY HIS DAD

"YES sir, Dick, if you'll help me clean up the cellar I'll not only take you to the circus but we'll get out there early enough to watch it come in."

Needless to say that youngster of mine pitched in and worked with a willingness that surprised both his mother and me.

The great day dawned at last, bright and clear, and a certain young man was up and dressed before his father, for once.

"Oh gee! Dad," piped the boy, "here's a great chance for me to try out that Brownie camera Aunt Ella sent for my birthday. Are you going to take your Kodak?" "You



THE ELEPHANTS HELPED



CURIOSITY

just bet I am, Dick," said I. "We'll stop at the drug store and get a few rolls of film."

Fortunately we loaded our cameras on the way out to the "lot," for as we jumped off the car we

spied the advance guard. He wore a sort of nondescript uniform and was mounted on a wiry Indian pony. Both horse and rider seemed to know the business at hand and, as each heavy wagon lumbered on



ENTHUSIASTIC COOPERATION

the lot, drawn by six or eight brawny horses, its driver was directed just what location to take. In a remarkably short time the

huge wagons were in their respective positions, helped by the elephants; huskies started driving stakes preparatory to raising the big tent and



ZEBRAS POSE FOR DICK'S BROWNIE



"WHEN A FELLER NEEDS A FRIEND"

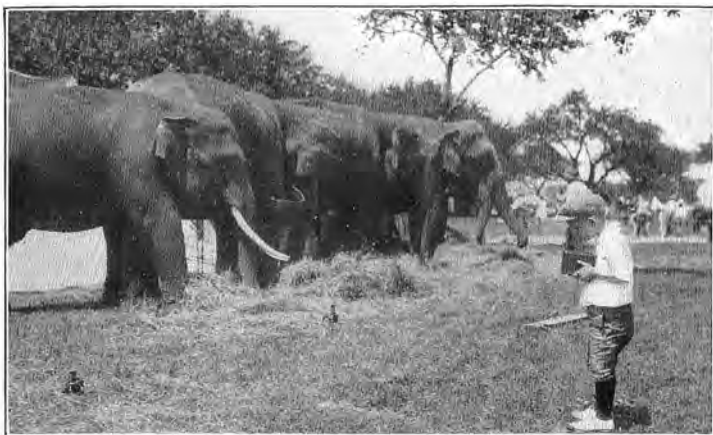
the boarded sides of the animal cages were removed to give the beasts fresh air.

Dick's curiosity as to what a certain bright red wagon contained had to be satisfied beforehand, however, and I "caught" him on the wagon with my Kodak. The grounds were now fairly alive with boys although we were by no means the only ones to arrive early.

Every one of these hundreds of youngsters was on the alert to lend a helping hand in the hope of

getting a free pass to the big show, and when the word was given to spread out the canvas of the main tent they worked like Trojans. Noon rolled around before we knew it and we realized that a meal of some sort was in order. "Hots," pop-corn, chocolate bars, pink lemonade and ice-cream cones were the principal dishes on the bill-of-fare, and the entrees were many and varied.

Sauntering back on the "lot," with a cone in one hand and a



MEAL TIME—A GREAT CHANCE FOR PICTURES

camera in the other, we found it was also meal time for the animals. Zebras, camels, elephants, etc., were tethered out in rope enclosures and here indeed was a great chance for pictures. The great canvas was now up and the side shows with the aid of their "bally-hoo" were gathering in the

dimes. Soon we were perched on our seats in the big tent with a copious supply of "goobers" in our pockets. The band struck up, the grand march started and two footsore photographers sat back in solid contentment.

That night the boy had a remarkable dream. Out of his



WATCHING THE RISE OF THE BIG TENT



LOOKING AS PLEASANT AS THEY COULD

Brownie, which he had placed beside his bed, had tumbled clowns and fairies, and soon commenced a grand march of all the

circus animals and performers. Beautiful ladies on gorgeously harnessed horses and elephants rode ahead, and round and round



AND THE CAMELS



the procession marched, with the boy as the sole spectator.

Dick's mother remarked that she was not sure which of us enjoyed our day at the circus most. That's a fair question, I'll admit, but at

any rate the story of that circus day is ours for keeps and Dick's dream came true, figuratively, for all we have to do to enjoy it again is to turn the leaves of our Kodak album.



REHEARSING THE BIGGEST THINGS IN THE SHOW



ALMOST ALL ABOARD

## TWILIGHT SILHOUETTES

WHILE watching the daylight merge into darkness, as we look across a landscape toward the western sky, we can observe the detail in dark toned objects that project above the skyline gradually vanish until these objects appear darkly silhouetted against a well lighted background.

It is during this twilight period that we can make outdoor silhouettes just as easily as we make snapshot pictures in the daytime, provided we light our subjects differently.

Since we need detail in our day-

light pictures but do not want it in silhouettes we must reverse our usual daytime procedure, and have the strongest light directly in front of, instead of behind or at one side of the camera, and we must also have as little light as possible on the side of the subject that faces the lens.

The most favorable lighting conditions for making silhouettes out on an open landscape exist during the early part of the evening twilight period, when the sun's rays no longer reach the landscape but still brightly illuminate the sky.

The ideal position for placing the



THE SIGNAL

figures of which we wish to make silhouettes is on a hilltop, where each figure can be wholly outlined against the sky, but a hilltop is not always available, and equally good results can be obtained, even on level ground, by merely holding the camera about a foot above the ground while the exposure is being made. In fact, it was by this latter method that the story telling silhouettes that illustrate this article were made.

As a wholly silhouetted image is void of detail the identity of the subject can only be determined by the outlines of the image and we should, therefore, place our subjects in such positions that the particular outlines we wish to record can be seen from the viewpoint of the lens. A silhouette of a

human head, for instance, should always show the face in full profile. The best silhouettes of animals usually show both head and body in profile.

In addition to animate subjects there are statues, towers, church spires, ships and many other objects that can be seen projecting above the skyline, of which pleasing twilight silhouettes can be made.

When the sky is clear, and well lighted, black images on a white ground can be secured. If there are patches of gray or tinted clouds floating in a brightly lighted sky backgrounds similar to that shown in the lower silhouette on page 15 will be obtained.

The exposure recommended for outdoor silhouettes that are made within 15 minutes after the sun has



"PLAY BALL"

passed below the skyline is  $\frac{1}{25}$  of a second with stop 8 on rectilinear, or stop *f.11* on anastigmat lenses.

With cameras that have no stops marked 8 or 11 the same snapshot exposure that is used for making landscape pictures at noon on a sunny day is recommended.

No reliable rule can be given for exposures that are made later than 15 minutes after sunset as the light then fades rapidly.

The films may be developed in the usual way — 20 minutes in the tank with one tank powder when the temperature of the developer is 65 degrees Fahrenheit. If extremely contrasty negatives are desired the films should be developed for 15 minutes, with two

tank powders, when the developer is at a temperature of 65 degrees Fahrenheit. The prints should be made on No. 4 Velox.



LIGHTING UP

# LITTLE BIOGRAPHIES

TRUTHFULLY TOLD BY  
EASTMAN CAMERAS







A TYPICAL CHANCE FOR A PICTURE

### SCOUT PHILLIPS GOES AFTER A PRIZE KODAK

**T**ED PHILLIPS wasn't the only one in Troop 31 who possessed a camera, but his folding Brownie was the only picture-maker carried along on the day that the troop hiked out along Big Sandy river.

Ted hadn't long been the "proud possessor," for only recently had his big brother acquired a new model Kodak. Then it was that he had fallen heir to the much used, but perfectly good Brownie.

"Well, today I suppose we'll all get 'shot,' somewhere between Big Sandy and our homes," laughed the

Scoutmaster, as Ted joined the troop.

But it wasn't until some hours later, when the troop had disposed of its mid-day lunch, that a picture possibility presented itself.

Then, when Bob Matthews was showing two tenderfeet of his patrol, how to properly use a knife, Ted opened up the Brownie and pressed the exposure lever.

"That certainly looks like a picture," commented the Scoutmaster, "but I'm afraid you had the sun too much in front of the camera. Try it again, with the sun

on one side of you, and I'm sure you'll get a picture good enough to enter in the big photographic competition."

"What competition is that?" came the chorused question.

"Why the Eastman Kodak Company is giving away one hundred No. 1A Pocket Kodaks, worth \$22.00 each, for one hundred of the best pictures sent in by Boy Scouts between now and October first."

"Yesterday," he continued, "I stopped at the Kodak counter in Shaul's and saw one of the prize Kodaks. It surely is a beauty. It's got a Kodak Anastigmat lens for one thing."

"Will the pictures we take for the contest count toward a merit badge in photography?" piped up Bud Smith, who saw both a prize Kodak and a merit badge coming his way.

"Sure thing," said the Scoutmaster. "And here's a tip—you'll stand a much better chance to own one of those Kodaks if you make your pictures tell a story. Now if Scout Matthews and the two tenderfeet had simply looked at Ted when he took the picture it might have been a good portrait but it wouldn't have told a story."

That night after Ted had read the contest folder that the Kodak dealer had given him, he explained to his Dad just how he was going to get one of the folding Kodaks.

"That Kodak is just as good as yours right now, isn't it?" laughed his Dad.

"Well, not yet," admitted Ted, "but I know I can take winning pictures with the Brownie and then wait till you see the pictures I make with that new Kodak — O boy!"



THE WATER WHEEL

*Made with a 3A Kodak Special by Wm. Kirkbright*





GOOD NATURE

*Made with a 3A Kodak Special by Wm. Manning*



THE TROPHY

*Made with a Groflex by M. W. Reeves*



THE NAVIGATOR

*Made with a No. 3 Kodak Special*

### DON'T SQUINT FOR TIME OR POKE FOR TEMPERATURE

CHANCES to make unique pictures are always bobbing up on the vacation trail. Usually they're of a sort that any novice can photograph, but sometimes the opportunity is one for which a fellow's previous experience with a camera holds no precedent. Even the manual, comprehensive as it is, may miss the particular question.

That's why so many vacationists not only take Kodaks with them but take Kodak Film Tanks also. Then, after one has exposed a roll of film, he can develop his negatives

at once and learn his luck right away. If he wishes to try another exposure for a different effect, he's on the spot to do it instead of back in town.

Kodak Film Tank is a compact affair that develops roll film in daylight by the *time and temperature* method. According to instructions, if the temperature of the solution is 70 degrees Fahrenheit and one Tank Developer Powder is used the process requires 15 minutes. If the solution is colder, one minute should be added to the developing



CHOIR OF CHARTRES CATHEDRAL

*Made with a Speed Graphic. Exposure 12 minutes f.32*

period for every degree below 70.

Now this method assumes that nobody will try to measure temperature by poking his finger into the water any more than he'd try to measure time by squinting at the sun. Guesswork won't do. A thermometer is just as necessary as a watch.

By all means carry a Kodak Film Tank on your vacation. Enjoy the thrill of developing your exposures as soon as a roll is full. But give the tank a chance to do its work properly; test the temperature with a thermometer so that you'll know exactly the time to allow for development.



THE QUAY  
*Made with a 3A Kodak*



THREE STAGES OF AN ADVENTURE  
*Made with a Graflex by W. C. O'Kane*

## DRYING NEGATIVES

THE length of time it takes to dry a negative, after it has been developed, fixed and washed, has an effect on its printing quality. A negative that dries within three hours will make a more brilliant print than one that holds water imbedded in the gelatine for many hours.

When negatives dry very slowly they increase in density and decrease in contrast. If the drying process is excessively prolonged (18 hours or more) a chemical change, of which we are informed by a very perceptible odor, takes place in the gelatine. When this occurs the negative becomes coarse grained and, though this coarse grain will rarely be noticed in a contact print, it will show plainly in an enlargement that is made from the negative.

The washing of negatives has an influence on the length of time it takes to dry them. If they are thoroughly washed all of the hypo and other chemicals that they absorbed from the fixing bath will be removed and they will then dry much more quickly than they would if hypo was left in the gelatine.

Negatives should be washed for from 40 to 60 minutes in running water, with the water constantly passing over both sides of each negative. If running water is not available they should be washed in a tray and the water changed 10 or 12 times at five minute intervals. They should be kept separated so that one will not lie on top of another.

Hastening the drying of nega-

tives by immersing them in alcohol is hazardous. When the water is withdrawn from the negatives by immersing them in successive baths of alcohol, the gelatine is apt to contract so rapidly that it will crack, and, if there is a trace of hypo left in the negatives they will become stained or streaked. If the alcohol is denatured or contains impurities, it may also produce stains. Another important objection to the use of alcohol is that it makes the film hard or "horny." Wood alcohol must never be used, as it will dissolve the film.

Of all the methods that have been tried for drying negatives none has proved as simple or as satisfactory as drying them in a current of air that is free from dust.



HER FIRST CAMERA

Made with a Graflex by J. H. Saunders



Made with a  
3A Kodak

By  
Mrs. John E. Allen

## AUTOGRAPHIC NEGATIVES TELL THE WHOLE TRUTH

A PERSON'S age is one of his attributes, like his height or his complexion. Therefore some people wish they were older while others wish they were younger.

When Napoleon Bonaparte and Josephine were wed, the bride was sensitive about her additional six years. So she persuaded the bridegroom to give his birth date as one year earlier than it really was and she gave hers as several years later than the truth.

Two brothers of Napoleon encountered similar situations with their respective brides and each

of them yielded to entreaty and set his birth date back. Strangely enough, all three Bonaparte brothers claimed to be born in 1768, but none of them really was.

One's age is part of his description. Before the invention of the autographic feature many photographers wrote dates and ages on the negatives after they were developed and dried—but sometimes not until years after. The autographic method is much simpler, of course, and it's more accurate, too, because the record is written on the film *immediately* after the exposure is made.



## SERVICE DEPARTMENT TALKS

## VACATION PICTURES

**D**URING your summer vacation you may have opportunities to picture types of subjects which you have never photographed.

Seashore pictures are made under conditions that do not exist at well shaded inland camps, and in cities there are types of subjects that cannot be found in the country.

While instruction in the various branches of amateur photography is constantly being published in *Kodakery*, our new subscribers may desire information which is not contained in the copies of the magazine that they possess.



*For any specific information that you  
may desire address*

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY

ROCHESTER, N. Y.



## 4x5 Graflex, *Series B*

Speeds  $1/10$   
to  $1/1000$

### For Sport Photography

WATCH the action in the hood. As the horse goes over the hurdle or the ball goes over the net, trip the shutter.

With a Graflex it's that easy to put the exciting scene into picture. Guesswork is left out. You *know* when the focus is sharp, you *see* what the view includes.

Graflex, *Series B*, is a unified camera with its Kodak Anastigmat  $f.4.5$  permanently set in a rigid metal mount. Two advantages of the  $4 \times 5$  proportions are that the big size simplifies composition and that the big contact print gives you a satisfying image.

Price of the  $4 \times 5$  Graflex, *Series B*, with one cut film holder (plate holder optional) and  $6\frac{3}{8}$ -inch Kodak Anastigmat lens  $f.4.5$  is \$92, tax included. See this splendid Graflex at your dealer's.

EASTMAN KODAK COMPANY

Folmer & Schwing Department

Rochester, N. Y.

## *Temperature is Important*



### Eastman Thermometer

EITHER tank or tray development is made easier by the use of this reliable thermometer.

Its back, curved to fit inside the tank, and the hook for suspending, are features that lend convenience to its accuracy.

*Price 90¢*

### Thermometer Stirring Rod



THE combination of a  $9\frac{1}{4}$  inch stirring rod and a tested thermometer forms an accessory that is unique in its usefulness. Chemical particles are easily pulverized with the flattened end of the rod.

*Price \$1.50*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*For rapid,  
daylight development*

## Kodak Film Tank

WIND the film on the apron, insert the apron in the solution filled tank, and develop for the length of time required for the temperature at which the developer is used. Developing with the Kodak Film Tank is just that easy, and the results are as sure as the procedure is simple.

It's all done by daylight.

*Price \$3.00 up according to size*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



*It's always in focus  
without adjustment*

## Kodak Auto-Focus Enlarger

For Bromide Enlarging

THE automatic focusing feature of this enlarger has made amateur enlarging almost as easy and fully as popular as contact printing.

As you raise or lower the camera, the image size changes but it still stays sharp.

Film or plate negatives up to 4 x 6 inches are accommodated while the largest possible print is 14 x 21 inches. The apparatus includes Kodak Anastigmat lens, negative holder, paper holder, set of flexible metal masks in six sizes, electric cord and plug but without the Mazda printing lamp (75 to 200 watts) required.

Kodak Auto-Focus Enlarger (including Excise Tax) . . . \$35.00

Diffusing Disc for soft focus effects . . . . . 1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



THE MOTOR CRANKS THE CAMERA

## *Motion Pictures the Kodak Way*

RUSHING water, swirl of spray, flashing paddles—press the button on your Ciné-Kodak and you're getting it all in motion.

And then back from the trip, you have only to turn the switch on your Kodascope and once more the racing canoes swoop past you and the thrill of the moment is yours again.

Nor are you limited to personal motion pictures of your favorite sports, your vacation trip, or the children. Professional releases—dramas, comedies, etc.—may be rented from Kodascope Libraries,

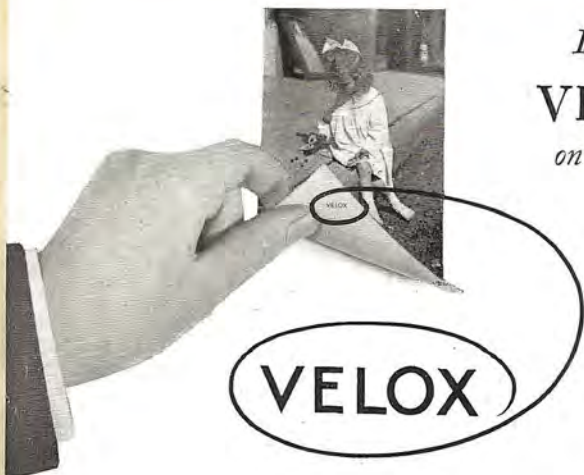
Inc., and projected in your own home.

Price of complete outfit, Ciné-Kodak with either motor drive or tripod and crank, Kodascope, Screen, etc., \$335. Cost of operating is less than 1/5 of the operating expense of equipment using standard width film, and your finishing by Eastman experts in Eastman laboratories is paid for when you buy the film. *You press the button; we do the rest.*

*Descriptive booklet and full information by mail, on request*

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*



*Look for*  
**VELOX**  
*on the back*

**V**ELOX enables your finisher to produce the kind of prints you want. It is supplied in four degrees of contrast—no matter the negative grade, there is a grade of Velox that will yield the best possible print.

Contrast No. 1 for negatives of extreme contrast.

Contrast No. 2 for average negatives.

Contrast No. 3 for thin flat negatives.

Contrast No. 4 for very thin flat negatives.

*Look for "VELOX" on the back*

**EASTMAN KODAK COMPANY**  
ROCHESTER, N. Y., *The Kodak City*

# KODAKERY

A  
MAGAZINE *for* AMATEUR  
PHOTOGRAPHERS



AUGUST 1924



EASTMAN KODAK COMPANY  
ROCHESTER, NEW YORK  
*The Kodak City*



*Simplified apparatus for amateur enlarging*

# Kodak Auto-Focus Enlarger

*There's no focus to set and consequently no bother. As you slide the camera up or down for the desired size image, automatic mechanism keeps the focus sharp.*



THERE is no need of carrying a large camera in order to obtain large prints. The negatives you obtain with your conveniently carried hand camera will produce large prints with the Kodak Auto-Focus Enlarger.

The Enlarger makes Bromide enlargements from  $1\frac{1}{2}$  to  $3\frac{1}{2}$  times the negative size and takes film or plate negatives up to 4 x 6 inches.

Price, complete with Kodak Anastigmat lens, negative holder, set of six metal masks, electric cord and plug but without the 75 to 200 watt Mazda lamp required . . . . . \$35.00

Diffusing Disc for soft focus effects . . . . . 1.00

**EASTMAN KODAK COMPANY**

ROCHESTER, N. Y., *The Kodak City*

*At your dealer's*



## Kodak Cut Film

*Regular—Super Speed*

WITH Kodak Cut Film, regular speed, you have at your command the good qualities of fast portrait plates with none of their disadvantages.

And in the emergency, *Super Speed* is essential. Its super sensitiveness increases the chances of success when dull light or deep shadows would otherwise spell failure.

In addition, Kodak Cut Film is unbreakable, light in weight, and practically free from halation.

By inserting Kodak Cut Film in Cut Film Sheaths it may be used in any plate holding camera, including the Nos. 3 and 3A Kodaks, regular and *Special*, when equipped with the Combination Back.

### *Prices*

	2½×3¼	3¼×4¼	3¼×5½	4×5	5×7
Kodak Cut Film, doz. . . . .	\$0.46	\$0.67	\$0.93	\$0.93	\$1.50
Kodak Cut Film, <i>Super Speed</i> , doz. . . . .	.52	.77	1.03	1.03	1.65
Kodak Cut Film Sheaths, each. . . . .	.10	.10	.15	.15	
Eastman Film Sheath No. 3, each. . . . .					.20
Combination Back for Nos 3 or 3A "Regular" . . . . .					4.00
Ditto for No. 3 <i>Special</i> . . . . .					4.50
Ditto for No. 3A <i>Special</i> . . . . .					5.00
Double Plate Holders for any of above. . . . .					1.50

*Prices of film include Excise Tax.*

## EASTMAN KODAK COMPANY

ROCHESTER, N. Y., *The Kodak City*



THE SHEEP PASTURE

*Enlarged from a Kodak Negative*



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. XI

AUGUST, 1924

No. 12



*Made with a 1A Kodak Jr.*

## FUN AFLOAT

BY C. HAZEN TRAYVOR

I HAD a sea captain uncle who taught me about floating craft. He trained me in the management of boats. He explained the different types of vessels, and was much annoyed when I called a "ship" a thing that was not a ship.

They have always been fascinating to me, all these sailing craft,

whatever right name belonged to each; and the smallest "small-boat" or canoe has ever had a charm of its own. Fitting out for a cruise, even if it was only a cruise to the other end of a lake, has had a romantic meaning.

Of course my Kodak was always part of the equipment. "Close-



*Made with a 3A Kodak Special*

ups" of fellow mariners became part of the history of a trip; as for instance, studies of the first mate worrying over bacon and eggs for breakfast with the aid of a frying pan that was by no means as

polished as a good housekeeper would have it, and an oil stove not above smelling dreadfully.

When there was a landing for dinner, impromptu fires ashore gave a keynote for a picture.



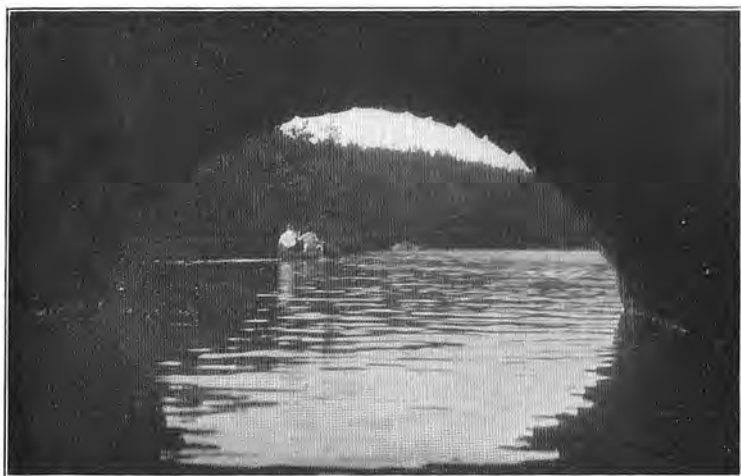
*Made with a No. 1 Kodak Special, by G. W. French*



*Made with a 2A Brownie, by Mildred G. Jennings*

The canoe is one of the most alluring of subjects for the camera. Its lines seem to give a graceful note to any water scene.

Naturally other craft, including busy professional plodders of the sea, form a prominent staple of the subjects in an album. Yachts



*Made with a Graflex, by Lindsley F. Kimball*

straining in a lively breeze, or idling at anchorage, seem made for the camera. The difficulty of

getting effective relief for white sails is a challenge to artistic skill. Always there is the beauty of



*Made with a 1A Kodak, by Gordon E. Frisque*



*Made with a 3A Kodak Jr.*

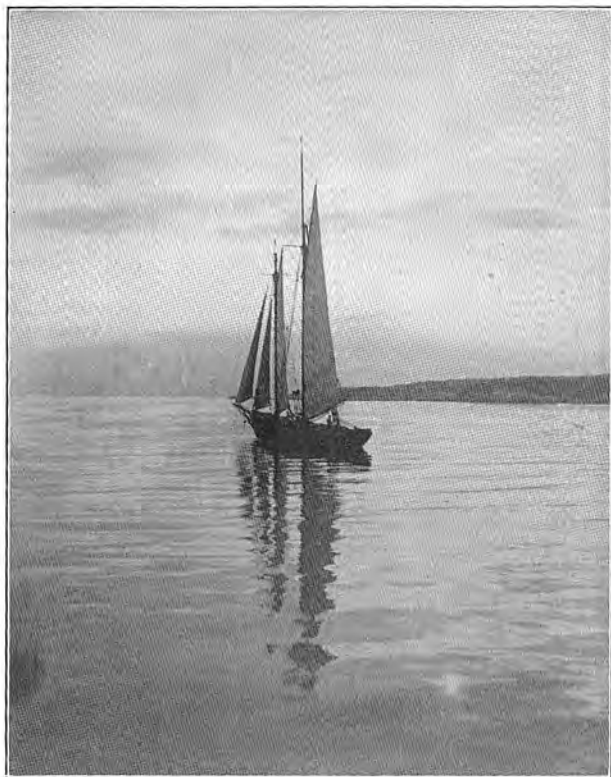




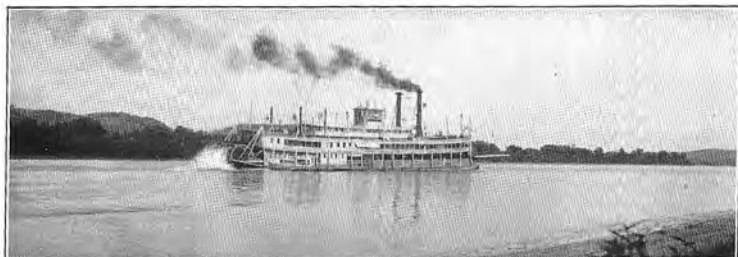
*Made with a Kodak*

water, whether it be tranquil or active, with its foam or glitter, its delightful picture-making reflection, never twice the same. And each story, whether of a private or public craft, suggests life interests that leave us opportunity for

pleasant speculation in the never-ending album reviews. The water adventurer and the shore spectator never can lack material for building dreams. Thus the Kodak is not only a historian. It is ever a suggester of romance.



*Made with a No. 3 Kodak Special, by Wm. E. Leonard*



*Made on the Ohio with a 1A Kodak Special, by Roy Harrison*



A STORY TELLING PICTURE—THE KIND THAT COMMANDS ATTENTION

## RED AND BROWNIE

A STORY FOR BOY SCOUTS

"Hike along, hike along,  
Hike along with a stride so free,  
But when you see a big brown bear  
Just let that big bear be."

So sang the Blazing Arrow Patrol, matching their stride to the swing of the refrain as they tramped away from the trolley station along the road to camp.

Camp—a word magic and compelling to members of the Blazing Arrow Patrol. Its mere mention by father (who supplied the funds) or by mother (who held veto power

over the entire project until the water at camp was proved pure) aroused immediate enthusiasm in piano practice and school work.

Now camp was a reality—a few more choruses of "Hike Along" brought the last turn in the road, and then came in sight the rustic sign over the lane leading to the lake shore where the white tents were pitched.

"Nineteenth verse," bawled Red Adams, Assistant Patrol Leader. "Hike along—"

"Say, Red Head," interrupted Pudge Baker, "what Merit Badges are you working for at camp?"

"Swimming, First Aid, Pioneering, Photography, Ath—"

"Photography—got a camera?"

"Sure, a Brownie, and say, Pudge, I'm out for the Eastman picture contest. Those Kodaks they're going to give as prizes are knockouts."

"Awful hard to get, isn't it, Red?" Pudge, evidently referring to the Merit Badge, was interested, but only mildly. He had no camera—the list of "optional equipment" in the camp prospectus, beginning with "tennis racket, camera, fishing tackle"—had meant nothing in his young life.

"Hard? Shucks, no—not with my Brownie, and think of the fun the pictures will be next winter when the snow's a mile deep out here at camp."

Red's argument sounded inveigling but Pudge quickly countered with:

"How're you going to kill two birds with one stone—I mean what are you going to do, enter the same pictures in the contest that you try to win the Merit Badge with?"

"Sure," replied Red, "why not? The pictures required for the Merit Badge—I've got it down cold—are 'Landscapes; Persons or Animals; Interiors; Buildings.' And pictures like that are good in the contest—the pamphlet says so."

That convinced Pudge. A chance to win a Merit Badge and a Kodak

with the same set of pictures—a single effort with the possibility of a double reward—there was a powerful appeal in the idea to fat, easy going, Pudge.

Red's cooperation was easily—oh, very easily—secured. Pudge agreed to stand Red's turn at the camp dish pan in exchange for unlimited use of the treasured Brownie!

Did Red and Pudge win the Merit Badge? Easily—both of them. The Brownie produced the pictures they wanted, and Mr. Thompson, their scoutmaster, helped them study up on the other requirements in a book on photography he had.

Did they win a Kodak? We don't know yet—the contest will not be over until October 1st. But



ENTRANCE TO THE CAMP



RED'S CUP DEFENDER

with Mr. Thompson's tip about making story-telling pictures instead of pictures that are just poses, and with one hundred

Kodaks offered as prizes, we expect that each of them will.

And even then there are ninety-eight Kodaks still to be won.



REVEILLE



FIGURE ONE

## PICTURING THE CHILDREN AND THEIR PETS

BY WILLIAM J. BUTLER

*With Illustrations by William Keunzel*

IN the popular photographic sport of "snapping" children and their pets, such as dogs, cats, etc., the aim should be not

only to make pictures that contain good likenesses but also to make the pictures pictorially interesting.

We should remember that such



FIGURE TWO

pictures consist of two different yet closely related parts—subject and background—and that the subject furnishes the motive while the background only furnishes what may be called the setting for

the scene. The subject should, therefore, be the most prominent thing in the picture.

Unless the photographer sees all that the lens sees at the time the exposure is made (and he can only

do this by observing the background as well as the subject) he may sometimes obtain pictures that have hodgepodge backgrounds filled with nearby fences, "misplaced" trees, telephone poles or other objects that are more conspicuous in the picture than the subject itself.

Finding a suitable outdoor background is usually an easy matter where lawns, gardens or open fields are available. Backgrounds of the type shown in Fig. 1 exist almost everywhere, but when a background that contains no objectionable objects is not available it is wise to place the subject in front of a tall hedge or anything else that shows no conspicuous design. The subject should not be placed close to the side of a clapboarded house, however, as this makes a background that contains too many equally spaced parallel lines, all of which extend in the same direction; but the side of a barn that is not clapboarded can be used in an emergency, as is shown in Fig. 2. In this picture the interest centers so strongly on the boy and the dog that the few lines that are prominent in the background do not seem to be obtrusive.

Children and animal pets are naturally so graceful that it is best to let them pose themselves. Children should not be made self-conscious by such phrases as "now look pleasant" or "stand right there, darling, and look at the birdie."

When children are playing with their pets it is best to watch the play and make the exposures without notifying them of the fact, at

moments when interesting poses, expressions or incidents can be seen. This is one of the best ways of securing a collection of pictures in which the children show no self-consciousness.

As these kinds of pictures must be made with snapshot exposures it is necessary to have the subjects in a good light. If they are in brilliant sunshine the children should not face the sun because, if they wear hats their eyes will be shaded, and, if they do not wear hats the intense light will make them squint. These difficulties can easily be avoided on days when the sun casts a faint shadow, that is, when the sunlight is filtered through white clouds, and they can also be avoided, on even the brightest of sunny days, by picturing the subjects in open shade. By open shade is meant shaded places above which nothing but the sky can be seen. Such shade can be found wherever tall buildings or tall trees stand.

EDITOR'S NOTE—The kind of pictures that Mr. Butler has discussed must be made at comparatively short range and must receive ample exposure.

Under the lighting conditions mentioned the following exposures are recommended:

With cameras that have anastigmat lenses,  $\frac{1}{25}$  second with stop *f*.7.7 or *f*.8.

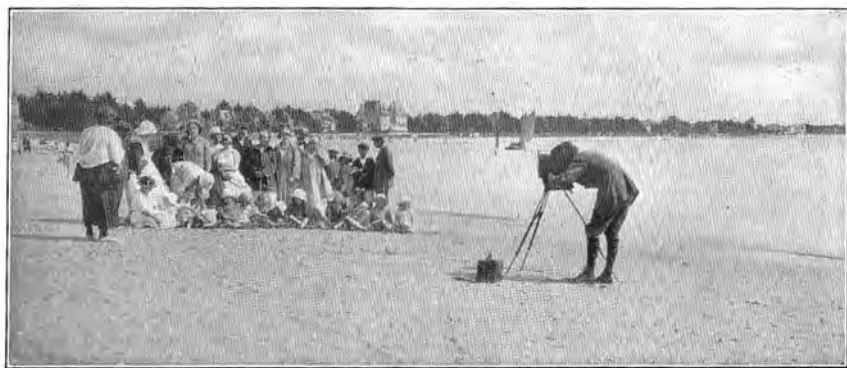
With cameras that have rectilinear lenses,  $\frac{1}{25}$  second with stop No. 4.

With single lens folding cameras,  $\frac{1}{25}$  second with stop No. 1.

With single lens box cameras, a snapshot with the largest stop.



# BEACH TIME







GROUP ONE

*Snow Scenes that contain no dark toned objects in which detail is wanted should be classed in Group One.*

## EXPOSURE GUIDE FOR OUTDOOR SUBJECTS

**D**ETERMINING what exposure to give for the various types of outdoor subjects that are ordinarily photographed is, apparently, a difficult problem for some amateurs, while for others it is no problem at all.

The reason for this is that those who always know what exposure should be given, either consciously or unconsciously classify their subjects into groups and then remember the exposures that prove correct for the various groups.

Snow scenes, extremely distant landscapes and marine views, for example, are very different kinds of subjects, but they all require the same exposure and should, therefore, be classed in the same group.

In the following tables, which were designed to make the exposure problem as simple as possible, we have listed outdoor subjects in four groups, so that it will be easy for anyone to commit the table to memory. To further simplify the matter we have recommended that the same shutter speed be used, with a different lens stop, for each of the groups, when the camera has a rectilinear or an anastigmat lens. By this method the exposure (the action of light on the film) can be increased or decreased by merely changing the size of the lens stop, as the value of any exposure depends, not solely on the shutter speed, but on the relation between shutter speed and size of lens stop.



GROUP ONE

*When the greater part of the subject consists of sky and water it should be classed in Group One.*

By examining our illustrations, each of which bears the number of the group in which it is classed in the accompanying exposure tables, you can readily decide in which group the outdoor subject you wish to

photograph should be classed and then, by giving the exposure that is recommended in the table that applies to the type of camera you are using, you should have no difficulty in obtaining a negative from



GROUP TWO

*A typical ordinary landscape subject showing sky with prominent foreground objects.*



## GROUP TWO

*Subjects similar to the above should be classed in Group Two.*

which good prints can be made.

If your camera has a double lens (which will be either an anastigmat or a rectilinear) use the table on page 21.

If your camera has a bellows

which folds up, and a single lens, with stops marked 1, 2, 3 and 4, use the table on page 22.

If it is a box camera, which has only one shutter speed and has no bellows, use the table on page 24.



## GROUP THREE

*A nearby landscape subject showing very little sky.*



GROUP THREE

*In street scenes there are usually more dark than light tones.*

The exposures that are recommended are neither the shortest nor the longest that will give good results with Kodak film, the latitude of which is so great that it will take care of any reasonable error in exposure. They are averages that have been obtained from a comparison of thousands of ex-

posures, and they are as good for use on sunny days in winter as on days of summer sunshine.

When the day is cloudy-bright the exposures should be from two to three times as long, and when the day is dull the exposures should be from four to eight times as long as those mentioned in the tables.

#### OUTDOOR EXPOSURE TABLE FOR CAMERAS THAT HAVE RECTILINEAR OR ANASTIGMAT LENSES

*For 2½ hours after sunrise until 2½ hours before sunset on days when the sun is shining*

	Shutter Speed	Rectilinear Lenses Stop	Anastigmat Lenses Stop
GROUP 1—Snow, Marine and Beach Scenes— Extremely Distant Landscapes . . . . .	1/25	32	f.22
GROUP 2—Ordinary Landscapes Showing Sky, with a Principal Object in the Fore- ground . . . . .	1/25	16	16
GROUP 3—Nearby Landscapes Showing Little or no Sky—Groups, Street Scenes . . .	1/25	8	11
GROUP 4—Portraits in the Open Shade, not under Trees or the Roof of a Porch— Shaded Nearby Scenes. . . . .	1/25	4	7.7 or 8



GROUP FOUR

*Any landscape subject that contains many dark tones should, if pictured at short range, be classed in Group Four.*

#### OUTDOOR EXPOSURE TABLE FOR FOLDING CAMERAS THAT HAVE SINGLE LENSES

*For  $2\frac{1}{2}$  hours after sunrise until  $2\frac{1}{2}$  hours before sunset on days when the sun is shining*

	Shutter Speed	Stop
GROUP 1—Snow, Marine and Beach Scenes—Extremely Distant Landscapes . . . . .	$\frac{1}{25}$	3
GROUP 2—Ordinary Landscapes Showing Sky, with a Principal Object in the Foreground . . . . .	$\frac{1}{25}$	2
GROUP 3—Nearby Landscapes Showing Little or no Sky —Groups, Street Scenes . . . . .	$\frac{1}{25}$	1
GROUP 4—Portraits in the Open Shade, not under Trees or the Roof of a Porch—Shaded Nearby Scenes . . . . .	1 second	4



## GROUP FOUR

*Portraits should not be given shorter exposures than are recommended for Group Four*



# OUTDOOR EXPOSURE TABLE FOR FIXED FOCUS BOX CAMERAS THAT HAVE SINGLE LENSES

*For 2½ hours after sunrise until 2½ hours before sunset on days when the sun is shining*

- GROUP 1—Snow, Marine and Beach Scenes—  
Extremely Distant Landscapes . . . . . Snapshot with Second Stop
- GROUP 2—Ordinary Landscapes Showing  
Sky, with a Principal Object in  
the Foreground . . . . . Snapshot with Largest Stop
- GROUP 3—Nearby Landscapes Showing  
Little or no Sky—Groups, Street  
Scenes . . . . . Snapshot with Largest Stop
- GROUP 4—Portraits in the Open Shade, not  
under Trees or the Roof of a  
Porch—Shaded Nearby Scenes . . . . . 1 second with Third Stop

## TIME EXPOSURES WITH BOX CAMERAS

To make a time exposure with a fixed focus Brownie camera, draw out the timeslide and, with cameras that have a time lever, move the lever over to "T". It takes two movements of the shutter lever for making a time exposure—one pressure for opening the shutter and another for closing it. It takes about one second to mentally pronounce "one hundred and one".

## MOVING OBJECTS

Though all of the combinations of stops and shutter speeds that are recommended in the preceding tables are eminently satisfactory for photographing stationary objects, all of them are not adapted for photographing moving objects.

It is obvious that sharp pictures of rapidly moving nearby objects can only be secured with very short exposures. A rule, that many adopt when using a compact hand camera for picturing anything that is moving, is to use the largest stop

and give the shortest exposure that the camera can make. The subject must, of course, be in bright sunshine.

The risk of movement showing in a negative is lessened as the distance between the camera and the moving object is increased, and it is also lessened as the angle at which the object moves across the field of view is reduced. To illustrate: If the object is moving at right angles to the camera at a speed of ten miles an hour, it should be photographed at a distance of seventy-five feet or more. If it is moving diagonally across the field of view it may be photographed at a distance of fifty feet, while if it is moving directly toward or away from the camera it can be photographed at a distance of about forty feet, with the assurance of equally sharp images of the object being obtained in each case.

The most pleasing pictures of moving objects are usually obtained when the subject is moving toward the camera, but diagonally across the field of view.



BOULOGNE HARBOR  
*Made with a 1A Kodak Jr.*

## THE RELATION BETWEEN SHUTTER SPEED AND LENS STOP

**I**N the exposure table for cameras that have rectilinear or anastigmat lenses, which appears on page 21 we have, for the convenience of the beginner in photography, recommended that the exposures for the four groups of subjects that are listed should be made with the same shutter speed, but with different lens stops.

In the article that directs attention to the exposure table we explained that exposure values can be increased or decreased by changing the size of the stop opening, as the value of any exposure depends on the relation between shutter speed and lens stop.

The stop performs two functions: It determines how much of the available light shall pass through

the lens in a given time, and it also affects the depth of focus of the lens—depth of focus being the distance between the nearest and the farthest objects of which the lens can make sharp images. The smaller the opening in the lens stop the greater the depth of focus, and vice versa.

Because the stop affects the depth of focus photographers may sometimes wish to use larger or smaller stops than those we have specified, for such subjects as are listed in the exposure table, and still secure the same relative exposures that the table recommends. The way to do this is shown in the table of comparative stop values on page 26.

There are two widely used sys-

tems of marking lens stops: The U. S. (Uniform System) is ordinarily used on rectilinear lenses, and its markings are based on the relation between the *area* of the stop opening and the focal length of the lens, while the *f.* system is in practically universal use on anastigmat lenses, and its markings are based on the relation between the *diameter* of the stop opening and the focal length of the lens.

Different numerals are used for expressing the relative values of the stops in these two systems, but in both systems all stops that bear a *higher* number than U. S. 4 or *f.* 8 admit just half as much light as the next lower numbered stop. This means that for all higher numbered stops the exposure must be doubled when the stop indicator is moved from any one stop number to the next higher number, and must be halved when the indicator is moved from any stop number to the next lower number. To illustrate: Should the correct exposure be  $\frac{1}{25}$  of a second with stop 16 it would be  $\frac{1}{50}$  of a second with stop U. S. 8 or *f.* 11, and  $\frac{1}{12}$  of a second with stop U. S. 32 or *f.* 22.

The numerals used for marking the stops in the U. S. and *f.* systems are listed in the first two columns of the accompanying table.

In the third column the values of these stops are compared with the exposure value of *f.* 8 (U. S. 4), which is the largest stop on rectilinear lenses.

The last column translates these values into actual exposure fractions, taking  $\frac{1}{25}$  of a second with stop 16 (the usual exposure for ordinary landscape subjects in sun-

light) as a convenient standard.

Lens stops that are marked 4.5, 5.6, 6.3 and 7.7 are only used on anastigmats.

No photographic shutter has all the speed markings listed in the last column; but the desired exposure value can always be obtained by using the stop that the available shutter speed calls for.

#### COMPARATIVE STOP VALUES

<i>f.</i>	U. S.	Exposure Value	Comparative Exposures
4.5	1.25	3	1/330
5.6	2	.5	1/200
6.3	2.5	.6	1/160
7.7	3.7	.9	1/110
8	4	1	1/100
11	8	2	1/50
16	16	4	1/25
22	32	8	1/12
32	64	16	1/6
45	128	32	1/3



IN THE GARDEN

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## SERVICE DEPARTMENT TALKS

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The shutter release, with which the exposures are made, may be actuated by a push pin attached to a cable, by a bulb attached to a rubber tube, or by a lever that is pressed with a finger.

When an automatic exposure is made the shutter is opened and closed by a single pressure of the shutter release.

In making a bulb exposure the shutter opens when the shutter release is pressed and then closes as soon as the pressure is removed.

For making a time exposure two pressures are necessary—one for opening and another for closing the shutter.

"B" (bulb) should be used for time exposures that are not longer than, say, 3 seconds.

"T" (time) is recommended for all exposures that are longer than 3 seconds.

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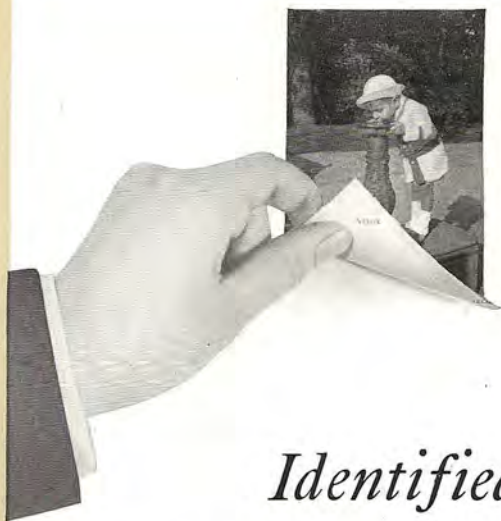
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