KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS

FEBRUARY 1920

EASTMAN KODAK COMPANY
ROCHESTER, NEW YORK
The Kodak City

The History of a Word

THE trade-mark "Kodak" was first applied, in 1888, to a camera manufactured by us and intended for amateur use. It had no "derivation." It was simply invented—made up from letters of the alphabet to meet our trade-mark requirements.

It was short and euphonious and likely to stick in the public mind, and therefore seemed to us to be admirably adapted to use in exploiting our new product.

It was, of course, immediately registered, and so is ours, both by such registration and by common law. Its first application was to the Kodak Camera. Since then we have applied it to other goods of our manufacture, as, for instance, Kodak Tripods, Kodak Portrait Attachments, Kodak Film, Kodak Film Tanks and Kodak Amateur Printers.

The name "Kodak" does not mean that these goods must be used in connection with a Kodak Camera, for as a matter of fact any of them may be used with other apparatus or goods. It simply means that they originated with, and are manufactured by, the Eastman Kodak Company.

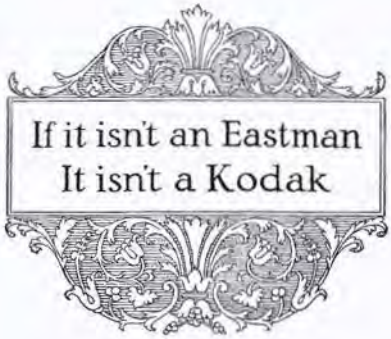
"Kodak" being our registered and common law trade-mark can not be rightly applied except to goods of our manufacture.

If you ask at the store for a Kodak Camera or Kodak Film, or other Kodak goods and are handed something not of our manufacture, you are not getting what you specified, which is obviously unfair both to you and to us.

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

EASTMAN KODAK COMPANY

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


If it isn't an Eastman
It isn't a Kodak

A VERY EXCLUSIVE TEA PARTY

(*See "Making a Kodak Biography" on page 15*)

KODAKERY
A Journal for Amateur Photographers

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FIG. 1

THE CLOUDS THAT ARE IN THE NEGATIVE

THE majority of outdoor pictures are made with snapshot exposures, and many of these pictures are printed from negatives which record clouds that do not show at all, or show but faintly, in the prints that are ordinarily made from them.

Clouds always add to the beauty of a landscape picture, and if they can be plainly seen in the negative they can always be recorded in the print. The easiest way to do this is by printing through the sky part of the negative longer than through the landscape part.

The negative is placed in an ordinary printing frame and exposed

FIG. 2

to the light for the length of time needed for correctly recording the landscape on the printing paper, then the landscape part is shaded, by holding a piece of cardboard two or three inches in front of the negative, and the sky part of the negative printed as much longer as is necessary for recording the clouds.

The shadow that the card casts on the negative must be watched during the printing, and this shadow must not be allowed to remain stationary, or its edge will show in the print. The edge of the shadow must be kept moving up and down, across that part of the sky which is just above the landscape. If it moves across the skyline the most distant part of the landscape will be rendered darker than it should be.

Our illustrations show the results that this method produces. The subject was photographed with a Graflex, at 3 P. M., in November. A Wratten K2 Filter was used and an exposure of 1/10 second, with stop *f*.4.5 was given. All the prints were made on the same grade of paper.

Fig. 1 shows the result of printing the entire negative for the same length of time. Figs. 2 and 3 show what was obtained by printing the sky longer than the foreground.

As a picture Fig. 1 is disappointing. It does not show all that the negative contains, and the foreground looks too dark for the sky. This is due to the fact that the landscape part of the picture was over-printed, a thing that is often done with negatives of this kind, in hopes of making the sky show to better advantage. This is a practice which should always be avoided.

FIG. 3

In Fig. 2 the landscape is lighter and the sky darker than in Fig. 1 and the tones of the entire subject are in balance.

In Fig. 3 the tones of the sky likewise harmonize with the tones of the landscape, though both are printed darker than in Fig. 2.

Keeping the tones of the sky in harmony with the tones of the landscape is very important. When this is not done the pictorial quality of the picture is impaired. Imagine the effect of placing the sky of Fig. 3 above the landscape of Fig. 2.

When the line where the sky and landscape meet is nearly straight (as in our illustrations) the shading can be done with any straight-edged card, but if the skyline is quite irregular the edge of the card that is used for shading should be cut to approximate the shape of the skyline. A good way to cut a card for an irregular sky line is to place the negative on a sheet of glass, with a piece of translucent paper over it, then hold it up to the light and trace the skyline on the paper. When the paper is cut along the traced line it will furnish the pattern for the card.

This method of printing is a simple "stunt" that anyone can make use of, and it is especially recommended when the best obtainable prints are wanted from negatives in which the density of the sky is relatively too great for the density of the landscape.

Autograph the date on the film —at the time.

Made with a 3A Kodak and Kodak Portrait Attachment
Stop, 4; exposure, 8 seconds; 2 P. M.,
March; cloudy-bright

BAY-WINDOW PORTRAITS

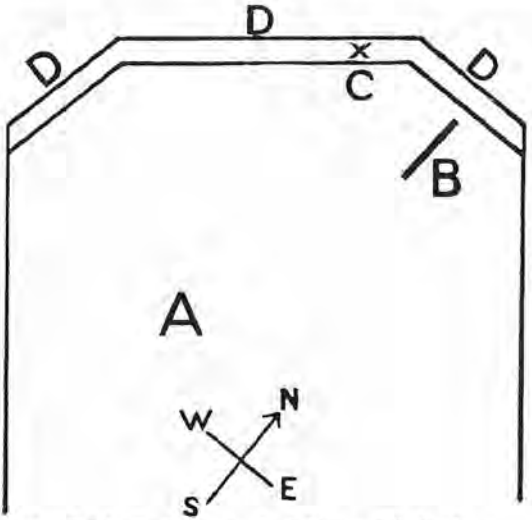
IN the December, 1919, KODAKERY we explained how portraits can be made with hand cameras in ordinary living rooms, by placing the subject in such a position near a window that the light from the window will illuminate the face, without having the window show in the picture.

One of our readers has sent us some portraits which were made in a bay-window, directly in front of

Made with a 3A Kodak. Stop, 4; exposure, 10 seconds; 2 P. M., March; cloudy-bright

one of the windows, which served as the background for the subject. The method by which these pictures were made is one that can be employed in many homes.

While well-lighted portraits that have window backgrounds cannot be made in a room that has one window only, they can easily be made in a room that has windows



A—Kodak; B—Reflector; C—Subject on Window Seat; D—Windows

Diagram showing arrangement of room in which pictures on pages 6 and 7 were made

on only one of its sides, if these happen to be bay windows.

If the bay, or recess, that projects outward from the room, has three windows it will receive light from three directions, and it will be suitable for portrait work at any hour when the sunlight is not shining through the window that is to be used as the background.

Even should the bay be so situated that the sun will shine on some side of it at all hours of the day, there will always be an hour when it does not shine on some one of the windows, and this one can then be used as the background for the picture. If sunshine comes through the other two windows these can be covered with cheesecloth or muslin—and splendid lighting effects will often be obtained.

The light that comes through the window which serves as the background will not satisfactorily illuminate the side of the subject that the lens sees, and in order to get enough light on this side of the face it will be necessary to place the subject quite close to the window, so that the light from one of the other windows will increase the illumination. A reflector must also be used for reflecting light to the face. A bed sheet is splendidly adapted for this purpose.

The reflector should be placed, as shown in the diagram, just as close to the subject as it can be without being visible in the finder.

If it can be seen in the finder it will show in the picture.

In making portraits with window backgrounds the lens must be pointed directly against the light, and as much as possible of the light that is not used for making the picture should be prevented from reaching the lens. If it passes through the lens it will reach the film and give the negative a foggy look. While all of the light that is not needed for making the picture cannot be kept out of the lens, yet much of it can be, and the way to keep it out is to stand beside the camera, a foot or two from it, in such a position that the body will shut off the strong side light, and then hold a piece of cardboard a few inches in front of and about a foot above the lens for shutting out the excess of top light.

The surest way of determining just where to hold the card, so it will shut off the excess of top light without showing in the picture, is to hold it so it can be seen in the finder, and then raise it and make the exposure as soon as the card has passed out of the field of view of the finder.

The exposure to give for window portraits can not be definitely stated, as this depends on the light conditions, but when the sun is shining, between the hours of 9 and 3, an exposure of from 1 to 3 seconds with stop 4 on rectilinear, or stop *f*.8 on anastigmat lenses will usually be long enough, and, if it is cloudy-bright an exposure of from 2 to 6 seconds should be ample. With single lens cameras these exposures should be twice as long when the largest stop is used.

The data under our illustrations show that longer exposures than those we have recommended were given, but the negatives from which these pictures were made were considerably over-exposed, and it is owing solely to the non-halation quality and great latitude of Eastman film that they made good prints.

A PORT IN THE FRENCH RIVIERA

Made with a 3A Kodak. Stop, 22; 1/25 sec. exposure

Focus, 6 ft.; subject 2 ft. 9 in. Focus, 10 ft.; subject, 3 ft. Focus, 15 ft.; subject, 3½ ft.

On this and opposite page, relative (not actual) sizes of images the Kodak Portrait Attachment makes when used on a 3A Premo at the distances and at the focused points named

WHEN USING A KODAK PORTRAIT ATTACHMENT

FLOWERS, birds and all other small objects must be photographed at comparatively short range if large images are to be made of them.

With focusing hand cameras we can work closer to our subject than with fixed focus cameras, but even with focusing hand cameras we can not work closer than 6, or in some cases, 8 feet, unless a Kodak Portrait Attachment is used.

The portrait attachment does not increase the size of the picture that a camera makes, but it does increase the size of every image that appears in the picture.

The increase in the size of the images depends on the distance the camera is placed from the subject. With a portrait attachment in front of the lens many models of focusing cameras can be used as close as 2 feet, 8 inches from the subject.

The sharpness of a picture always depends on the accuracy of the focusing, and the closer the camera is to the subject the more accurate the focusing must be. Since the portrait attachment can only be used for subjects that are less than 6 feet from the lens the camera must be placed at just the right distance from the subject when the focusing indicator is set on any particular mark on the focusing scale. This distance must be measured and not guessed at, and the measurement made from the subject to the front of the portrait attachment and not

Focus, 25 ft.; subject, 3 ft. 9 in. Focus, 50 ft.; subject, 4 ft. Focus, 100 ft.; subject, 4 ft. 3 in.

from the subject to the back of the camera.

When the portrait attachment is used on fixed focus cameras the camera must always be placed at exactly 3½ feet from the subject, but when it is used on cameras that are fitted with focusing scales the camera can be placed both nearer and farther away.

The fact that the majority of the portrait attachment pictures, made with focusing cameras, that our readers have sent us, were made at the shortest possible range suggests that many never use it for any of the other distances for which it is equally well adapted.

The distance at which an object should be photographed in order to secure an image that will be in pleasing proportion to the size of the picture depends on the subject. For such small objects as flowers and birds, for instance, it may often be placed as close as possible, but for head and shoulder portraits of broad-shouldered people, and for full length portraits of tall children, it should never be placed as close as 2 feet, 8 inches, because at such short range the image will be too large for the size of the picture.

Too large an image crowds the picture area—a very unpleasing thing in portraiture, since it suggests that the person portrayed is abnormally large.

The illustrations on this and the preceding page show the relative sizes of the images obtained with the Kodak Portrait Attachment, when it is used at the various distances for which it is recommended, with a 3A camera. While these reproductions show all that the negatives contain they do not show the actual size of the photographs from which they were reproduced, being not quite ⅐ the size of the photographs. The actual size of the photographs is shown by the pictures on pages 12 and 13.

Actual size of portrait made at 6 feet WITHOUT *Portrait Attachment*

Actual size of same subject made WITH *Portrait Attachment.*
Focus set at 10 feet; subject 3 feet from lens

FILTERS FOR SNOW SCENES

Is a filter needed for making the best obtainable photographs of snow scenes?

A filter does not improve the rendering of the snow unless the sun is shining and there is both sunlight and shadow on the snow.

Snow is white and it always photographs white whether a filter is used or not, but shadows on the snow appear gray, and the trees and shrubs and other landscape fixtures are very dark in winter, usually appearing gray or almost black, in contrast with snow.

An orthochromatic filter, such as the Kodak or one of the Wratten K filters, will only slightly increase the contrast between white and gray, but a Wratten G Filter, which is a contrast and not an orthochromatic filter, will considerably increase the contrast and thus improve the rendering of sunlight and shadow on snow.

HAPPY DAYS
Made with a Vest Pocket Kodak

Both orthochromatic and contrast filters make blue photograph darker than white, and when we have blue sky and white clouds above the landscape a filter will give us a better picture than we could otherwise obtain.

The writer never uses a filter for snow scenes when the sky is gray, but always prefers to use one when the sky is blue, whether clouds are present or not, because from filter negatives of snow scenes, made when the sky is blue and the sun is shining, pictures can usually be printed that will suggest either day or night, the effect obtained depending chiefly on the length of time the print is exposed to the printing light.

When we desire to record the shadows on the snow we must expose, not for the shadows, but for the strongest lighted parts of the snow, giving about ¼ the exposure that would be needed for a summer landscape.

The exposures suggested are:

1/100 of a second with stop 16 without a filter.

1/25 of a second with stop 8 (*f*.11) through a Kodak Color Filter.

1/10 of a second with stop 8 (*f*.11) through a Wratten K 2 Filter.

½ a second with stop 8 (*f*.11) through a Wratten G Filter.

With single lens cameras and the Kodak Color Filter make a snapshot with the same stop used for summer landscapes.

THIS IS THE BABY AT ONE YEAR

(There are a lot more of her on the next two pages)

MAKING A KODAK BIOGRAPHY

BY ALBERT CRANE WALLACE

DID you ever, at the movies, see a flower suddenly grow up? Or did you ever see a butterfly unfold from its chrysalis and become a full-fledged aviator?

Well, a Kodak biography of a baby sometimes gives an impression something like that. The baby herself isn't quite so sudden. She takes her time getting to be a month old. And a year seems to be a long time. But after it has happened the time seems very short.

In a bit of Kodak biography it all seems to be wonderfully quick, quite as if she were growing up before your eyes. Take a batch of prints in your hand and you can shuffle them to look like a kind of human kaleidoscope, never twice the same way. Which is natural enough, for the child is never twice the same way, especially, perhaps, when she is a baby. When she is a baby you are particularly grateful for your Autographic privilege. Nothing stops arguments as to how old she was *then* like an Autographic memorandum. You never in the world could prove every case so well in any other way.

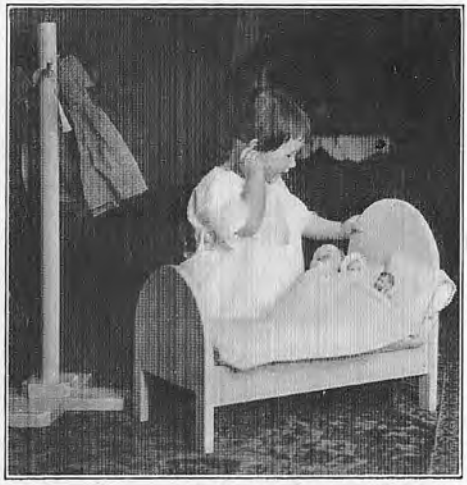
A KODAK BIOGR

BEING A TRUTHFUL RECORD
EXTENDING INTO
THE FOURTH CHAPTER

At 9 months

At 1 year

At 17 months



At 2 years

APHY OF A BABY

At 2 years and 2 months

At 2 years and 4 months

At 2 years and 5 months

At 2 years and 6 months

At 2 years and 8 months

At 3 years

At 3 years and 8 months

SEPIA PICTURES BY RE-DEVELOPMENT

Of all the printing papers that have been invented the quickest to print and the simplest to manipulate are development papers.

Development papers are chiefly used for making pictures in black and white, but the black image that the various grades of Velox paper gives can easily be changed to sepia, a tone which many prefer for such subjects as summer landscapes, interiors and portraits.

In the following article, the method of making sepia prints on Velox is discussed.

Of the various methods that have been employed for making sepia photographs the sulphide process of converting the black silver image of a development paper print into one of a sepia tone is the one that is most extensively used at the present time.

The most satisfactory method of sulphiding a development paper print is to re-develop it, because by this method no reduction of the image occurs and none of the detail of the picture is lost.

Pleasing sepia prints can be made from any negative that has strong highlights and deep shadows, but the richest sepias are obtained from negatives that have a long range of tones. When a sepia print is made from a long scale negative it will usually show more distinct tones than can be seen in a black image print made from the same negative.

The shade of sepia obtained by turning a black image into one of a sepia tone depends on the density of the silver deposit, being dark where the silver is black and light where the silver is gray, and the reason why the sepia image often shows more tones than the black one is that a slight difference between the tones of sepia is more noticeable than a slight difference between the tones of black or gray.

The richness of the sepia tone depends on the quality of the black image that is re-developed. The darkest parts of this image must be either a pure black or a blue-black, not a greenish or brownish black, and in order to obtain the right kind of a black image the print must be exposed to the printing light for the minimum length of time that will record all the detail, and then be fully developed—not less than 20 seconds if it is on Regular Velox, or less than 30 seconds if on Special Velox. It is impossible to get a rich sepia from an under-developed black image.

The ideal developer for Velox prints, that are to be converted into sepia, is Nepera Solution, as this will give the right kind of a black image. The Elon-Hydro developer recommended for Velox will also give good results if it contains the least quantity of bromide that will prevent the print from fogging during development. Too much bromide gives the greenish or brownish black images from which good sepia tones cannot be obtained.

An over-printed and under-developed print may sometimes be pleasing in black but it is never pleasing in sepia, because there is

too little blackened silver in the shadows of such a print to make the shadows dark enough when the image is changed from black to sepia.

The method of re-developing a print with the Velox Re-developer is in every way as simple as developing the black image. The print is immersed in the bleaching bath and left there until all traces of black in the image have disappeared. When this has occurred the picture can be but faintly seen. It is then rinsed in water and placed in the sulphide bath, where the image, with all its original detail, is rapidly changed into a permanent sepia tone. Full directions for working the process are furnished with every package of Velox Re-developer.

All grades of Velox, excepting Glossy, are suitable for making sepia prints. Carbon, Portrait and Velvet Velox will give us sepia pictures on a white ground, while with Royal Velox we can make sepias on a cream-tinted ground, a combination that is especially pleasing.

On page 22 we discuss the advantages of making sepia prints from under-exposed negatives.

THE FORD

Made with a Kodak

NIGHT EFFECTS IN DAYLIGHT PICTURES

MANY interesting photographs of outdoor scenes, in which the lighting effects closely resemble those we see on moonlight nights, have been printed from negatives that were exposed when the sun was shining brightly.

Negatives that will yield such prints can easily be made if the subject is a suitable one and the light conditions are right.

We think of night as a period of darkness, and it is probably because of this fact that a picture will not adequately suggest night to us unless it contains more dark than light tones.

The deep shadows in a night scene are black, the half-tones quite dark and the sky is never as brightly lighted as in the daytime. If a picture is to suggest night it must render these tones as we see them at night, but it should also, for pictorial effect, contain some highlights. These highlights should be on the landscape instead of in the sky, and they can only be furnished by something that reflects light enough to photograph white or very light gray. Sunlight reflected from a sheet of open water, or from snow or ice, will furnish these highlights.

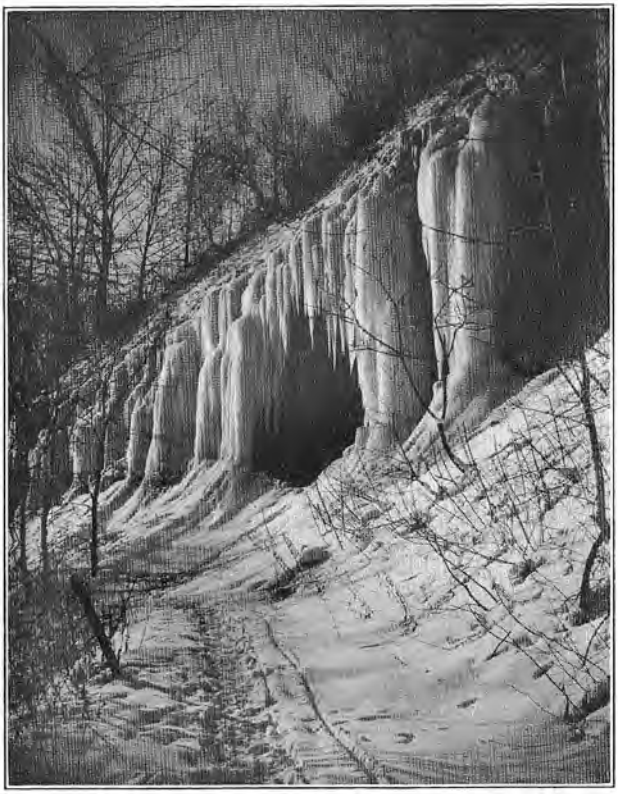
Sunlight is needed for giving the necessary contrast between the lightest and the darkest parts of the picture, and since the strongest lights are not to be in the sky it will be necessary to use a filter for photographing the subject.

The reason why a filter must be used is because all photographic films and plates are more sensitive to blue and violet than to any other colors, and since more of the blue-violet is reflected from the sky than from the landscape it is necessary to use a filter for cutting out the excess of these colors, if we wish to make a strongly-lighted sky photograph dark enough for securing the effect needed for suggesting a night scene.

The point of view from which to make such pictures is one from which more of the dark than of the light side of the subject can be seen, and the best time to make them is at that hour of the day when the greater part of that side of the subject that is to be photographed happens to be in shadow. The noon hour is as suitable as any other, if the light conditions are favorable at that time. The picture on page 21 was made at 11 in the morning when the sunlight was intensely brilliant.

In making such pictures we must expose for the strongest lights only. This will under-expose the shadows, so they will print black. If we expose long enough for recording detail in the shadows the result will be a day and not a night effect. Splendid results have been obtained with the K2 Filter when exposures of $\frac{1}{25}$ of a second, and, with the Kodak Color Filter when exposures of $\frac{1}{50}$ of a second were made, with stop 4 on rectilinear, or stop *f*.8 on anastigmat lenses.

With single lens cameras we would suggest an ordinary snapshot—with a Kodak Color Filter in front of the lens. If the pictures are made early in the morning or late in the afternoon, the exposures



AFTER THE JANUARY THAW
Made with a Kodak

should be from 2 to 4 times as long as those stated.

Distant landscapes and all subjects that lack deep shadows are wholly unsuitable for the kind of work we have described. Typical night effects can only be obtained in daylight pictures of nearby subjects, in which plenty of dark tones can be seen.

Think first and then expose.

PLEASING PRINTS FROM UNDER-EXPOSED NEGATIVES

How to make a satisfactory print from an under-exposed negative is usually a problem for those who are particular about the quality of their work.

It has often been said that the best use to make of an under-exposed negative is to throw it away. It may be all right to do this after a better one has been obtained of the same subject, but it is a very unwise thing to do if a better one is not to be had.

An under-exposed negative always lacks detail in the shadows. The impossibility of making a print show detail which the negative does not contain is obvious, but it is often possible to make a print in sepia, from such a negative, which will be more pleasing than any print that can be made from it in black and white.

If the under-exposed negative has very thin highlights it will be flat, that is, lacking in contrast. If the best print that the negative can make in black and white, on Contrast Velox, is not satisfactory the negative should be intensified with the Eastman Intensifier, so that its contrast will be increased, after which a print should be made from it in sepia.

If the under-exposed negative has dense highlights and clear shadows it will be hard, that is, contrasty. A hard negative should not be intensified because it has all the contrast that is needed for making a rich sepia print.

It must not be supposed that intensification will add detail to a negative, nor that printing in sepia will add detail to the picture. Intensification merely increases the contrast between the tones of a negative, and, by so doing, it often makes it possible to print long enough for getting a deep sepia tone in the shadows and a light sepia tone in the highlights. When this happens the intermediate tones will be rendered in different shades of sepia, and as we can see more distinct tones of sepia than of black, a sepia print will usually show more tones than a black one.

There are two kinds of under-exposed negatives that can not be made suitable for printing in sepia—those that are so hopelessly under-exposed that no images can be seen by looking through them, though ghostly images may be faintly visible by the light that is reflected from them, and those utterly discouraging ones that are fogged. It does no good to intensify a photographic ghost, for it always remains a ghost, and by intensifying a fogged negative we increase the density of the fog as well as the density of the image and, consequently, gain nothing.

The method we have recommended will not produce the kind of pictures that can be made from correctly exposed negatives, but it will produce pictures from negatives that have masses of dark tones in contrast with light ones, that are often very pleasing.

While sepia prints can be made on all the various Velox papers, excepting glossy, yet for under-exposed negatives we especially recommend Royal Velox, which

makes sepia pictures on a cream-tinted ground.

The details of the sepia process are discussed on page 18.

A STREET OF OLD HOLLAND
Made with a 3A Folding Kodak by Mrs. W. C. Stuckslager

A SCENE IN NIPPON
Made with a 3A Kodak, by T. Toyoshi, Japan

PRINTS THAT ARE EXACT DUPLICATES

It is a simple matter to make a lot of Velox prints from the same negative, in such a way that all of them will show the same amount of detail and the same range of contrast, and when the prints are so made they will be uniform, that is, they will be exact duplicates of each other.

No special skill is needed for doing this. It can be done by anyone who will repeatedly do the same thing in the same way.

All that is necessary for making uniform prints from the same negative, on the same grade of paper, is to expose every print to the same light, at the same distance from the light, for the same length of time, and to develop every print in the same developer (kept at the same temperature) for the same length of time.

In order to do these things accurately the exposure must be timed with a watch or a clock that records seconds, or with the Eastman Timer, which is about the size of an ordinary alarm clock and has a hand that records seconds on a large dial. This is made especially for the convenience of the photographer.

The prints must all be printed by artificial light, because the brilliancy of daylight is apt to

change rapidly, and the printing must be done at the same distance from the light, since the strength of the light that reaches the negative is affected by the distance the negative is placed from it.

If a printing frame is used it should be set flush against a stop, such as a thin strip of wood, which is fastened at the desired distance from the light.

If a Kodak Amateur Printer is used in place of a printing frame the negative and the paper will always be at the same distance from the light, as the printer is so constructed that this distance cannot be changed.

The temperature of the developer must be tested with a thermometer and kept constant, and the length of time the prints are developed must be accurately timed and not guessed at.

Every one of these things is a purely mechanical act, which can be performed by anyone, and when these things are done accurately, uniformly printed prints will be obtained, each of which will be an exact duplicate of every one of the others.

AMALFI, ON GULF OF SALERNO, ITALY

Made with a Kodak, by A. J. Birdseye

A GLIMPSE OF AN ENGLISH VILLAGE
Made with a 3A Folding Kodak

SERVICE

WHEN 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 and we will gladly assist you.

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

Address all Communications,

SERVICE DEPARTMENT, EASTMAN KODAK COMPANY

ROCHESTER, N. Y.

The KODAK ANASTIGMATS

f.7.7 *f*.6.3 and *f*.4.5

THE watch maker who makes the delicate adjustments on a full-jeweled watch, the artificer who cuts and sets precious stones, the lens expert who comes as near perfect workmanship as scientific accuracy will allow, constitute in themselves an aristocracy of skilled labor.

It is in such an atmosphere, developed to the *nth* degree at the Kodak Lens factory, that the Kodak Anastigmat is fashioned.

EASTMAN KODAK COMPANY

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