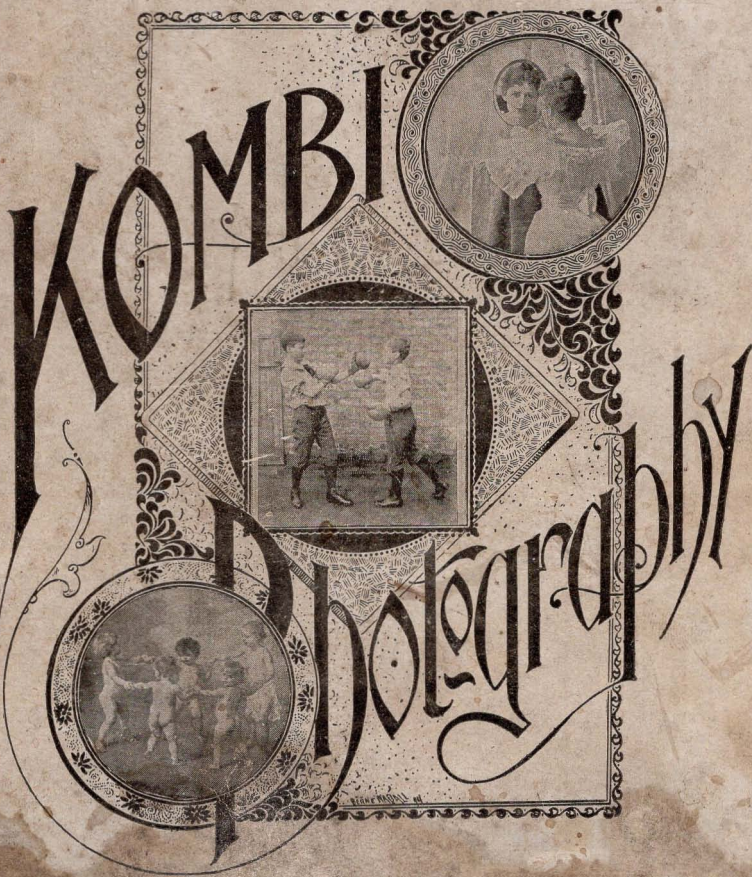


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# KOMBI PHOTOGRAPHY



COMPLETE INSTRUCTIONS  
FOR MAKING PHOTOGRAPHS

WITH THE

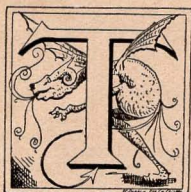
**KOMBI.**

PATENTED IN THE ENTIRE WORLD

CHICAGO:  
ALFRED C. KEMPER,  
1895.



## How to use the Book.



HIS book is to teach you to make perfect photographs with the Kombi.

It can be easily done.

Other people have done it.

So can you, if you will follow the instructions.

Everything has to be learnt, even making pictures with the Kombi.

It is as simple as A. B. C., but everybody had to learn the A. B. C.

The only way to learn Kombi Photography, is to read the book. To read it several times. To refer to it, at first, every time you are going to do anything. To look up anything you are in doubt about.

The book is complete. It contains *everything* you want to know. You want to know *everything* in it.

Nothing is easy until you know it. Nothing is so easy to learn "to know", as "Kombi Photography."

You will never know it until you have mastered the book. But the book is simple enough.

If, in spite of all, there is something you can't get right, write to the manufacturer, and he will tell you where you are wrong.

In looking anything up, refer to the Index at the end of the book.



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## The Kombi.

### Preliminary Explanations.

THE KOMBI is made of two portions, one fitting into the other.

The front part contains the *Lens*, and the *Shutter*.

The rear portion, or *Roll Holder*, contains the rolls **How Made.** which hold the sensitive film.

The *Lens* is a piece of glass, ground double convex so that it collects the rays of light and "projects", or throws them upon the sensitive film.

**The Lens.**

Behind the lens, inside the front portion of the Kombi, is the Shutter. The Shutter keeps the light out, when the picture is not being taken. It is guided by the Spring Latch on the top of front portion of Kombi. The Spring Latch holds the Shutter either open or shut. Open, when picture is being taken. Shut, either before or after picture is taken. (See illustrations, Figs. 1, 2 and 3.)

**The Shutter.**

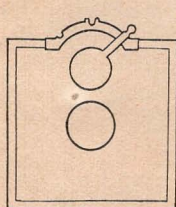


Fig. 1.  
LENS CLOSED, BEFORE  
TAKING EXPOSURE.

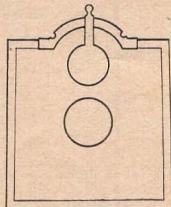


Fig. 2.  
LENS OPEN, WHILE  
TAKING EXPOSURE.

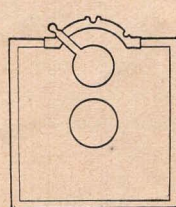


Fig. 3.  
LENS CLOSED, AFTER  
TAKING EXPOSURE.

When the Kombi is held as shown in Fig. 1, [with the lens towards you] and the spring is pressed, the latch flies from right to left, opening the shutter on the way, (as it takes, for an *instant*, the position shown in Fig. 2), and

**Making an  
Exposure.**



stopping when it reaches position shown in Fig. 3.

Pointing the Kombi at an object and snapping the latch, is called "making an exposure." You expose the film to the light which passes through the lens.

**Action of  
Light on  
Film.**

The action of white light upon the sensitive film impresses upon it those objects directly in front of the lens, or in other words, takes a picture, but this picture remains invisible until the film has been "developed."

**Developing.**

"Developing," is bringing out the invisible picture on the film by means of chemicals.

**Fixing.**

When the picture is developed, it must be "*fixed*", so that it stays visible, and so that light will not injure it.

**A Negative.**

The picture which is thus developed and fixed, is called a "*negative*", because, in this form, the shadows are all light, and the lights, dark.

**Printing, &c.**

"*Printing*", is done by placing the transparent negative upon a piece of sensitized paper, and letting the sunlight pass through the negative on to the sensitized paper, thus bringing out the lights and shadows as they should be.

The printed picture is then "*Toned*," "*Burnished*," and "*Mounted*", (and sometimes, after that, "*Burnished*" in a machine), all of which processes will be described later on.

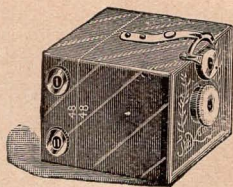


Fig. 4.— THE KOMBI.

### ***Making Exposures.***

To make an exposure with the Kombi is the simplest thing in the world, because the Kombi is the simplest camera in the world.

**Snap-Shot  
or Time  
Exposure,  
Which ?**

You must first decide, whether you are going to make Snap-Shot (i. e. instantaneous) Exposures, or "Time Exposures." It is best to make all exposures the same on the same film, because easier to develop.

Snap-shot or instantaneous exposures, must be made in the open air, in a bright light and clear atmosphere.

Time exposures are to be made indoors, and when the light is not bright enough for snap-shot exposures.

It is best for beginners to make time exposures only.

Time-exposures are easier to make and results are more satisfactory, because any condition of light will do.

**Time-exposures best for beginners.**

Snap-shot exposures are uncertain, because so much depends on the light, and the atmosphere.

### ***To make a Snap-Shot Exposure.***

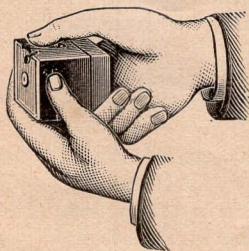
Set Latch to position No. 1, *holding finger over lens until set.*

Take off cap.

Point Kombi directly at object to be photographed.

Snap the Latch, by pressing down spring, so Latch can pass without stopping to position No. 3. (page 3).

**To make a Snap-Shot Exposure.**



When you have made one exposure, before making the next, always turn roller No. II in direction of arrow until you have counted *three clicks*. A fresh surface of film will then be ready for another exposure.

In doing this, if rollers are not very tight, it is a good plan to press the left thumb against roller No. I, so as to cause more tension and force click

Fig.5. SNAPPING THE LATCH. to operate.

### ***To Make a Time Exposure.***

Cover Lens with Time Exposure Cap.

Set Kombi on some steady stand, such as a table or tripod, pointing directly at subject.

Set Latch to position No. 2, (page 3), *holding finger over Lens until quite ready.*

Remove finger from Lens, and leave open for a

**To make a Time Exposure.**



time varying from 6 to 50 seconds, or more, according to conditions explained in "Time-Table."

Snap the latch, by pressing down on spring.

Change surface of film, ready for next exposure, as explained above.

### ***Rules for Taking Pictures.***

- Don't touch glass.** In holding finger over lens, while setting latch, do not let your finger come into direct contact with the glass.
- Landscapes.** For a *Landscape*, point Kombi at center of landscape.
- Small objects.** For a *Small Object*, place object against dark background, and point Kombi at center of object.
- Large objects.** For a *Large Object*, as a Building, etc., stand away from the object, a distance equal to about twice its height, and point Kombi directly at object. If however, you stand on a hill, and can point at center of object, a distance equal to the height is satisfactory.
- Portraits.** For a *Portrait*, place the person against a back-ground, preferably light, hold the Kombi about three feet from the face and point at chin.
- In making an exposure, the Kombi should never be tilted at an angle, but always held *level*.
- For *Time Exposures*, don't hold the Kombi in your hand; rest it on some stationary object, such as a table, or tripod.
- The light should never shine on the lens, but on the object to be photographed. The sun should always be at the back of the operator, or directly overhead.
- The sun.**

### ***Time-Table.***

In a bright light, out of doors, for snap-shot, *without* time exposure cap, just snap the latch.

**Outdoors.** In a bright light, out of doors, for pictures of objects which can be kept still, *with* time-exposure cap, *one second*.

In a medium light, or in the shade, *three seconds*.

*Indoor Pictures* should *always* be time exposures. Kombi should always be pointed *away* from the light. Time-exposure cap should *always* be used.

**Indoors.**

For room with *white walls*, and in *bright sunlight*, time of exposure should be at least *6 seconds*.

**Room with white walls.**

If the sunlight is hazy, at least *12 seconds*.

If the light is *medium bright*, at least *25 seconds*.

If the light is dim, at least *50 seconds*.

For room with *medium-colored* walls, other conditions remaining the same, the times of exposure should be at least **double** those given above.

**Room with medium light walls.**

For room with *dark* walls and hangings, the times of exposure should be at least **five times** those given above.

**Room with dark walls.**

If the room has only *one window*, the times of exposure should be at least **twice** as long as any of the times given.

**Room with one window.**

Thus, under the most *favorable* conditions given above, in a room of one window or more, the time of exposure should be at least 6 seconds; whilst, under the most *unfavorable* conditions, in room with only one window, the exposure should be at least *twice, five times, fifty seconds*, or 500 seconds; that is, over *eight minutes*.

It is not always possible, even for an experienced photographer, to gauge exactly the right time of exposure, without some experiment. For a picture which you desire to get as near right as possible, it is a good thing to make say *three exposures*, timing each one say 2 seconds longer than the last. Thus, you might take the first at 12 seconds, the next at 14 seconds, and the next at 16 seconds. One of these exposures will in all probability be very nearly right.

**To get as nearly right as possible.**

One of the most important things in photography is to get the *right time* for exposure. In order to do this, before taking a



picture, study the light, read this chapter, and time your exposure as nearly according to the instructions as you can.

### ***Caps.***

There are two Caps for the Lens of the Kombi.

**Time  
Exposure  
Cap.**

The first is the *Time Exposure Cap.* It is the cap with the *small opening.* It is always used for time-exposures.

**Snap-Shot  
Cap.**

The second is the *Snap-Shot Cap.* It is the cap with the *large opening.* It is used for snap-shot exposures, when the light is very bright and the atmosphere exceptionally clear.

**Lens without  
Cap.**

The *Naked Lens* (without cap) is used for snap-shot exposures in the sunlight, with an ordinary atmosphere.

### ***Flash-Light Exposures.***

There is a way of making what might be called snap-shot exposures, by flash-light. It is turning snap-shot photography around. Instead of snapping the latch, you "flash the light."

It is to be done at night in a perfectly dark room, as follows:—

**How to  
"Flash the  
Light."**

First arrange your subject, as if you were going to take a picture by daylight.

Point your Kombi.

Turn out the lights.

Open the Shutter. (Position 2, page 3.)

Take a Magnesium Cartridge. Place it in a dish or tray exactly above and a little behind Kombi.

Light the Cartridge. (It will flash up and go out.)

Spring the latch.

Turn on the light, and change surface of film, as usual.

**Better results  
with the  
Kombi.**

With proper care, the Kombi will give *better* results by flash-light than many larger and much more expensive cameras.

For price of Magnesium Cartridges, see price list.

***Developing, Printing, Etc.***

When your film is full of pictures, the next thing is to have the pictures developed.

There are two ways of having this done: First, to get us or someone else, to do it; Second, to do it yourself.

**Two ways  
of having  
it done.**

In the beginning, it will be best to send the film to us, or to some practical photographer, to have it developed. Then, if your pictures do not turn out right, you will know it is the fault of the exposures.

**The best  
way for  
beginners.**

\* First learn how to make proper exposures. After that, if you wish, you can learn the art of developing.

To have your film developed by us, the best way is to send the whole Kombi. Wrap carefully in heavy paper, and address on the wrapper:

**Send us  
the Kombi.**

From **ALFRED C. KEMPER,**  
Name..... **208-210 Lake Street,**  
Address..... **CHICAGO.**

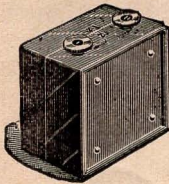
**How to send.**

The postage will be *eight cents*.

**Postage.**

Write us a letter of instructions, giving the *number* of your Kombi, and enclose money order for the work you wish done (see Price List), *including* eight cents for return postage.

**Tell us  
what you  
want done.**



If you do not wish to send the whole Kombi, you may, by getting a Magazine, keep the Kombi and send only the Roll Holder with exposed film. The Magazine Roll Holder can be attached to Kombi, and you can

**What the  
Magazine  
is for.**

Fig. 6- KOMBI MAGAZINE. be making another set of exposures while we are developing the first. We can then re-load your Roll Holder and send it to you, with the developed and printed



pictures, and on its receipt, you can send us the Magazine with the second set of exposures.

The Kombi is the only camera in the world, that has an extra Magazine. (For prices, etc., see Price List.)

*The cost* of having your pictures developed by us, depends altogether upon how you have taken the exposures. If they have been carefully timed, above all, if, on the one film, you have made all the exposures under about the same conditions, and in about the same time, the cost of developing one film will be 15 cents.

If the exposures have been made under different conditions, and differently timed, and we have to cut the film into pieces and develop each picture separately, the cost of developing may amount to 5 cents *each picture*.

For 15 cents per strip of 25 pictures, we will engage to develop the strip (without cutting, or special treatment), so as to make as many perfect negatives as possible, from your exposures. For cost of printing, mounting, burnishing, etc., see Price List.

### *Interior of the Kombi.*

There are many people who will rest content with the knowledge they have of the exterior of the Kombi.

**How is it with you?** If they can make a good exposure, and have it developed and printed for them, they are satisfied.

Others will want to know how the Kombi is made internally, how it works, how it is loaded, and how it is unloaded.

Those who want to do their own developing, printing, etc., will have to know all this.

**How to learn about it.** To learn it practically, take your Kombi (unloaded), sit down at a table, and take it apart. To do this, grasp rear and front portion, each in one hand, and pull gently. (See illustration, Fig. 7.)

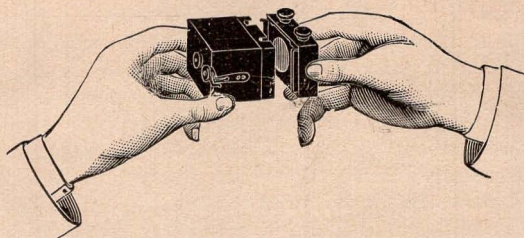


Fig. 7.—OPENING OR CLOSING KOMBI.

We have already learnt about the working parts of the *front portion* of the Kombi.

The *rear portion*, or Roll Holder, contains the following parts: Two Film Rollers (Nos. I and II). Two Film-Guide Rollers. One Platen. One Mat.

Rear Portion  
of Kombi.

The Film Rollers are used, as their names implies, for rolling the film on. In loading, the film is rolled on No. I, and, after making an exposure, that portion of film upon which the exposure has been made, is rolled off No. I, on to No. II, leaving a fresh surface of film for the next exposure.

The Film  
Rollers and  
Film Guide  
Rollers.

The Film Guide-Rollers act as guides for the film.

The Platen is for stretching that portion of the surface of the film, upon which the exposure is to be made.

The Platen.

The Mat determines the boundaries and shape of the picture.

The Mat.

Familiarize yourself with these various parts, and with their position in the roll holder. Take them out and put them back, several times, so that, if necessary, you will be able to take them all out and put them back with your eyes shut. This will enable you to work faster when loading or unloading your Kombi in the dark room, and will enable you, if you wish, to dispense with a lamp altogether.

Learn the  
places of  
the parts.



### *To Load the Kombi.*

**The Dark Room.**

We will suppose that you now thoroughly understand the working parts of your Kombi, and where they belong. The next thing is to be able to do the loading. For this, you must have a dark room or closet, into which light cannot penetrate. The least ray of daylight, lamp-light, candlelight, or any light but that which has passed through a pane of ruby-red, yellow or orange glass, will infallibly spoil your sensitive film (and this, whether an exposure has been made on it or not), until it has been developed and fixed.

In choosing a closet or dark room, go in, close the door, and see if any light comes in through cracks or keyhole. If it does, the room will not do. The safest way is to work by night. If you have a ruby lamp, use a very dim light. All you want is enough light to see what you are doing. Work quickly.

Once in the dark room, take the Kombi apart, and all the parts out of the roll holder, except the two rollers. Take the film out of its paper casing.

Trim the end tapering (Fig.8).

Turn a lap toward the inner side (Fig. 8).

Insert into slit in roller No. 1, and wind up in direction of

**To roll up the Film.**

arrow, *the inner side of roll out* (Fig. 9). That part of roll holder projecting up on opposite side of roller No. 1, has a recess, or gauge, on its end, just the width of film. In rolling up film, let it pass over this gauge,

which will help you to roll it evenly. (See illustration, Fig. 10 )

When opposite end of film is reached, trim tapering like the first end, and insert in roller No. II.

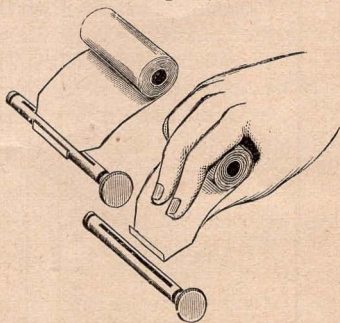


Fig. 8.—PREPARING FILM FOR LOADING.

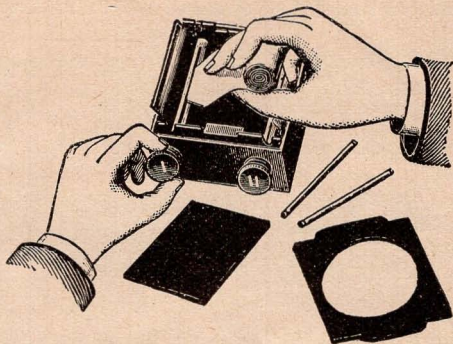


Fig. 9.—LOADING. MAT, PLATEN AND FILM GUIDE-ROLLERS REMOVED.

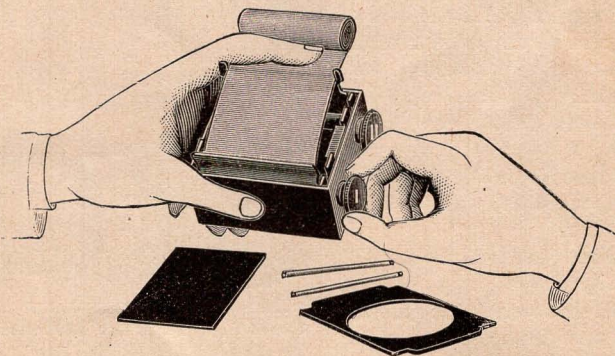


Fig. 10.—USING GAUGE WHEN LOADING.



Give one and one-half turns of roller No. 11, in direction of arrow.

Give two or three turns of roller No. 1, in *opposite* direction of arrow, so as to loosen film, then

Insert Guide-Rollers *beneath* film.

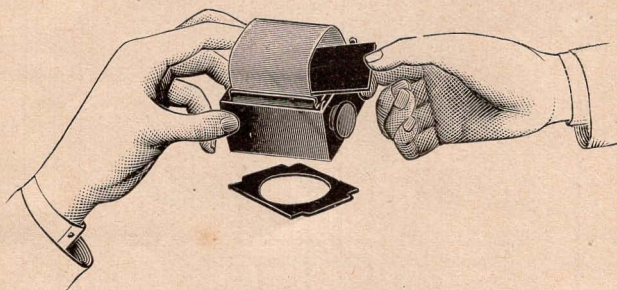


Fig. 11.—INSERTING PLATEN.

Insert Platen *beneath* film (Fig. 11).

Turn roller No. 1 in direction of arrow, until film is stretched tight across the platen.

Insert Mat *over* film. (Fig. 13.)

Close Kombi.

Spring the Latch, to close shutter.

Kombi is now loaded, and ready for use.

In inserting Guide-rollers, be sure that the one with *Click-pin* is in position to engage *Click-spring*.

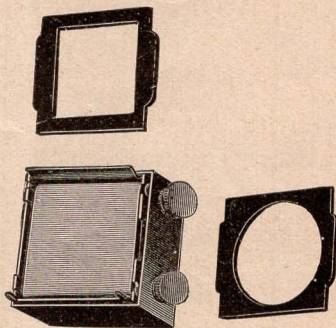


Fig. 12.—SHOWING THE ROLLER CASE LOADED WITH FILM, AND READY TO PUT THE MAT IN PLACE; A ROUND MAT GOES WITH EACH KOMBI.

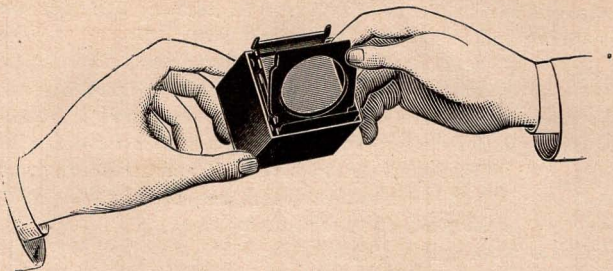


Fig. 13.—INSERTING MAT OVER FILM.

In sliding out Mat, if click-pin is in the way, turn roller a little, to disengage it (Fig. 14). In Inserting Mat, place one end under shoulder of spring end-plate, and press the other end into place (Fig. 13).

The Mat.

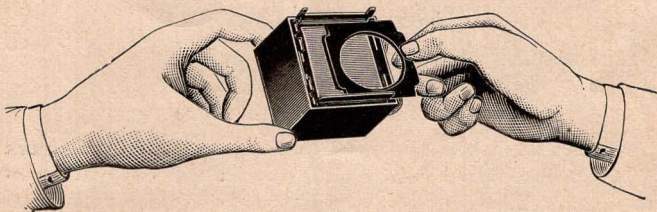


Fig. 14.—REMOVING MAT.

A separate explanation as to how to unload will not be necessary, as anyone who can load, will also be able to unload the Kombi.

Unloading.

### *Developing at Home.*

One of the chief pleasures of amateur photography is in the developing of the exposures.

Once you have learned to make perfect exposures, if you have



the time it will be worth your while to take up the question of Developing and Printing your own pictures.

**It is as easy as any other.** Kombi exposures can be developed as easily as the exposures taken by other first-class cameras.

**The Developing Outfit.** For those who desire to do this work, we supply a complete Developing and Printing Outfit, which contains enough Chemicals, Paper, etc., to develop 500 pictures, and print 80. When the chemicals, etc., are used up, it will not cost much to replace them.

**It will work right if you do.** This Developing and Printing Outfit is not a toy, but a practical and complete outfit, containing exactly the same chemicals and materials as used by ourselves in developing and printing. It is guaranteed to do the work if you will follow our instructions. With proper care, as good work should be done, as that of any good photographer.

For price and full description, see Price List.

### *How to Develop.*

First, prepare your chemicals, as follows:

#### *For Developing Bath.*

**Developing Powder.** Fill tray No. 1, with clear, cold water (about 50° F.), to mark shown on inside of tray. Put in one package of Developer, (two powders,) and rock tray until powders are dissolved.

#### *For Fixing Bath.*

**Hypo.** Fill tray No. 2 with clear, cold water, to mark shown, and dissolve in it a heaped tablespoonful of Hypo.  
**Water, Lamp, Kombi.** Now take your lamp, Kombi, a basin and pitcher filled with cold water and the Developing and Fixing Baths into the dark room with you.

If you have plenty of room, you may take the whole outfit in with you, and stand it on a convenient table or shelf.

Close door; stop up all openings which let in light.

**Close Door.**

Light ruby lamp, and place, with light turned toward you, on table or shelf at least eighteen inches away from where you are going to work.

**Light Lamp.**

Unload Kombi, as per instructions above. Place film in basin of water, and soak until limp.

**Unload Kombi.**

Place film in tray No. 1, or developing bath, sensitized side up, and draw through bath, back and forth, as shown in illustration (Fig. 15). Move continuously, to keep entire strip well moistened with developer.

**Place Film in Developer.**



Fig. 15.—DRAWING FILM THROUGH DEVELOPER.

Do not touch sensitized side with your fingers, but handle strip carefully at its edges.

In from 10 to 20 seconds, the pictures will begin to appear. The lights will appear first, as dark spots on the film. Then in about two minutes, the shadows will develop. You should watch the process of development, by lifting film out of bath, and holding between your eye and the lamp (Fig. 16). Don't hold too near lamp, nor too long out of developer. It will take from five to ten minutes to complete the process of developing.

**How picture will appear.**

**Watch film developing.**

**Time 5 to 10 minutes.**

Let developing go on, until the shadows are clearly seen, and details have come out strongly. When the

**When done.**



high lights (the dark portions) seem to have come through the opposite side of film, picture is fully developed.

*Over-development* makes the resulting negative dim and dense. While not actually spoiling the negative, it makes it very slow to print from.

Dense  
Negatives.

*Under-development* makes the negative bright, but with-

Negatives  
without  
detail. How  
to prevent.

out details. Most amateurs under-develop their pictures. To prevent this, it is better to leave the film in the developing bath until it is just a little denser than you wish to have it. The fixing bath will brighten it up a little.

*Under-developed* negatives can be cured, over-developed negatives must be endured. We can supply an *Intensifier* which strengthens, or intensifies, weak, *under-developed* negatives (which however is not safe for children to handle.)

Intensifying  
under-  
developed  
negatives.

If the pictures on one film have been taken in different lights, and with different exposures, those taken in bright light, and with longer exposure, will be developed before those taken in dim light, and with shorter exposure. In such a case, a practiced operator may cut off those pictures already developed, and proceed to wash and fix them, while the others remain in the developing bath, until completely developed (Fig. 17). The novice will find this, however, no easy task, and the best way for him is to let the pictures go which first flash up, and take most pains with those which develop slower.

Differently  
timed  
exposures.

*Over-exposed* pictures develop quickly, but produce weak nega-

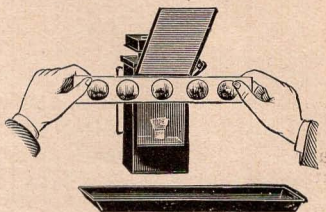


Fig. 16.

VIEWING FILM DEVELOPING.

tives, without contrast between lights and shades. If very much over-exposed, the negative will be perfectly black.

**Black  
Negatives.**

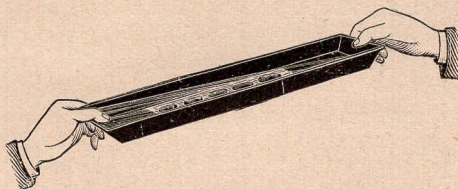


Fig. 17.—DEVELOPING FILM WHEN CUT.

*Under-exposed* pictures produce strong contrasts, but show no details in shadows. If very much under-exposed, there will be no picture at all.

**Blank  
Negatives.**

### ***Washing.***

When the negative has been sufficiently developed, rinse thoroughly in three changes of fresh water, in your basin.

### ***Fixing.***

Place the film in tray No. 2, containing your Hypo. Draw it back and forth through bath in the same way as you have done in developing (Fig. 15). This should be done until there are no white or milky spots on the negatives. The operation will take about ten minutes. When fixed, the negative can no longer be harmed by light.

**Clean off  
Milkiess.**

**Time,  
10 minutes.**

### ***Washing.***

After fixing, the negative should be thoroughly washed in several changes of fresh, cold water, or preferably under a running tap, for about 30 minutes, to remove the Hypo. The least trace of Hypo left on the plate will, in a short time, destroy the film.

**Wash out  
Hypo.  
Time,  
30 minutes.**



### ***Soaking and Drying.***

The film must now be soaked for about 5 minutes in the Soaking Solution. This may be done in any clean glass or porcelain vessel. Then fasten the film with pins to the wall, the dull side out, and let it hang until thoroughly dry. Soaking is to prevent the film from curling while drying.

**Soaking  
Solution.**

### ***Rules for Developing, etc.***

The Developing, Fixing and Soaking Solutions, may all be used several times over. The Developing Solution will give out first; next, the Fixing Solution; and the Soaking Solution, if kept clean, may be used almost indefinitely.

**Keep your  
Solutions.**

Keep your solutions in perfectly clean, tightly corked, bottles. Never mix them, and see that even the corks are not changed.

**Don't mix  
Trays.**

Use tray No. 1 for developing and tray No. 2 for fixing and for no other purpose. Use the same tray *always* for the same purpose.

The least trace of Fixing Solution will spoil your Developer, even that coming off your fingers if dipped from one bath into the other. If your fingers have been dipped into fixing bath, wash and rinse them thoroughly before doing any more developing.

**Don't mix  
Solutions.**

**Label  
Everything.**

Label your bottles and your trays, to prevent all possible mistakes.

### ***Printing.***

Take one of the masks furnished with the outfit (Fig. 18). Cut the negatives apart. Fasten the negatives side by side to the mask by means of the gummed strips. See that the dull side of each negative is turned toward the mask. Select negatives as nearly as possible of the same density, that they may print in about the same length of time.

**How to  
use mask.**



Fig. 18.—MASK.

Remove back from printing frame (Fig. 19). Place mask with negatives on the glass; glossy side next to glass. Cover mask with strip of sensitized paper; sensitized side next to mask. Replace the back of frame.

**Printing  
Frame.**

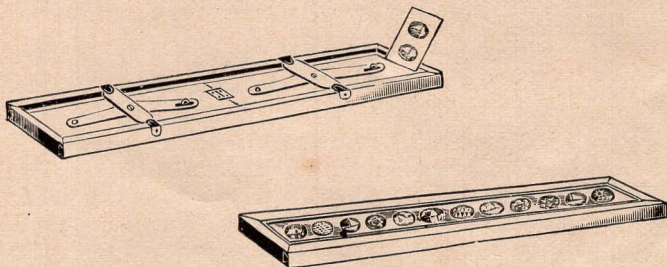


Fig. 19.—PRINTING FRAME.

Lay frame with glass side up in bright sunlight. Examine print from time to time, by opening one half of frame. Printed picture should show rather darker than you want it to appear when finished, as the toning and fixing will slightly bleach it.

**Print in  
Sunlight.**

Make all the prints you want before beginning the toning, etc., as it will save time and trouble to finish up all your prints at once.

**Make your  
Prints first.**

As pictures are printed, place in dark box, in closet or drawer, as light will, in time, spoil them. Keep your sensitized printing paper away from the light, and always well wrapped up.

**How to keep  
Prints and  
Sensitized  
Paper.**



### *Toning.*

The toning of prints is a process somewhat similar to the developing of exposures. It is to be done in a room with not too bright a light, and some distance away from the window.

**Light for  
Toning.**

**Cold Toning  
Solution.**

Fill tray No. 1 with *Toning Solution*. This toning solution must be as cold as possible. It may be cooled by putting into an ice chest for an hour or so.

Or the tray containing solution may be floated on a large basin of cold, running water, or pieces of ice may be put into solution while toning is going on.

**Submerge  
Prints.**

Place about four or five prints, one by one, into the solution, face up. See that they are at once fully submerged.

**Don't allow  
Bubbles.**

Move freely, from side to side, as in developing.

Turn several times face down, and then up again.

The prints will turn, first yellow, then brown, then purplish.

The process will take about 15 minutes. When this stage is reached, the toning is completed and the prints

**Time,  
15 minutes.**

should be taken out at once and put into the

### *Short Stop.*

This is a solution of 2 tablespoonfuls of common salt in 1 pint of water. The prints are left in this for 5 minutes to stop the process of toning from going on any further.

**Salt Water.  
Time, 5 min-  
utes.**

### *Final Washing.*

Take prints out of Short Stop and immerse in basin of clear, cold water. Wash thoroughly in five or six changes, leaving at least five minutes in each change. The washing is done by rocking basin to and fro, or, better still, by leaving basin under running tap for about 25 minutes, with pictures face down.

**Time 25 to  
30 minutes.**

### ***Burnishing with Ferro-Type Sheet.***

This is done *before* mounting.

Fasten Ferro-Type Sheet, which goes with outfit, to a piece of board with small tacks. Remove dust with a soft cloth. Place wet toned and fixed prints, face down, on ferro-type sheet, and press on them with a blotter, to expel water and air bubbles. Place board on edge, and allow prints to dry. When dry, they will begin to loosen at the edge, by which they may be removed from ferro-type sheet. This process gives them a beautiful and permanent gloss.

**Ferro-Type  
Sheets.**

### ***To Clean Ferro-Type Sheet.***

After each time of using, Ferro-Type Sheet should be cleaned as follows :

Wash with hot water and soft cloth, rubbing well.

Polish dry with chamois skin, silk handkerchief, or soft cloth.

**Polishing  
Solution.**

Apply a little *Polishing Solution*, and polish dry with soft cloth.

### ***Mounting.***

Make some starch paste, or get some good adhesive paste. Mucilage will do, but paste is better. Apply the paste very thinly upon the *card*, and allow it to soak in until there is barely enough left to hold the print. Place mounted print, face down, on the face of a slightly warmed polishing iron, and iron the back with another slightly warm polishing iron. Place card in a book, and press until thoroughly dry.

**Starch  
Paste.**

**Warm Iron.**

If paste is rubbed into print, instead of card, or too much paste is used, the picture will lose its gloss.

### ***Burnishing with Burnishing Machine.***

Professional photographers run their pictures, when mounted, through a burnishing machine. If you can conveniently have



Must be  
done by  
a Photo-  
grapher.

this done, it will improve the appearance of your prints; but it must be done immediately after mounting, and while the cards are yet damp.

### *Blue Prints.*

Ferro-  
Prussiate  
Paper.

This is the simplest method of making prints from negatives. The sensitive paper used is called "Ferro-Prussiate" paper. The printing process, in the frame, is the same, but blue prints are not toned or burnished, simply rinsed in clear water for about 15 minutes, then dried between blotting paper. The picture will be in a rich blue and white. Blue Prints may be mounted the same as other prints.

### *The Kombi as a Graphoscope.*

The object of the Graphoscope is to *exhibit* pictures. The pictures are printed upon a transparent film. Film is loaded into Kombi the same as a sensitized film. Round cap-plate at back of roll holder is removed, by placing thumb nail of right hand against one knob on cap-plate, fore-finger nail against the other, and turning from right to left until arrow on cap-plate registers with mark on back of case. Kombi is then held to the light, and pictures are looked at through the lens (Fig. 20).

The lens magnifies the pictures and brings them out very clearly and distinctly. You change from one picture to another by turning the rollers.

We will print your pictures on a translucent film if desired, or we will supply special strips, for use in the graphoscope, of celebrities, statuary, paintings, views, etc. See Price List.

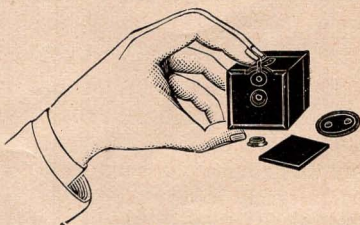


Fig. 20.  
USING KOMBI AS A GRAPHOSCOPE.

**DON'TS****FOR THE KOMBI**

The Kombi is the simplest first-class camera in the world, but to get the best results there are a few simple rules which must be remembered.

- Don't** forget to cover lens with finger when setting shutter.
- Don't** forget to turn roller No. 11, to change surface of film, immediately after each exposure.
- Don't** open Kombi when loaded, except in light-tight dark room. Light, if used, should be ruby or orange.

**SNAP-SHOTS.**

- Don't** take snap-shots on same film as time-exposures.
- Don't** take snap-shots with time-exposure cap on.
- Don't** let Kombi shake while snapping the latch.
- Don't** take snap shots indoors or in the shade; only in bright light, outdoors.
- Don't** point Kombi toward the sun.

**TIME-EXPOSURES.**

- Don't** forget to use time-exposure cap (small opening).
- Don't** forget to rest Kombi on a stand or tripod.
- Don't** point Kombi toward the window.
- Don't** make mistakes as to *time*. Study "Time-Table", on pages 6 and 7.

**LOADING.**

- Don't** expose the film too long to ruby light. One minute is long enough for loading.
- Don't** handle film with moist fingers.
- Don't** touch dull or sensitive side of film with your fingers.

**DON'T**

think that because a thing's simple, it doesn't need a little learning. Read "KOMBI PHOTOGRAPHY" over again.

*If you don't get along as you ought, see a photographer or write*

**ALFRED C. KEMPER,**  
208-210 Lake St., Chicago, Ill., U. S. A.



## . . PRICE LIST . .

	EACH.
<b>THE KOMBI</b> (packed in cloth-covered Carrying Case) .....	<b>\$3.50</b>
Roll of Film for 25 exposures .....	.20
Box of 5 Rolls of Film (for 25 exposures each) .....	1.00
<b>Complete Developing and Printing Outfit</b> .....	<b>3.00</b>
<i>Contains the following assortment:</i>	
1 Kombi Ruby Lamp .....	.75
1 Set (3) Black Enameled Steel Trays (15 x 2 inches) .....	.60
1 Package Developing Powders (enough for 500 pictures) .....	.25
1 Package Hypo (1 pound Hyposulphite of Soda) .....	.10
1 Bottle Soaking Solution .....	.25
1 Kombi Printing Frame and Glass .....	.45
1 Set (2 strips) Paper Masks and Gummed Strips .....	.10
1 Bottle Toning Solution .....	.25
1 Set (2 sheets) Ferrotypes, 5 x 14 inches, for burnishing prints .....	.20
1 Package (10 sheets) Sensitized Paper (each strip enough for eight views) .....	.25
1 Package (1 dozen) Card Mounts .....	.10
1 Bottle Polishing Solution (for Ferrotypes Sheets) .....	.10
Strips of Transparencies (containing 25 perfect photos, suitable for the Graphoscope feature of the Kombi) .....	.60
No. 1 Extension Tripod, with plate attached .....	2.50
No. 2 Staff Tripod, with plate attached .....	1.50
Tripod Plate, complete .....	.35
Kombi Clasp (showing when loaded) .....	.10
<b>Magazine containing extra loading</b> .....	<b>1.50</b>
Double Rubber Loading Sleeve (for daylight loading) .....	.60
<b>Magnesium Cartridges, (for Flash Light Exposures.)</b>	
No. 1, small, per package (½ doz.) .....	.50
No. 2, medium, " " .....	.80
2½, large, " " .....	1.20
3, very large, " " .....	1.50

Expressage 15 cents per package extra, if prepaid. Not mailable.

### FOR RELOADING, DEVELOPING AND PRINTING.

Developing 1 strip, from 15c. and upward. See §§ 4 and 5, on page 10.

Printing and Burnishing Pictures from strips sent us, per picture, one cent.

Re-loading Kombi with film for 25 exposures ..... .25 |

Mounting Pictures on Cards, from 35c. to 50c per doz.

If the negatives of strips sent us are not perfect, we will not print more than one or two copies.

When returning Kombi to be reloaded don't forget to enclose 8 cents for return postage.

**PRICE LIST,—Continued.**

	PER DOZ.
Gilt, Stamped-Metal Frames (for single pictures); each 5c.....	\$ .60
Thumb Screw; each 5c.....	.60
<b>Higgin's Photo Mounter:</b>	
{ No. 1 Glass Jar 3 oz.; each 15c.....	1.80
{ " 2 " " 6 " " 25c.....	3.00
{ " 3 " " 14 " " 50c.....	6.00
Ferrotypes Sheets, 10 x 14; each 15c.....	1.80
Developing Powder (Box of 1 doz. Powders); per box 50c.....	6.00
	<b>EACH.</b>
Magnesium Powder, for Refilling Cartridges; 1 oz. Package with 12 Fuses.	1.00
<b>Kombi Album</b> , Size $8\frac{1}{4} \times 3\frac{1}{2}$ to hold 100 Pictures.....	.25

**Kombi Album**, Size  $8\frac{1}{4} \times 6\frac{1}{2}$   
to hold 200 Pictures..... .40

**Kombi Album**, filled with  
Sample Prints for dealers  
only, furnished at cost. Write  
for Terms.

**Solio Paper**, in Packages of 1  
Gross Sheets, per Package.... 3.25

**Karsak Paper**, in Packages of  
1 Gross Sheets, per Package.. 3.00

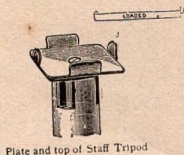
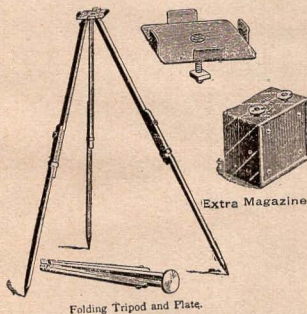
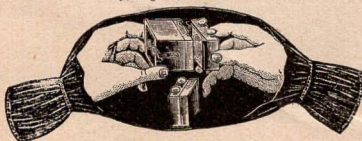


Plate and top of Staff Tripod



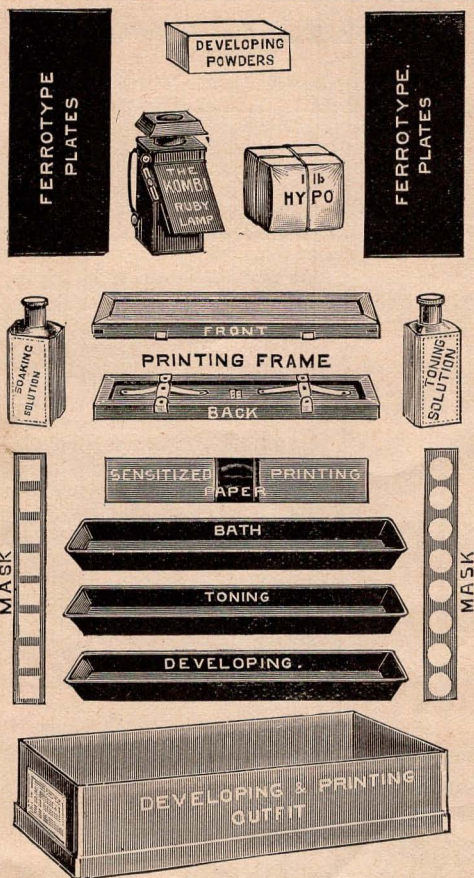
Folding Tripod and Plate.



Double Rubber Daylight Loading Sleeve







*Developing and Printing Outfit.*





# Dictionary of Photographic Terms

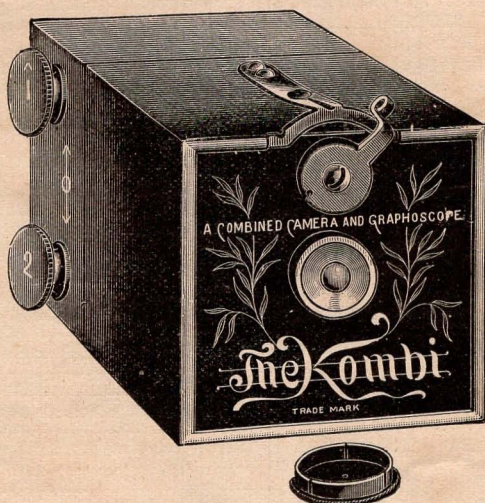
## And Index to Kombi Photography.

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<b>BURNISHING.</b> A process by which a very high polish or gloss is given to the face of the photograph.....	23
<b>CAP.</b> A cover for front of lens.....	8
<b>CLICK.</b> The "Click" on the Kombi is caused by a small pin pressing against a spring, and indicates how much film has been rolled up on roller.....	5 & 14
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<b>PRINTS.</b> Photographs (which have not been toned or fixed).....	21
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<b>SNAP-SHOT EXPOSURE.</b> An instantaneous exposure. An exposure made by "snapping the latch".....	PAGE 5
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*The Kombi, Full Size.*

