

# PRINT PICTURES ON ANYTHING

*popular photography, 1940*

The process resolves itself into sensitizing the surface on which you want to print the picture, producing the positive image by contact printing, and developing. . Precaution: relative instable solutions, the surface should be exposed for printing right after the sensitizer has been applied and dried. Sensitizing by weak artificial light. Apply with sponge, a wad or cotton, or a brush. Spread even. A brush should contain no metal. Dry in the dark. Drying cloth with ironing while it is damp, rest with stove, hairdryer etc. After drying contactsheet (printing). Clear glass bottle inside with sensitizer, outside with contactfilm. Teststrip for exposure. Sunlight is the most convenient. Any light will do. Wear gloves handling the sensitizer.

## Picture on Artist's Canvas.

Print by contact or enlargement on canvas. Handcoloring possible after printing.

Canvas is first cleaned with a solution of

Liquid Ammonia	0,880 sp. gr	1
ounce.		
Denaturated alcohol		4 ounces.

Rub canvas with sponge to eliminate greasiness. Dry. Size the canvas by soaking in solution of 60 grains of geletin dissolved by moderate heat in 10 ounces of distilled water.

When dissolved, add

Ammonium bromide	35 grains
Ammonium chloride	10 grains

## Prints on fabrics

After washing and drying the fabric, put on rubber gloves and immerse the fabric in the following sensitizing solution:

silver nitrate	300 grains
ferric ammonium citrate	375 grains
citric acid	300 grains
water	16 ounces

Wring out, stretch on a frame, and hang in a dark place. When dry, print by sunlight. After exposure, wash the cloth for a few minutes in running water and fix in a 10% hypo solution for about 10 minutes. Wash again and dry.

## Prints on white silk

The silk is first washed in warm water, smoothed out, and floated on the following albumen solution:

white of one egg	
distilled water	5 ounces
ammonium chloride	20 grains

the solution is beaten to a froth, allowed to subside, filtered through coarse muslin, and poured into a tray. After the silk has been marked in one corner to indicate the side to be sensitized, it is lowered onto the surface of the bath and allowed to remain there for 5 minutes, after which it is hung up to dry. When dry, it is floated in similar fashion, but in very subdued light, on the following sensitizing bath:

distilled water	1 ounce
silver nitrate	40 grains

Potassium chloride 80 grains  
Dry albumen 1 ounce

Stir, let stand for an hour, filter through flannel, sponge on dried canvas surface. When dried, sensitize by applying an even coating of the following solution, using cotton as brush:

distilled water 6 ounces  
glacial acetic acid 1/4 ounce  
silver nitrate 1/2 ounce

It is not necessary to dry the canvas before printing. It should be left on the frame throughout the routine. After exposure, develop in:

distilled water 5 ounces  
lead acetate 5 grains  
gallic acid 30 grains  
fix in a 1:5 hypo solution and wash well.

### Printing on an egg

Sponge the surface several times with a 1:5 solution of kitchen salt. Allow it to dry thoroughly. Sponge on the sensitizer which is a 1:12 solution of silver nitrate. To print, cut a hole in a piece of black cloth, the hole being a little smaller than the negative. Wrap it around the egg to serve both as a mask and makeshift printing frame for the negative. Print by sunlight: wash, tone, and fix as usual. Since the chemicals penetrate the shell, the egg becomes inedible.

### Prints on glass

Clean the surface. Then apply the following binder:

to the whites of two eggs add  
ammonium chloride 29 grains,  
dissolved in  
wood alcohol 1 dram

after 5 minutes it is hung up in a dark place to dry.

Print as usual, supporting the silk on a flexible piece of cardboard. The negative is masked, of course. Tone is gold toning bath. Then fix in a hypo bath, as usual. Wash and dry. Thereafter, the silk may be washed in suds and ironed, but the precaution should be taken to place a moist sheet of linen over the silk before applying the iron.

### Kallitype prints

A favourite paper sensitizer (tones range from sepia to black). The paper is sized twice by immersing for about three minutes each time in a bath of

arrowroot 2 grains  
water 1 ounce

after the first sizing, the paper is dried and sized over again. Following sizing, the paper is sensitized in

ferric oxalate (crystals) 75 grains  
oxalic acid 5 grains  
silver nitrate 30 grains  
water 1 ounce

Brush the solution on a dry paper in the dark. During the printing, a faint brown image on a yellow background is a clue to completion of the required exposure time, detail being just visible in the shadows.

For sepia tones, the print is developed in

rochelle salts 1/2 ounce  
potassium bichromate 3 to 4 grains  
distilled water 10 ounces

For purple tones:

Borax 120 grains

water 1/2 ounce

Beat this mixture to a froth, then allow to settle. Filter and apply to surface. Allow to dry. When dry, repeat the process.

Sensitize by weak artificial light, with  
silver nitrate 40 grains  
water 1 ounce  
When dry, hold over bottle of ammonia to permit fumes to cover the surface. Print, as usual, by sunlight. Fix in 10% hypo solution, wash.

### Prints on Veneer Wood

The use of maple or pine is recommended. Soak for live minutes in a solution of gelatin and formaldehyde, which is made up by melting (by heat) 288 grains of soft gelatin in 16 ounces of water, and adding 58 minims of formaldehyde.

Dry the surface with moderate heat, and immerse for five minutes in  
Hard gelatin 192 grains  
soluble starch 768 grains  
ammonium chloride 77 grains  
water 16 ounces

Again dry, and sensitize in

silver nitrate 768 grains  
citric acid 637 grains  
water 16 ounces

Dry in the dark and print by sunlight. Use a strong negative. After printing, wash and tone.

A suitable gold tone:  
Gold chloride 1 grain  
borax 60 grains  
water 10 ounces

Gold-toning should be done in a special dish set for the purpose, by weak daylight, and away from any

rochelle salts 1 ounce  
potassium bichromate 7 grains  
distilled water 10 ounces

For black tones:

Borax 1 ounce  
rochelle salts 3/4 ounce  
potassium bichromate 5 to 6 grains  
distilled water 10 ounces

For warm maroon tone:

sodium tungstate 1 ounce  
distilled water 10 ounces

After the print seems to have fully developed, allow it to remain in the bath another 10 to 15 minutes, with correct exposure, overdevelopment need not be feared, Then fix in:

Hypo 1 ounce  
Ammonia 0.880 sp. gr. 2 drams  
water to make 20 ounces

fix 10 min, wash 30 min.

### Pictures on Porcelain

Carbon transfer tissue (a combination of gelatin and pigment on a paper base, which is available in a variety of colors, is used for producing positive photographic images on porcelain and similar surfaces. The tissue of the selected color is sensitized (do not sensitize in damp weather) in a 5% solution of potassium bichromate (gloves) and left soaking for ca. 5 minutes. The longer the soaking period, the softer the contrast.

Then lay it face down on a ferrotype tin. Now squeeze the surplus moisture by a blotter on the back in a mild, rolling action. Peel the tissue off the tin, hang to dry in dark. After it has dried, it may be put away in thge dark for 24 h. Dry as quickly as possible.

Exposure as usual in a regular printing frame by sunlight or arc light. After

draft. Keep the tray in motion and break any rubbles that may appear on the surface being toned.

## Prints on Leather

Clean the surface well and brush the following solution in it:

hard gelatin	19 grains
soluble starch	77 grains
potassium bromide	67 grains
cadmium bromide	67 grains
ammonium chloride	19 grains
cadmium iodide	19 grains
water	16 ounces

dry quickly and sensitize in

silver nitrate	307 grains
citric acid	384 grains
water	16 ounces

A short printing exposure is recommended. After exposure, immerse in a 5% solution of ammonium chloride.

Develop in

pyro	19 grains
hydroquinone	58 grains
citric acid	77 grains
sodium sulfite	260 grains
water	16 ounces

This developer should be used at 95 °F. When the image appears, fix in an acid hypo bath and tone with gold.

## Blue prints on cloth or paper

This process results in a white image on a blue background. The cloth is soaked in warm water, then rubbed and hung up to dry. While still damp, the cloth is ironed. When dry it is immersed in a bath consisting of equal parts of solutions A and B of the following sensitizer:

exposure soak in cold water until limp. The correct exposure must be determined by the substitution method, using some printing-out paper as a reversal guide. Since the image is to be transferred to another surface, a reversal of the image will result.

Apply carbon image to porcelain. Mask with black paper the area that should remain white. The carbon sensitized side is placed in firm contact without airbubbles with the object. To prevent premature drying, cover with wax paper and allow to stand this way for 10-15 min. with a 10-15 pound weight on top. The porcelain is placed in a tray and warm water poured on it. The temperature of the water being gradually increased. The purpose of this bath is to dissolve the soluble pigment, the insoluble portions (the ones that form the image). Agitate. Gentle laving continues until all the soluble pigment has been washed away. Then place the object in a 10% alum bath for 3-5 min to harden the gelatin.

When dry, the image may be protected by dipping or spraying with clear Duco or by applying a pyroxyline lacquer with a brush. This is adequate for decorative purposes only. However, if it is to be used, ceramic carbon tissue should be selected and the result put in a kiln.

A strong negative is generally recommended for all processes.

A: ferric ammonium citrate (green)

110 grains

water 1 ounce

B: potassium ferricyanide 40 grains

water 1 ounce

After the cloth has become saturated, it is drained and hung up in the dark to dry. When dry, stretch it over a cardboard and print by sunlight. Develop by immersing the print in water until the image comes up (in about five minutes). Rinse in several changes of water. Hung up to dry.

In using cloth specimens, it is useful to know that the smaller the negative and the greater the desired detail, the finer should be the weave of the cloth used. Before sensitizing the cloth it should be thoroughly washed in soap and water and then rinsed clean of the soap. When the object has finally been printed, developed and dried, it may be washed and ironed as usual, time after time, without harming the image.