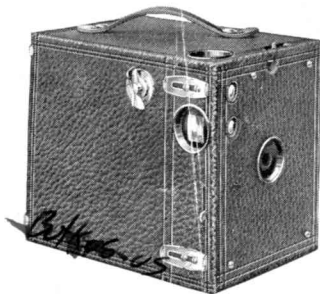


Picture Making
with the
**BOX SCOUT
CAMERA**



Price 10 cents

Seneca Camera Mfg. Company
ROCHESTER, N. Y., U. S. A.

Specify and Use

**No. 360 (No. 120) FILM
FOR**

No. 2 Box Scout

**No. 348 (No. 116) FILM
FOR**

No. 2A Box Scout

**No. 372 (No. 124) FILM
FOR**

No. 3 Box Scout

**No. 390 (No. 130) FILM
FOR**

No. 2C Box Scout

**No. 375 (No. 125) FILM
FOR**

No. 3A Box Scout

ORDER FILM BY NUMBER

**Then you are sure of getting
the correct size**

No. 2 Box Scout

Indicator for operating the shutter is located at side of Camera.

Slide or indicator in front of Camera, above the lens, is adjustable for "Time" and "Instantaneous" or snapshot exposures. When this slide is at bottom of opening, shutter is set for "Time" exposures; when it is at top of opening, shutter is set for snapshots.

No 2 Box Scout has one diaphragm opening in shutter.

Nos. 2A and 3 Box Scouts

Indicator for operating the shutter is located at side of Camera.

These Cameras have three diaphragm openings in shutter, namely: Large (No. 16); Medium (No. 32); Small (No. 64). Lever for adjusting diaphragm openings is located at top of Camera.

Slide or indicator in front of Camera, above the lens, is adjustable for "Time" and "Instantaneous" or snapshot exposures. When this slide is at bottom of opening, shutter is set for "Time" exposures; when it is at top of opening, shutter is set for snapshots.

Nos. 2C and 3A Box Scouts

Indicator for operating the shutter is the lower lever at the side of Camera.

These Cameras have three diaphragm openings in shutter, namely: Large (No. 16), Medium (No. 32), Small (No. 64). Lever for adjusting diaphragm openings is upper lever located at side of Camera.

Indicator or slide in front of Camera, above the lens, is adjustable for "Time" and "Instantaneous" exposures. When this slide is at bottom of opening, shutter is set for "Time" exposures; when it is at top of opening, shutter is set for snapshots.

Before Loading

Before placing a roll of film in the Camera, remove the inner part (this is called the film chamber) from the Camera and see what takes place when the various indicators or levers are moved. Examine the shutter for the diaphragm openings; look for the slide which tells how to change the Camera from snapshots to time exposures; then push the shutter indicator and see how it works for both snapshots and time exposures. (The description on page 3 will give the exact location of the various indicators.)

Although the Camera may be loaded in direct sunshine, it is safer to perform this part in subdued light. Sufficient light will pass through the lens in a small fraction of a second to change the sensitized surface. In the same amount of time a ray of sunshine may penetrate the loosened wrapping and destroy the result of much patient effort.

Again we say it—read the directions carefully and investigate the use of every part before the film is loaded in the Camera. Finally, see that the shutter is closed before loading.

Loading the Camera

I—Place the camera upon a table and pull back the clips upon either corner. See Fig. I.

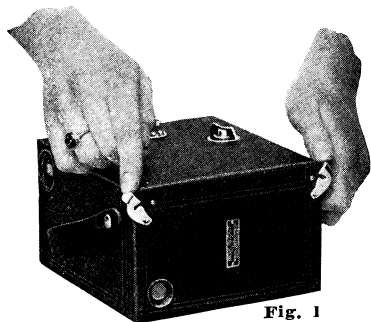


Fig. I

Slide the other clip toward the front of camera.
(There are two clips on Nos. 2C, 3 and 3A sizes.)

II—Remove the film chamber at the side by pulling out upon the winding key. See Fig. II.

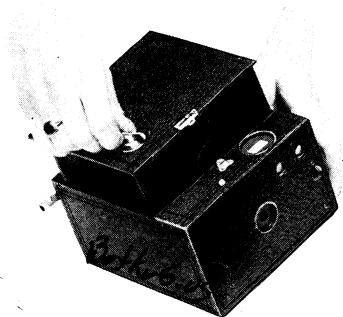


Fig. II

III—Place the empty spool at the winding key, making sure to adjust the slot of the spool to the flange of the winding key.

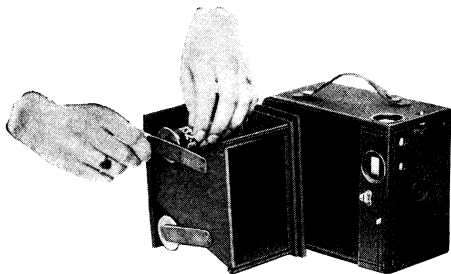


Fig. III

IV—Insert the film cartridge in the now empty compartment. See Fig. III.

V—Break the gummed sticker around the cartridge and wind the black paper around the back of the film chamber, taking care that the printing on the protecting paper appears on the outside. If the printing does not appear on the outside, reverse the loaded cartridge or the sensitized surface will be turned away from the lens, making pictures impossible. In threading the paper through the slot of the empty spool, be careful that it is started perfectly straight. Should this be neglected, the film will run over the flanges of the spool and give considerable trouble. Turn the winding key two or three times to bind the film upon the spool.

VI—Lift the film chamber across the shorter distance and insert it in the outer box with a dip to the right. This draws the paper tight around the corners and allows the film chamber to drop into position. Replace the catches in their original positions so as to lock film chamber securely.

VII—Turn the winding key until a hand appears in the ruby window. A few more turns will bring No. 1 into the center of the window, at which time the film is in position for taking the first picture. After taking first picture, then turn winding key until "2" appears in the ruby window, etc., until you have used up the entire roll of film.

Making the Exposure

The Scout Camera is always ready to take pictures of objects six feet or more away. It is unnecessary to make any adjustments; no focusing is required.

To take a vertical picture, aim the Camera at the object and look down into the view finder.

The image shows those objects included in the picture.

To take a horizontal picture, turn the Camera over on the side and proceed the same as for a vertical picture.

For snapshots, see that the indicator or slide in front of Camera, directly over the lens, is at the top of opening. One operation of shutter release lever is necessary for snapshots.

For time exposures, see that the indicator or slide in front of Camera, directly over the lens, is at the bottom of opening. One operation of the shutter lever opens the shutter, and then after giving sufficient time to the exposure, push the lever again to close the shutter.

The largest diaphragm opening (No. 16) is used for all snapshots and these must be made in ~~it~~ bright light with the sun falling directly on the object to be photographed; otherwise, you will not get a fully exposed negative. The medium opening (No. 32) is used when photographing an object on the water and you wish an instantaneous or snapshot exposure. Do not use this opening to take an instantaneous exposure of a landscape or a portrait. The smallest opening (No. 64) is never used for snapshots; use it for time exposures, such as interiors or outdoor work whenever the Camera can be rested on a table or some stationary object.

Little aid can be given to the beginner in regard to the proper exposure, excepting to say that a portrait ordinarily requires an exposure three times as long as a landscape, because the subject or group is close to the Camera. When the sky is cloudy, the exposure needed is about three times as long as when the sun is shining. Unless it is shining brightly, an instantaneous or snapshot picture will be under-exposed.

When taking a snapshot, it is advisable, whenever practicable, to rest the Camera on something solid. Amateur photographers sometimes think that they need only to press the shutter lever, but the practice of the more expert is to rest the Camera on something when making snapshots. If the Camera is moved while the picture is being taken, it is very apt to produce a blurred picture.

The following table is figured for indoor time exposures made between the hours of 10:00 A. M. and 3:00 P. M., using the largest diaphragm opening. If the medium opening (No. 32) is used, double the length of time; if the smallest opening (No. 64) is used, give four times the exposure.

White Walls and More Than One Window

Bright sunlight outside.....	4	seconds
Hazy sun	10	"
Cloudy bright	20	"
Cloudy dull	40	"

White Walls and Only One Window

Bright sunlight outside.....	6	seconds
Hazy sun	15	"
Cloudy bright	30	"
Cloudy dull	60	"

Medium Colored Walls and Hangings and More Than One Window

Bright sunlight outside.....	8	seconds
Hazy sun	20	"
Cloudy bright	40	"
Cloudy dull	80	"

Medium Colored Walls and Hangings and Only One Window

Bright sunlight outside.....	12	seconds
Hazy sun	30	"
Cloudy bright	60	"
Cloudy dull	120	"

Dark Colored Walls and Hangings and More Than One Window

Bright sunlight outside.....	20 seconds
Hazy sun	40 "
Cloudy bright	80 "
Cloudy dull.....	2 minutes, 40 "

Dark Colored Walls and Hangings and Only One Window

Bright sunlight outside.....	40 seconds
Hazy sun	80 "
Cloudy bright.....	2 minutes, 40 "
Cloudy dull.....	5 minutes, 20 "

V—The lens is carefully corrected to make a good picture but it is not designed to make an enlargement much larger than four or five times the original size of the picture. It is also regulated for ordinary light conditions. Take snapshots from ten until two-thirty in the winter and from nine until four-thirty in the summer when the object is in bright sunshine. Turn your back to the sun—don't point the camera at it. When the light gets weaker, make time exposures.

Removing the Film

I—After making all the exposures on the roll, turn the winding key until all the paper is wrapped around the exposed film.

II—Remove the film chamber as instructed for loading and take out the exposed roll.

III—Use the gummed sticker in the now empty spool to keep the exposed roll tightly rolled.

IV—Do not twist the film on the spool in order to tighten it; it is likely to rub the emulsion and consequently to spoil your pictures.

V—Place the empty film spool in the Camera opposite winding key.

VI—Replace the film chamber in the camera in readiness for use upon the next occasion.

VII—In case you are developing your own pictures, the film is ready for the dark room. If you are having your pictures developed and printed, ask your dealer to show you how you may secure more pleasure from the time spent in photographic work by doing your own finishing.

Important

I—Film should be developed as soon as possible after exposure. This is necessary to obtain the best results.

II—Make sure the film is rolled tightly between the spool flanges before sealing and removal from camera.

III—Examine the lens frequently to see that it is clean. This can be done by opening the shutter, as for time exposures, and removing the film chamber (when there is no film in it), holding the camera so that you can look through the lens. If the lens is found to be dirty, wipe carefully front and back with a clean soft handkerchief.

Developing the Film

These directions for developing are not to be regarded as absolute, but only as general hints from which the amateur should deviate at the first moment he obtains more pleasing results. Remember that the value of any rule in photography is gauged by the excellence or mediocrity of the result secured by following that rule. If you find another way of getting a better or even the same result, use the new way at once; you are widening your acquaintance in picture making.

I—Empty the contents of the Seneca M. Q. tube (both chemicals) into ten ounces of water, mix as per printed directions and place in a tray at your left.

II—In the center place a tray of clear, cool water for rinsing.

III—At the right set the tray of acid hypo solution, for making which complete directions are given upon the box.

IV—Exclude all rays of white light from the room and let the ruby light be at least one and one-half feet from the developing tray.

Developing

I—Unroll the film and detach the entire strip from the protecting black paper.

II—With one end of the strip in each hand, held by a firm clip, pass it continuously through the developer. In about one minute the blank spaces between the pictures will begin to show. In about two minutes the images will show somewhat clearly.

III—Continue the development for five or ten minutes until the contrast between the light and dark parts of the negative has become very distinct or the image begins to show on the back of the film. If some of the negatives, as you hold them between your eye and ruby light, are darker than others, they have been exposed for a longer time, but this difference will be easily taken care of in the printing. It is only necessary to watch the degree of contrast.

Rinsing

I—After developing sufficiently, rinse three or four times in the middle tray of water before you.

II—If desired, the exposures may be cut apart and fixed separately.

Fixing

I—Pass the negatives face down through the solution two or three times before completely submerging them in the hypo solution.

II—If the negatives have not been cut apart, fold the strip several times without allowing it to crack at the ends. Press these down so that the solution will reach all parts of the film. Two or three minutes after the last trace of milkiness has disappeared, it is safe to admit white light to the room. Allow the negatives to remain in the hypo solution for ten minutes longer.

III—Remove the negatives to running water and allow them to remain there for an hour. In case running water is not available, change the water five times the first ten minutes, moving the negatives occasionally. Then allow them to soak for an hour. If desired, the water may be changed four or five times during a half hour of washing. It is essential that the negatives be thoroughly washed.

IV—Suspend the wet negatives in such a way that neither side will come in contact with anything while drying. The Seneca Film Clip will be found to be very convenient for this purpose as well as for handling the films while developing.

Defects in Negatives

Veiled Whites or Fog

Film handled too close to ruby light.
Exposed to rays of white light.

Muddy Effects

Exhausted developer.
Forcing under-exposed negatives in development.
Too warm a developing solution.

Irregular Light Spots

Uneven development due to failure to keep all parts of the negative evenly moistened during development.
Uneven immersion in the developing solution.
Over-exposure.
Air bells upon the film during development.

Milky Spots on Negatives

Failure to keep negatives entirely covered by fixing bath or insufficient time for fixing.

Don'ts

Don't start until the chemicals are thoroughly dissolved.

Don't use a tray for developing if it has previously been used for hypo solution or final washing.

Don't use chemicals after their strength is gone. A hypo solution is exhausted when numerous air bells settle around the edge of the tray and remain there. When the developing solution loses its strength, it turns brown.

Don't allow one ray of white light to enter the room.

Don't hold the strip too close to the ruby lamp; it may cause fog.

Don't let a trace of hypo reach the developer; a drop may spoil the whole solution. Wipe your hands upon a clean towel each time after taking them from the hypo solution.

Don't remove the negatives from the hypo until they are thoroughly fixed. Too long is better than too short.

Don't blame the materials; read the directions over again or ask your dealer.

Making the Prints

I—Mix the contents of the Seneca M. Q. tube (both chemicals) thoroughly with six ounces of water at about 70° Fahr. and place tray at the left.

II—In the center have a tray of clear, cool water for rinsing the prints after developing.

III—Dissolve thoroughly the acid hypo according to directions upon the box and set the tray to the right.

IV—Darken the room to semi-darkness. It is unnecessary to have the room completely dark, since Seneca paper can be handled safely ten feet from an ordinary gas jet or incandescent bulb.

Printing

I—Place the smooth side of the negative against the glass of the printing frame, allowing the dull or picture side of the film to face up.

II—Take one sheet of the developer paper from its light-proof wrapping and lay it concave side down upon the negative. This allows the dull surface of the negative to come into contact with the emulsion side of the paper.

For a negative of normal contrast use Medium Seneca to obtain best results. When the negative is weak or thin, use Hard Seneca. If the dark places (the high lights of the negative) are very dense and the contrast between the light and dark portions very marked, use Soft Seneca. It is very important that paper with the correct degree of contrast be used with each class of negatives. A soft or weak paper, for instance, with a contrasty negative will produce the same result as a contrasty paper with a weak negative. The Hard Seneca meets the average requirements of an amateur more closely than any other degree of contrast.

III—Clamp the back of the printing frame into place and expose to artificial light for several seconds.

With an ordinary gas light and a negative of average density expose Seneca Paper about eight seconds—counting one hundred, two hundred, etc. Incandescent electric bulb is a trifle faster.

Developing

I—After exposure to the bright light, hide the exposed paper until the room has been darkened enough to permit its being handled safely again. Remove the paper from the frame and immerse it in the developer with a quick sidewise motion so that the solution reaches all parts at approximately the same time. The room may now be lighted again to enable the operator to follow the developing more closely.

II—Leave the paper in the developer until the picture has come up to slightly more than the right shades of black and white. The picture will begin to appear in about six seconds.

If the shadows are light or foggy and appear slowly, the paper has not been exposed long enough. If, on the other hand, the shadows are very intense and come up quickly, the exposure has been too long. Before making any exposures, cut a sheet of paper into strips and make trial exposures. You will soon find what exposure gives the best results. Not only will this save a considerable amount of paper, but it will enable you to obtain pleasing results more quickly.

Rinsing

I—At this point take the print from the developer quickly and rinse in the middle tray.

Fixing

I—Submerge the print in the hypo solution and allow it to remain for fifteen minutes. See that the prints do not become matted, since in that case the hypo solution will not fix them evenly. Rinse the hands in clean water before touching developer again, as hypo in the developer causes stains.

II—Wash the prints in running water for an hour, taking care again that they do not become

matted. If running water is not available, change the water ten or twelve times during a half hour. Be sure that the prints are thoroughly washed.

III—Place the prints face down on either stretched cheesecloth or a blotter. The time necessary for drying may be shortened by first laying them upon a piece of clean glass and pressing out the surplus water. Then dry them upon cheesecloth or blotters as before.

Defects in Prints

Foggy Whites

Paper handled in too strong a light.
Paper too old.

Muddy Effects

Forcing development of under-exposed prints.
Exhausted developer.

Irregular Light Spots

Uneven development due to failure to keep print fully submerged during development or to immerse print evenly.
Over-exposure to light.

Stains

Over-development.
Forced development.
Chemically dirty dishes or hands.
Failure to fix a sufficient length of time.

Round White Spots in Clusters

Air bells upon the print after being immersed in developer. Rub the print lightly with the finger to scatter them.

Oval Dark Spots in Clusters

Air bells upon the print after being immersed in the fixing bath face downward. Immerse them face upward and move about to displace the bubbles.

Don'ts

Don't start until the chemicals are thoroughly dissolved.

Don't use a tray for developing if it has been used for pyro developer, hypo solution or final washing.

Don't use chemicals after their strength is gone. A hypo solution is exhausted when numerous air bells settle around the edge of the tray and remain there. When the developing solution loses its strength, it turns brown.

Don't have the lights too bright while the print is in the developer; it may cause fog.

Don't fix the prints too long; it has a tendency to turn them brown.

Don't let a trace of hypo reach the developer; one drop may spoil the whole solution. Rinse the hands in clean water every time you touch the hypo.

Don't blame the materials if your first results are not as good as you expected; read the directions over again or ask your dealer.



Portraits

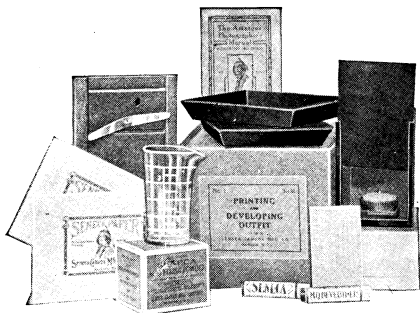
By the use of the Seneca Portrait Attachment, excellent portrait pictures can be made at a distance of three feet from the subject.

This attachment is a Supplementary lens that is fastened in an instant to the front of Camera.

Price with instructions - - - 50c
(Mention size of your Camera)

Seneca Developing and Printing Outfit

Suitable for the $3\frac{1}{4} \times 5\frac{1}{2}$ (post card) and all smaller sizes.



Each outfit contains:

- Two 4 x 5 Japanned Trays,
- One 4-ounce Measuring Glass
- One $3\frac{5}{8} \times 6$ Printing Frame with glass,
- One Candle Lamp,
- Two M. Q. Developing Powders,
- One package, $\frac{1}{4}$ pound, Acid Fixing Powder,
- One package (12 sheets) $3\frac{1}{4} \times 5\frac{1}{2}$ Seneca Paper,
- One Seneca Exposure Meter,

Price, complete - - - - - \$2.00

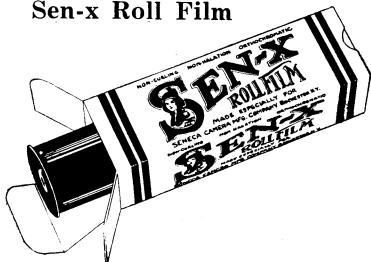
Seneca Metal Tripod



Made of heavy gauge seamless brass tubing. The lower legs, which telescope, are finished in polished brass—the upper, in black enamel.

No. 300 (3 sections)	-	-	-	-	-	-	\$2.50
No. 400 (4 sections)	-	-	-	-	-	-	2.75
No. 500 (5 sections)	-	-	-	-	-	-	3.00

Sen-x Roll Film



Non-Curling—Orthochromatic—Non-Halation

The Sen-x roll film has a wide exposure latitude which eliminates the chance of failure from under or over-exposure. It fits all standard makes of Cameras.

Get a roll of Sen-x film from your dealer. If he does not stock it, send us your order with your dealer's name. We will see that you are supplied with it. Then try the film. If it is not satisfactory to you in every way, we will refund the purchase price.

Sen-x Film for Box Scouts

No. 360 (No. 120) for No. 2 Box Scout, 25c per roll, 6 ex.
No. 348 (No. 116) for No. 2A Box Scout, 30c per roll, 6 ex.
No. 372 (No. 124) for No. 3 Box Scout, 45c per roll, 6 ex.
No. 390 (No. 130) for No. 2C Box Scout, 45c per roll, 6 ex.
No. 375 (No. 125) for No. 3A Box Scout, 55c per roll, 6 ex.

(Be sure to order the film by number. Then you are sure of getting the correct size for your Camera.)

Catalog describing our complete line of Cameras and Accessories will be sent upon request.

Seneca Camera Mfg. Company
ROCHESTER, N. Y.

Greater Possibilities
with the
SENECA
FOLDING SCOUT

EVERY one who owns a Box Scout Camera is sure to be pleased with it and the pictures it takes. He will appreciate its many good qualities and will feel as though something were missing when he goes on a trip without it.

The Seneca Folding Scout, equipped with Rapid Rectilinear lens, is a Camera of greater possibilities. We unhesitatingly recommend it to the amateur who wishes to graduate from the box type of Camera. For one who wants a more speedy, compact instrument, the Folding Scout fills the bill.

This popular model is made in five different sizes. You will be sure to find a Folding Scout that will fit your taste and your pocketbook.

No. 3A (post card) size Folding Scout, fitted with Rapid Rectilinear lens and Deltax or Marvel shutter, \$19.50 list.

Full information and prices on other sizes will be mailed upon request.