



# Amateur Photography

## Enlargements, and How to Make Them

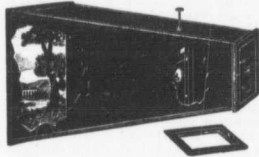
C. A. COLES.



THE popularity of the hand camera has led to the production of an enormous number of small negatives, the prints of which, when placed in albums are quite pretty and form interesting mementos of holiday incidents, but, which when used for decoration of the home or hung on the walls of some exhibition, are dwarfed by the larger pictures. Many of these small negatives are capable of yielding an enlargement of considerable size, which when suitably framed makes a picture bearing the marks of our own individuality, which no bought picture can ever possess.

Enlargements from small negatives are as a rule pictorially superior to small direct prints, inasmuch as the process of enlargement gives an atmosphere and a greater breadth than are manifest in the small print.

Enlargements are generally made in one of the three following methods, which the drawings clearly illustrate: 1. By a fixed focus enlarger, which consists of a conical-shaped box containing the negative at one end and the sensitized paper at the other, with a lens in a fixed position between. As its name implies,



FIXED FOCUS DAYLIGHT ENLARGER.

the distance is "fixed," and only one sized enlargement can be made by its use. 2. By the daylight method used in conjunction with a focussing camera. This requires the least quantity of special apparatus, and is one in which the work room itself becomes the camera. 3. By the artificial light enlarger. At all seasons of the year an enlarging lantern is useful, but as the operations are entirely conducted in the dark room, the making of enlargements will be found to be a most interesting and educative occupation for the long winter evenings.

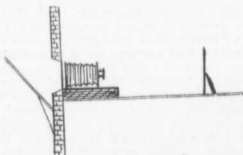
Whether daylight or artificial light is used, the principles of the apparatus are the same. A camera is required fitted with a lens and some means of projecting parallel rays of light through the negative. These rays after passing through the front lens form an enlarged image on the bromide paper placed in front. These parallel rays may be secured by the use of a condenser or a suitable reflector. Bromide paper is generally used for enlargements, because, being very sensitive, the exposure required is so short that enlargements are quickly obtained.

Different illuminants can be used, such as daylight, oil lamps, incandescent gas

or electric light. The illustrations show the approximate positions of the bromide paper, lens, negative, condenser or reflector, and illuminant.

### ENLARGING WITH A LANTERN.

In setting up an enlarging lantern for work, the first thing to be done after lighting up is to put the negative in



CAMERA ARRANGED FOR DAYLIGHT ENLARGING.

position in the carrier (the plain glass slide toward the condenser) and settle the size of the picture on the easel. This determines the position of the various parts and it is only a waste of time to attend to the even illumination of the picture until this has been done. When the negative has been focussed on the easel, it is taken out again, and the position of the light altered, until the screen shows a perfectly even illumination. The negative is then replaced in the carrier, focussed as sharply as possible, and the red or yellow cap is put on the lens ready for the exposure.

Focussing should be done on a sheet of white paper the same size as the piece of paper that is going to be exposed, so that there may be no doubt about the selection of exactly that part of the original negative that is to appear in the enlargement. It is a mistake to use any smaller stop than is necessary to get the required definition. It not only prolongs exposure, but with some forms of illumination it makes the lighting uneven. In enlarging either with the camera or the lantern, the operator should stand beside the sheet of paper on the easel and by means of cardboard he may shade parts of the picture so as to let the rest have longer exposure and so become darker. This is a very valuable power, and a great deal can be done to improve the result, with comparatively little skill. The card must be held well from the face of the paper on the easel or be kept moving to prevent its edge from showing as a hard line on the finished picture.

Some enlargements are rendered very effective by exposing through a hotting silk. A piece of the silk slightly larger than the enlargement to be made is tightly stretched over a piece of clean glass and is used by being placed just in front of the bromide paper on the easel. The most effective distance away is about the thickness of a piece of glass. A  $2\frac{3}{4}$  x  $4\frac{1}{4}$  negative enlarged through hotting silk on to 15 x 12 cream crayon paper and

then toned sepia gives a beautiful and striking result. It is quite a different softness from that got by leaving the picture out of focus, and is often the making of an enlargement which without some such device would be microscopically sharp. It also hides pinholes and other slight blemishes on the negative.

### EXPOSURE.

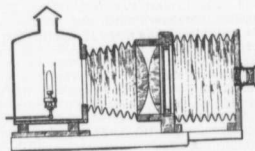
No hard and fast rules can be laid down in regard to exposure, as so much depends upon the quality of light, density of negative, stop used, and size of enlargement. However, in each packet of bromide paper will be found two small sheets on which to make trial exposures and so save the large sheets.

### DEVELOPING.

The best developer to use is that recommended by the maker of the paper employed. A popular formula is amidol, 50 grains; sodium sulphite, 650 grains; potassium bromide, 10 grains, and water, 20 ozs.

To develop, lay the sheet of paper face upwards in a clean dish and soak it in clean water. Pour this off and drain. Then flow the developer evenly over the wet paper. Rock the dish gently, and if correctly exposed, the image should appear in a few seconds and full development in about one minute. When development is complete pour off the developer and transfer the print to the fixing bath of hypo, 4 oz.; potassium metabisulphite, 200 grains, and water 20 oz. Leave it in the fixing bath for 10 minutes then wash well for 30 minutes and hang up to dry.

The print after drying is ready for trimming and mounting. A good photographic mount or freshly made starch



ENLARGING LANTERN FOR ARTIFICIAL LIGHT.

paste should be used for this purpose. The whole process once understood and mastered will not be half as intricate or difficult as it may at first seem to be.

I find my highest consecration in that which I call my ideal. My ideal lies in my ambition. My ambition grows out of my purpose in life. My purpose in life is so to live that when I have finished my course, men can say of me, "The world has been made better by his having lived in it: we have been lifted one step higher." That is my highest consecration.—John Morris Stokes.