

AMATEUR PHOTOGRAPHY.

BY SHARLOT M. HALL—No. 2.—LEARNING TO USE THE CAMERA.

Each style of camera—as the “Premo,” “Normandié,” “Marlboro” and others—has distinguishing features of its own, and an accompanying booklet in each case describes plainly the working of the various parts. Study this booklet until you know every spring and hinge in the instrument, can find each one in the dark and can open and close all parts without bungling. This is very important, because some of the most delicate work must be done in as little light as possible. Having learned its mechanical working, take the camera and an empty plate-holder outdoors and go through all the motions of selecting and taking a picture at least a dozen times before you venture to put a plate in the instrument. This is not very exciting, to be sure, but it will greatly reduce the percentage of failures that bestrew the amateur's pathway, two-thirds of which are due to haste and impatience of instruction. The camera is an instrument of such mathematical precision and the materials for use with it are so carefully prepared that failure is almost impossible, if the worker is reasonably patient and painstaking.

PLACING THE CAMERA.

We will suppose that one begins with a tripod camera and, of course, has learned to attach the tripod before coming outdoors. Choose what you think would be a good view and set up the camera with the lens pointing toward it. Spread the legs of the tripod so that one will be in front and one on each side of the camera, leaving free space to work behind the instrument. Be sure that the camera stands perfectly level or the picture will run slanting or bias across the ground glass and consequently across the negative when it is made. If your eye is not accurate, fill a tiny vial with alcohol, having an air-space; cork the vial tightly and you have as good a pocket level as you could buy. Lay this on top of the camera and move the tripod until the air bubble is just in the center of the vial; the picture will then be straight. The eye will naturally with practice become trained to the requisite accuracy, but the vial will prove a good friend until this time arrives. Now the focusing cloth comes in. Full-fledged photographers use a square of black velvet, but I have got along very well with two thicknesses of black calico about a yard square. At the moment you look through the ground glass you will see the scene of the cloth; without it the image appears only a faint, insubstantial, shimmering blur of earth and sky. Now draw the cloth over your head and about the camera, leaving only the ground glass uncovered. The picture comes out in the darkness, showing all the beautiful tints of sky and landscape—but upside down, and more or less distinct, as the focus, or distance from the object pictured, is made more or less correct. Draw the bellows only back or forward until the image is sharp and fine as a printing. It may be necessary even to move the camera closer or farther away from the subject.

THE DIAPHRAGM OR STOP.

You have probably discovered ere this a little slit in the top of the tube which holds the lens and fitting into this a removable metal slide with a hole in each end, one of which is larger than the other. There may, perhaps, be extra slides with extra small or large holes. The slide is a *diaphragm* or *stop* and is used to shut out all light from the lens, except what comes through the hole. The purpose is to control the amount of light passing through the lens in order to get a perfect image on the ground glass. Either too much light or not enough will be equally fatal to a good picture. The smallest stop is seldom used except with extremely sensitive plates, the middle size answering most purposes. For indoor work or on cloudy days larger stops, or even the largest, may be needed.

When focusing outdoors try the small stop, then a larger one and compare results; that one is best which shows a clear picture to the very edge of the glass, with no misty or hazy looking spots. To change the stop simply, pull out the slide and put it back upside down.



A PERFECT LANDSCAPE EFFECT.

EXPOSING THE PLATE.

Having secured the correct focus, unfasten the ground glass from the back of the camera or drop it down like a trap-door—as the model may provide—and adjust the plate-holder in place. A holder must always fit the camera tightly, for otherwise white light will leak in

and spoil the picture. This is the most common fault of cheap cameras and the source of many seemingly inexplicable failures.

If there are any doubts on the subject, keep a strip of black velvet about half an inch wide and long enough to go around the camera and pin easily; pin it over the line between camera and holder and let it remain until the exposure is made. Never remove the focusing cloth from the camera until the exposure is over, and if you use a hand camera, throw a black silk handkerchief over it after the plate-holder has been attached. Now for the exposure: draw very gently the slide of the plate-holder almost out, take the cap or hood off the end of the lens, count four, replace the cap, push back the slide—and the thing is done. It will be worth while to repeat all this a good many times, while I introduce “our friend the enemy,” LIGHT.

It is light that makes and unmakes the picture, not the machine we have just been learning to use. That machine is like a mouse-trap; it captures, but it does not create. It is merely a cunningly arranged light-trap, and the finest photograph is only a contrast of light and shade; that is, light and absence of light. The light slips in through the lens and shines brightly on some parts of the sensitive plate and dimly on other parts that are shadowed by the objects in the picture, changing the delicate chemicals with which the plate is coated, so that when