

SIMPLE PLATE CAMERA

I MADE a 3-1/2 in. x 2-1/2 in. plate camera, after some general experience of photography, to eliminate waste when my needs could be met with a single photograph.

Like many another, I had taken up photography in the grip of an enthusiasm that left little room for reflection. For a time my Ensign Selfix 820 camera was in constant use. I did not dream that with returning rationality my requirements would be drastically curtailed.

By GEOMETER

But what can you do with a roll film camera, unless the one urgently-needed photograph can be taken near the end of a film? If it is near the beginning, you must waste the remainder of the film or wait until it can be used on other subjects. Soon I did not wish to do either. I wanted single photographs, or at most a few, without waste and without loss of time. Obviously, I needed a plate camera.

By this time I had used the Ross Xpress lens of the Selfix for several purposes besides the original one. It was the basis of the apparatus for the Profile Projector in ME of November 26 and December 3 and 10, 1959. Mounted on a 3 in. square of 1/8 in. Tufnol, it had done copying and enlarging in the dark room. I could easily transfer it to a plate camera on its Tufnol mount, which was drilled near the corners for 2 BA bolts.

This lens has everything to simplify camera construction. The roll-film cameras are themselves very cheap now at second-hand. The maximum aperture is 3.8 and the focal length 105 mm. By turning the front cell, you can focus from infinity to 4 ft. With supplementary lenses you can get within inches of subjects. The Epsilon shutter gives a choice of speeds from "time" to 1/250 second.

With these built-in facilities, the plate camera had only to be a suitable design of box to take lens and slides. Diagrams A and B show its main features.

The wood is oak. Front, back and sides are 1/2 in. thick; top and bottom are 1/4 in. thick. Front and back are the full width of the camera with the sides fitted between them. Top and bottom cover all. Countersunk screws hold the pieces together.

As shown, the right side is shorter than the left to leave a space through which the slide with the plate can be inserted. The left side has a step 1/8 in. deep into which the inner end of the slide engages. The back has two integral bosses through which the pins UV of the Y-shaped slide holder pass.

These pins are stepped at the ends to bear over the outer edge of the slide as the slide holder is tightened by its nut. They prevent the slide from being inadvertently withdrawn, as might otherwise happen when the cover was removed for taking a photograph. Details of the fitting will be given in my next article.

I chose the simplest single slide holder: A. P. Paris made by Posso Ltd, Paris, and distributed by Actina

Ltd. You can buy as many as you need at photographic dealers. Diagram C shows details when the thin metal cover is drawn off. There is a spring against which you push the end of the plate until it can be slipped under two lugs XY. Then you replace the cover. This is done with a safe-light in the dark, or with a changing bag.

You push the slide into the camera, tighten the slide holder, and draw out the cover, ready to take a photograph. As you draw out the cover, a strip of velvet in the slide comes up against the right side of the camera at W, to prevent light from entering. You take the photograph, push the cover back into the slide, and remove the slide from the camera. I fitted the original Albada view finder so that I could see what I was taking.

To get the length of the camera, I checked the lens at its different settings, after screwing the front on a wood base with a ground glass plate in a bracket, as at D. A piece of cloth over top and sides excluded light so that I could see the image on the plate. The correct length Z, after the plate had been set, agreed closely with the dimension of the Selfix. □

