

TECHNOLOGICAL NOTE: A CHEAP STEREOPHOTOGRAPH APPARATUS

by

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The need for a gadget for taking stereo pairs of photographs has been evident for some time. What was needed was a cheap, pocket-sized gadget that would fit all makes of cameras, could be used for close-up photos, large immovable objects and even landscapes. It had to be simple and easy to operate.

Beam splitters were looked at, as were stereo-rocking boards. Beam splitters were found to be limited in close-up work, and stereo-rocking boards have serious limitations when it comes to size and immovable objects.

The principle of stereo-vision involves an understanding of the significance of inter-pupillary distance and the angle of the retina to the visual mid-line. Thought was therefore applied along these lines.

Some years ago when the author was Technician in the Zoology Department of Rhodes University, Grahamstown, the late Dr. Robin Bolt and he had experimented with stereo-photography. The stereo-plate and technique now described were the outcome of the experiment and the need for such apparatus in the Bernard Price Institute for Palaeontological Research at the present time.

The Plate

A 6 mm thick aluminium plate 20 cm x 7,5 cm is slotted as per the drawing in Figure 1. A tripod screw hole is drilled as shown.

The Technique

The plate is fitted to a tripod, the camera is fitted to the screw in the slot and tightened up in the central position and focused on the object to be photographed. A reference point is chosen on the object, usually in the centre of the field of view. The camera is now moved to the extreme right and again the reference point is centred. The camera should now be at an angle to the object photographed. An exposure is made and the camera moved to the extreme left and the procedure repeated.

To help line up the reference point on this specimen a dry transfer dot was placed on the view finder of the camera used by the author.

Figure 2 is a photo of the apparatus set up for use.

Figures 3, 4 and 5 are stereo-pairs of a close-up of a fossil, a moderate sized fossil skull and a landscape scene, which all show that a very good illusion of depth is obtained.

Stereo-pair enlargements for use with a large type stereo-viewer are possible and very successful.

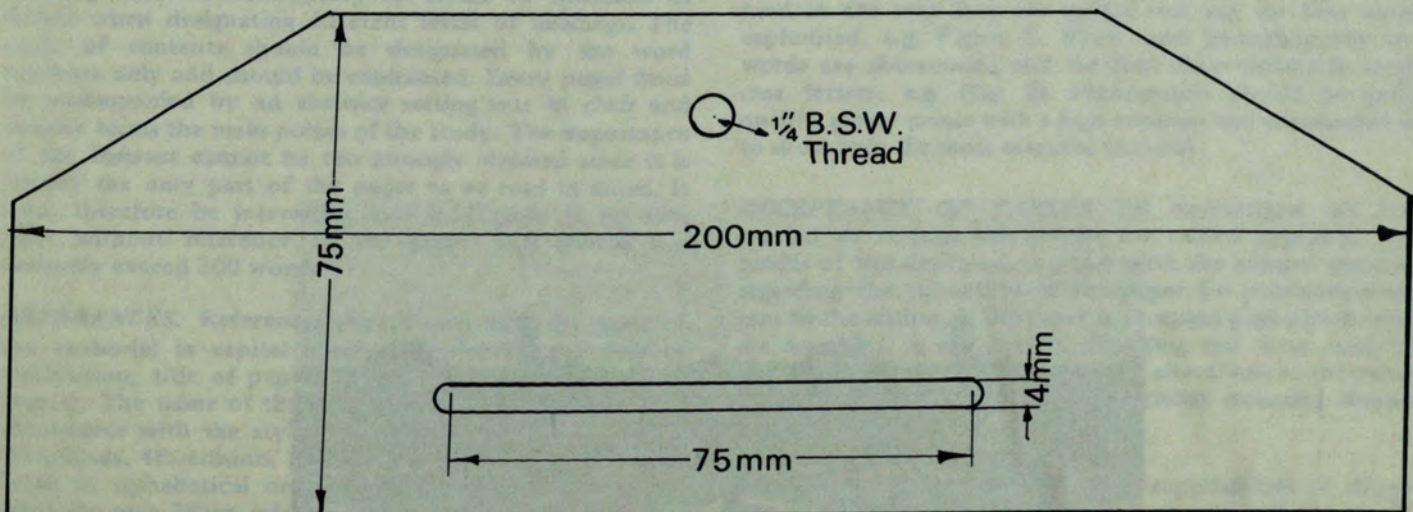


Figure 1.

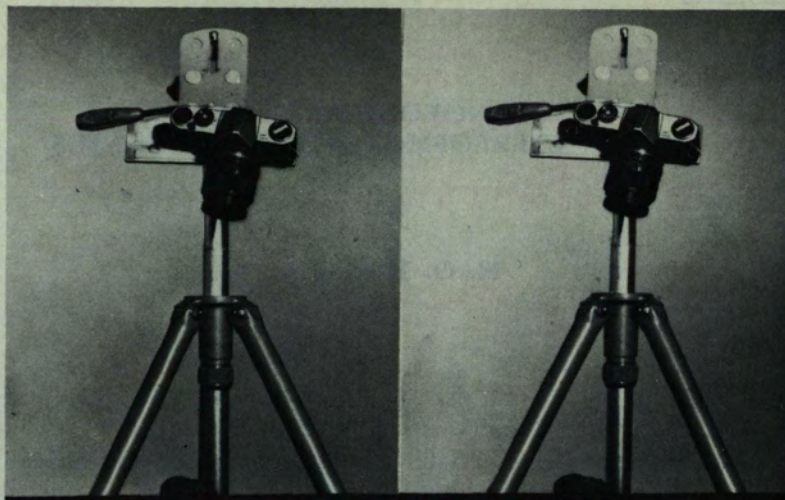


Figure 2.

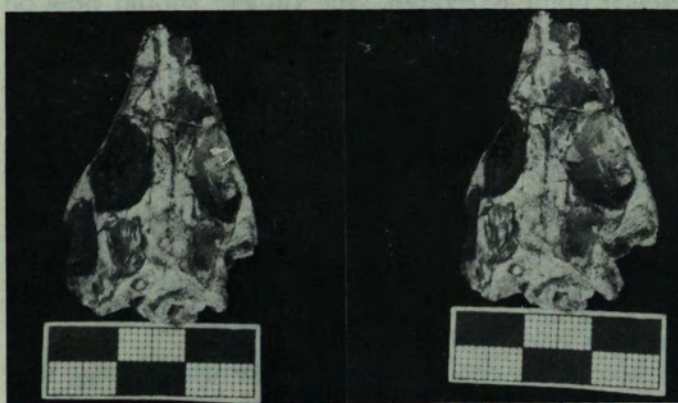


Figure 3.

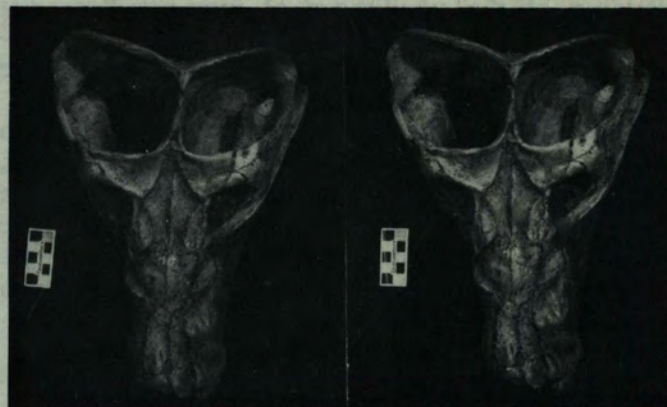


Figure 4.



Figure 5.