INEXPENSIVE APPARATUS FOR SERIAL RADIOGRAPHS

REFERENCES


9. Peterson, H. O. Cited by Childe and McNaughton.2


AN INEXPENSIVE SEMI-AUTOMATIC SERIALOGRAPHIC APPARATUS FOR ANGIOGRAPHY

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Numerous articles have advocated the need for rapid serial cerebral angiography.1–10 The apparatus required is usually expensive, or technically difficult to use. The following method of obtaining rapid multiple radiographs is presented so that the benefits of serial angiography may be had with a minimum of expense and technical personnel.

The method utilized consists of an easily constructed apparatus which allows serial radiographs to be made at one-second intervals by one technician. The x-ray cassettes are permitted to fall in position and are exposed semi-automatically through the interval timer of an x-ray machine. This is accomplished by the manual opening of the spring door, and an exposure is made when the door closes as a new cassette falls into position.

DETAILS OF CONSTRUCTION

The overall dimension of the machine is 63 inches high by 18 inches wide by 23 inches deep. This is built to accommodate a standard 10×12 inch cassette. Slight variations of width are necessary if other sizes are used (Fig. 1).

The sides are of 1/2 inch plywood and are separated 13 1/2 inches so a 10×12 inch cassette may slide freely on its side. The front panel is in three parts. The upper and lower sections are lead-covered plywood while the middle third is masonite. The back is open except for the cross pieces of the 2×4's for stability. The plywood sides and front are built inside a framework of 2×4's for sturdiness.
Fig. 1

Fig. 2

CROSS SECTION

Fig. 3

WIRING DIAGRAM

Fig. 4

SWITCH DETAIL