Oct. 3, 1950 L. I. WEISSMAN 2,524,216

ADJUSTABLE FILM HANGER

Filed Oct. 27, 1948

Fig. 1.

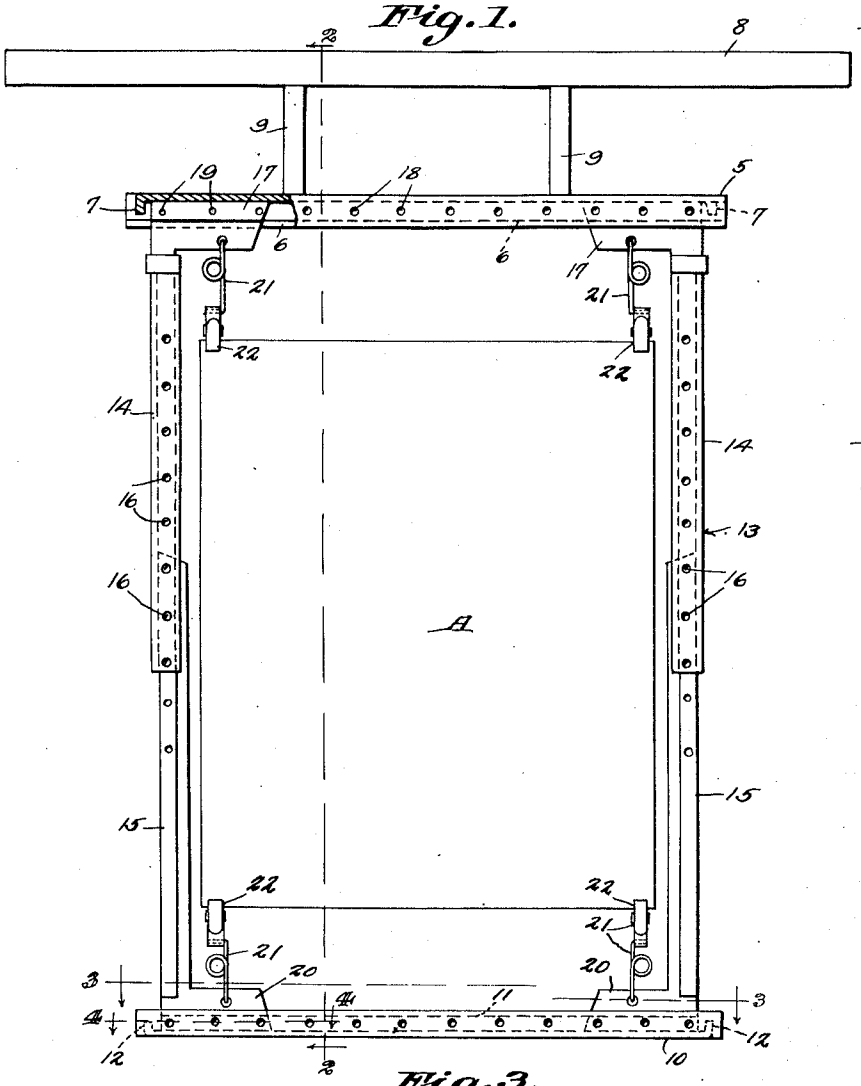


Fig. 2.

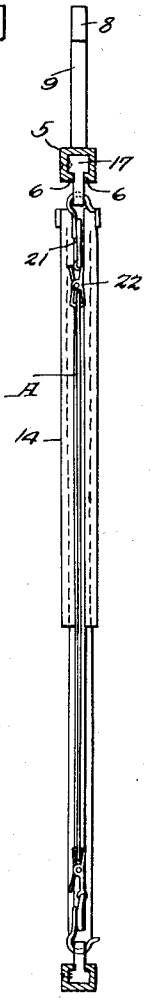


Fig. 3.

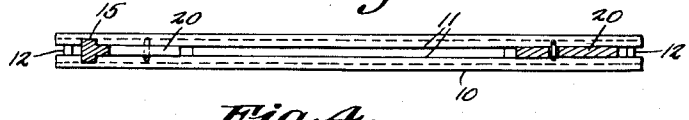
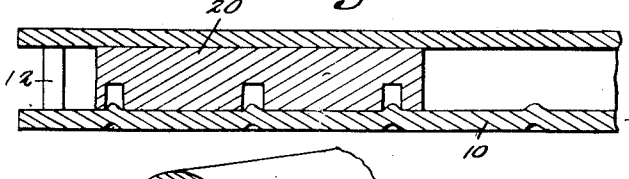


Fig. 4.



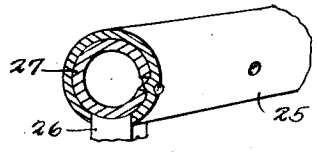


Fig. 5.

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ADJUSTABLE FILM HANGER

Lorant I. Weissman, Akron, Ohio

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2 Claims. (Cl. 95—100)

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This invention relates to film hangers especially designed for use in hanging X-ray films, the primary object of the invention being to provide a hanger which will be capable of adjustment for use in hanging films of various sizes.

Another important object of the invention is to provide an adjustable hanger wherein the hanger may be readily and easily adjusted without the use of tools.

Still another object of the invention is to provide a hanger which will hold the film hung therein, in stretched condition, so that the film may be dried and accurately examined.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is an elevational view of an adjustable film hanger, constructed in accordance with the invention.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is an enlarged sectional view taken approximately on line 4—4 of Fig. 1.

Fig. 5 is a fragmental perspective view illustrating the end members of the device constructed of tubular material.

Referring to the drawing in detail, the hanger comprises an upper supporting bar 5 which is of channel bar construction with its open side disposed downwardly, the longitudinal edges of the open side of the bar being turned inwardly providing spaced flanges 6. The upper wall of the supporting bar at each end thereof, is turned downwardly providing stops 7 at the ends thereof.

The reference character 8 indicates a hanger rod which is connected with the upper supporting bar 5 by means of the spaced vertical bars 9, the hanger rod 8 being designed to fit within suitable brackets (not shown) for hanging a film for examination and drying purposes. The reference character 10 indicates the lower bar of the hanger which is also constructed of channel bar material with its open side disposed upwardly, the longitudinal edges of the open side being extended inwardly providing flanges 11. Portions

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of the lower bar are extended upwardly at the ends thereof providing stops 12.

The side bars of the hanger are indicated generally by the reference character 13, which side bars comprise telescoping upper and lower sections 14 and 15, respectively, the section 15 being movable within the open end of the section 14 so that the length of the hanger may be adjusted by moving the sections 15 at the sides of the hanger within the sections 14.

Enlargements 16 are formed on the inner surfaces of the section 14, which enlargements are adapted to move into openings formed in the sides of the section 15, frictionally holding the sections 14 and 15 of the side bars, in their positions of adjustment.

At the upper ends of the section 14 are T-shaped plates 17 that extend laterally from the upper sections, the T-shaped plate being fitted within the open side of the upper supporting bar 5.

As shown, the bar 5 is formed with inwardly disposed enlargements 18 that are adapted to fit into the depressions 19 of the T-shaped plates 17, thereby holding the T-shaped plates 17 in their positions of adjustment along the bar 5. The stops 7 at the ends of the bar 5 act to restrict outward movement of the T-shaped plates from becoming disconnected from the upper supporting bar 5.

At the lower ends of the sections 15, are inwardly disposed plates 20 that are of T-shaped construction to fit within the lower bar 10, the bar 10 being provided with enlargements that fit into depressions formed in the plates 20 to hold the plates in their positions of adjustment. The stops 12 of the bar 10 act as means to prevent the lower ends of the side bars from becoming disconnected from the lower bar 10.

Openings are formed in the plates 17 and 20, which openings accommodate the hooks formed at the ends of the spring arms 21 of the film engaging clamps 22 that are shown as pivotally connected with the spring arms 21.

These clamps 22 are designed to clamp the edges of the film hung on the device, the film in the present showing being indicated by the reference character A.

From the foregoing it will be seen that due to the construction shown and described, I have provided a film hanger which may be adjusted longitudinally and transversely so that it will properly support films of various sizes.

In the form of the invention as shown by Fig. 5 of the drawing, the reference character 25 indi-

cates a portion of an upper or lower bar of a hanger wherein the upper and lower bars are constructed of tubular material, the tubular material having an open side to permit the plate **26** secured thereto and which connects with the adjacent bar of the hanger, to extend therethrough, the plate **26** being connected to the inner tubular section **27** of the supporting bar for movement therein.

Having thus described the invention, what is claimed is:

1. In a film hanger, an upper supporting bar of channel construction having its open side disposed downwardly, a lower bar of channel construction having its open side disposed upwardly, spaced parallel flanges extending inwardly from the open sides of said upper and lower channel bars, providing guideways, connecting bars connecting the upper and lower bars, T-shaped plates at the ends of the connecting bars fitted within the open sides of the upper and lower supporting bars adjustably connecting the side bars to the upper and lower supporting bars, means for holding the connecting bars in various positions of adjustment with respect to the supporting bars, and clamps forming a part of the hanger clamping a film securing the film to the hanger.

2. In a film hanger, an upper supporting bar of channel construction having its open side disposed inwardly, a lower bar of channel construction having its open side disposed upwardly, parallel flanges extending inwardly from the open sides of said upper and lower channel bars providing guideways, connecting bars, said connecting bars embodying telescoping sections, T-shaped plates at the ends of said connecting bars moving within the open sides of the upper and lower supporting bars, stops on the supporting bars engaged by said T-shaped plates restricting lateral movement of the connecting bars with respect to the supporting bars, means for securing the connecting bars in adjusted positions with respect to the supporting bars, and clamps secured to the T-shaped plates for clamping a film, securing the film to the hanger.

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