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A. J. NIEDERMAYER

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FILM HANGER CLIP

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FIG. 1.

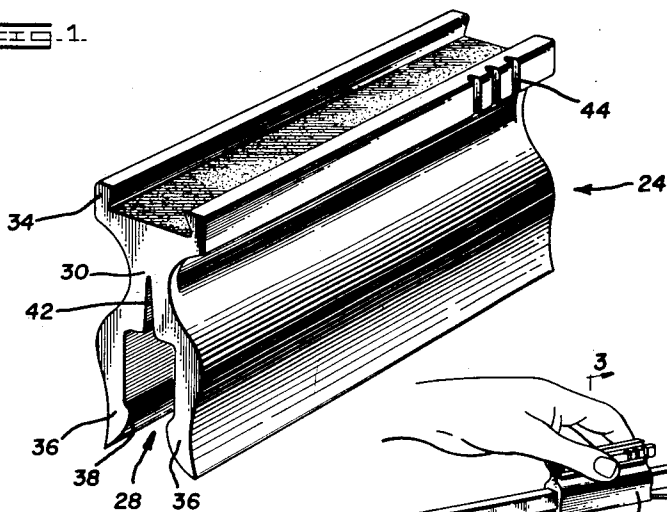


FIG. 2.

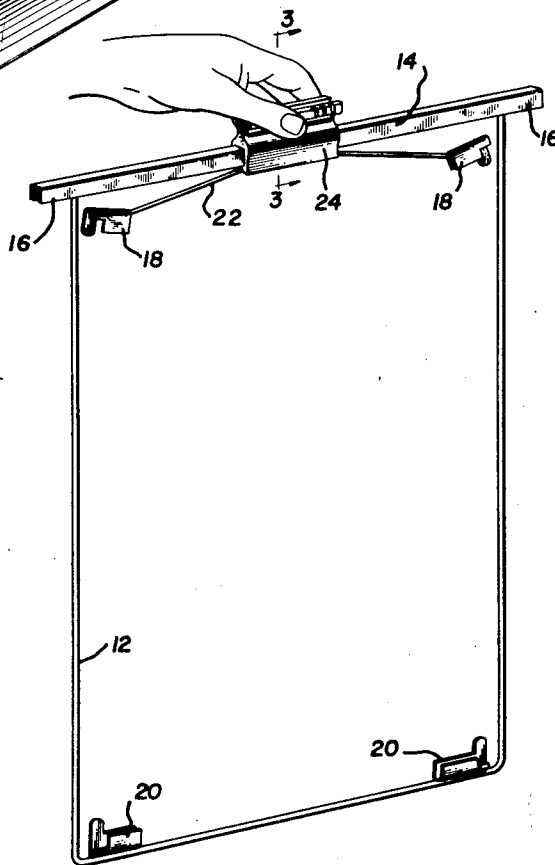
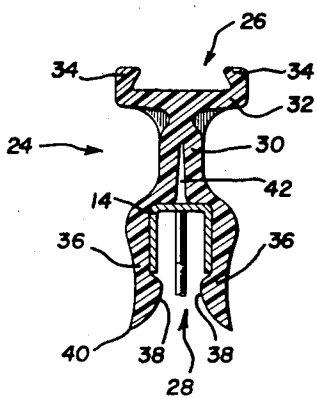


FIG. 3.



INVENTOR.
ALFRED J. NIEDERMAYER

BY
Arthur H. Light & Arthur H. Light
ATTORNEYS

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FILM HANGER CLIP

Alfred J. Niedermayer, 960 Washington Ave.,
Evansville 13, Ind.

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2 Claims. (Cl. 40—23)

This invention relates to handles and more particularly and specifically to a removable, identification handle for X-ray film hangers.

It is, and has been, a common, prevailing practice in radiological laboratories to process X-ray film while it is clamped or clipped within a generally rectangular hanger frame. The usual hanger frame is provided with a side projecting headbar component which overhangs and rests across the top of opposed sides of the respective developing, fixing and washing tanks used in the processing of such film.

It has been found that in practice, particularly in the hospital-associated radiological laboratories, substantial time is consumed and wasted by technicians and doctors in hunting through the tanks and viewing X-ray films in process in an attempt to locate particular X-ray films in which doctors have an immediate interest and desire to read wet without waiting for full processing.

It is, therefore, a general object of this invention to provide a unique identification handle for X-ray film hangers which will serve, in use, to eliminate the consumption of time and eliminate the annoyance and errors which attend the location and accurate identification of X-ray films which are in developing process.

It is a principal object of the present invention to provide a unique handle member which is quickly and easily attached and removed from the top headbar component of an X-ray film hanger.

A further object of the present invention resides in the provision of a unique handle construction for use on X-ray film hangers which may be readily and inexpensively manufactured in multiple sets of varying colors to permit use thereof in a manner to allow for quick color identification of film hangers to which the handles might be attached.

It is another object of this invention to provide a unique handle member which is quickly and easily attached and removed from the headbar component of an X-ray film hanger which carries an easily applied and removal visual identification in a prominent position on the upper surface of the hanger where it is readily visible when the film hanger is supported in a processing tank in the usual manner.

Another object of this invention resides in the provision of an identification handle of the type described which, in addition to visual identification, provides for a coded, sensual or touch identification which can be detected and read by touch in a darkroom with ease and accuracy.

Still another and further object of this invention resides in an identification handle for X-ray film hangers which resiliently snaps onto the upper or headbar component of the usual hanger frame to be securely retained thereon and insure against loss or displacement so as to maintain a positive identification of the hanger at all times, and to further provide a secure handgrip to facilitate handling of the hanger frame during film processing.

Still a further object of this invention lies in the provision of a unique identification handle of the type de-

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scribed which is attractive, inexpensive in manufacture, and durable and long-lasting in use.

Still further objects and advantages of this invention will become more readily apparent to those skilled in the art when the following description is read in the light of the accompanying drawings in which:

Fig. 1 is a perspective illustration of an identification handle made in accordance with the present invention.

Fig. 2 is a pictorial illustration of the identification handle in use on a film hanger.

Fig. 3 is a vertical section through the identification handle and film hanger as shown in Fig. 2.

In the handling of X-ray film during processing in a radiological laboratory, and particularly in development of the film in darkroom procedures, it is the common practice to utilize for each film negative, a film hanger of the type generally designated at 10, Fig. 2, in the drawings. Such hangers consist of a generally U-shaped wire or metallic frame 12 having an inverted, channel-shaped headbar or rail component 14 bridging the open end of the U frame and extending, as at 16, for a spaced distance beyond each side thereof. The side extensions 16 of the frame headbar provide supporting shoulders which normally engage and rest on the top edges of opposed sides of a processing tank to suspend the frame within the developer, fixer or wash solution within the tank.

The hanger frame 12 is provided, top and bottom, with spring type clips 18 and 20 respectively, the top clips 18 being supported on the remote ends of a rod 22 secured centrally to the top frame component 14, and the lower clips 20 being secured directly on the U frame 12. An X-ray film (not shown) is supported within the frame by these clips which engage in the areas of the corners of the film.

The identification handle 24 consists of a molded body form of plastic, metallic or other suitable material. The handle body form consists of a generally elongated block member having an undercut channel 26 longitudinally of the upper face thereof, and having a grooved channel 28 formed longitudinally in the bottom edge or face thereof.

In more particular detail, the handle block in cross sectional configuration, Fig. 3, consists of a central vertical web section 30 merging at its upper end into a perpendicular T-head 32 which presents a flat upper face defined on each edge longitudinally thereof by an angular, overhanging bead 34. The overhanging beads 34 on opposed edges of the upper face define and form the undercut channel 26. Further, the surface of the face defined between the beads 34 is stippled, or otherwise roughened, in manufacture to provide a receptive surface for chalk or crayon identification application thereto which can be readily erased or washed off subsequently.

The lower end of the central web portion 30 flows into the lower bifurcated end of the handle defined by two identical depending leg members 36 spaced apart and, in turn, defining the grooved channel 28. The grooved channel 28 is generally rectangular in cross section at its innermost end simulating the cross sectional shape of the headbar component 14 of a typical hanger frame. The inner, opposed faces of the leg members 36 adjacent the mouth of the channel 28 are provided with rounded beads 38 defining arcuate shoulders outwardly of the rectangular shaped inner area of the channel and restricting entry thereinto from below the handle. The beads 38 taper outwardly and downwardly to pointed ends 40 at the extremity of each leg 36.

The central web section 30 of the handle is provided with a longitudinal groove 42 opening upwardly therein from the central rectangular area of the grooved channel 28 whereby the flexibility of the legs 36 is increased by general elongation. Further, the groove 42 is tapered

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inwardly in a vertical direction to permit a wedging attachment of the handle to a filing card, envelope or folder for content identification in filing or transmittal procedures.

To complete the handle construction, the outer, generally vertical edge face of one of the overhanging beads 34 on the upper T-head of the handle is provided with vertical notches 44 therein in selective numbers and spaced relationships so as to provide a touch-system code for identification of the handle and the X-ray film supported in the hanger frame to which such handle is removably attached.

In use of the identification handle hereinbefore described, it is readily seen that several visual aids are provided in addition to the sensual touch identification means offered by the system of coded notches. First, by supplying handles in a multiple of sets with each set being of a different color, it is seen that a doctor or patient code system can be quickly established by color alone. If a doctor code is set up in colors, then patient identification can be established by written indicia on the textured upper surface or by use of indicia bearing tabs insert in the slot 26. For example, a paper or card form of tab bearing identification indicia relating to the doctor or patient with whom the particular X-ray film is associated is telescopically inserted in the channel 26 with the edges retained beneath the overhanging beads 34 on either side of the channel. Such identification tabs might be Celluloid or plastic covered for protection, and they could be adhesively backed for retention in handle groove 26.

The bifurcated legs 36 of the handle are then forced down over opposed sides of the upper head component of the hanger frame. As seen in Fig. 3, the head component 14 will be moved into registry with the inner rectangular area of the groove 28 locating the beads 38 in a retaining position outwardly therefrom. Thus, the handle is securely, but detachably, connected to the hanger frame.

The utilization of a coded system of notches 44 on the vertical edge face of the handle further permits the quick and accurate identification of an X-ray film hanger by a sense of touch in a darkroom or other unlighted processing area.

It becomes obvious that the unique handles herein-

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before provided may be easily removed from the hanger frames and reused with a change in the printed or visual identification associated therewith, as it is also obvious that variations in colors of the handles would serve to code or identify X-ray films in groups determined by association with particular doctors, a particular floor or hospital ward, or particular patients.

From the foregoing it is seen that a unique and highly useful identification handle has been provided which functions to satisfy all of those objects and advantages heretofore set forth. It is further evident and contemplated that variations in materials, specific configurations and other physical characteristics are possible within the scope of the inventive concepts hereinbefore defined, and it is suggested that the only limitations applicable hereto are those made necessary by the prior art and by the hereinafter appended claims.

Having thus described and explained the construction, operation and functional advantages of my invention, what I desire to claim is:

1. An identification handle for attachment to an X-ray film hanger, comprising an elongate body of substantially T-shaped cross section, a flat surface on the upper face of the head portion of the body, undercut raised beads formed longitudinally on opposed sides of said head portion defining with said flat surface an identification tab receiving channel, the lower stem portion of said body being bifurcated into spaced resilient leg members defining a film hanger receiving and retaining groove longitudinally of said body, a wedge slot opening inwardly from the inner extremity of said hanger receiving groove, said wedge slot being of lesser transverse dimension than said groove.

2. An identification handle as defined in claim 1 wherein said resilient fingers are provided on opposed surfaces thereof adjacent the outer extremities with arcuate beads restricting the mouth of the groove defined between said fingers.

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