

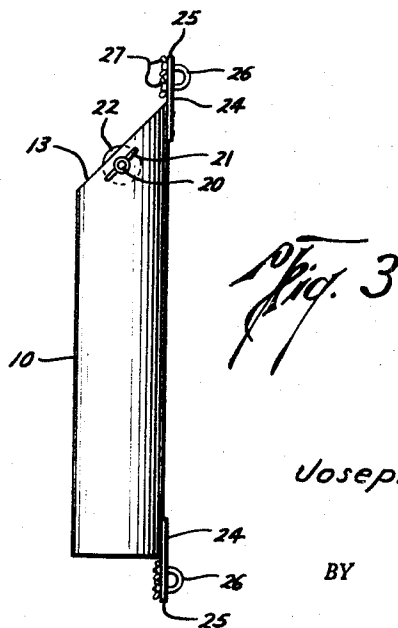
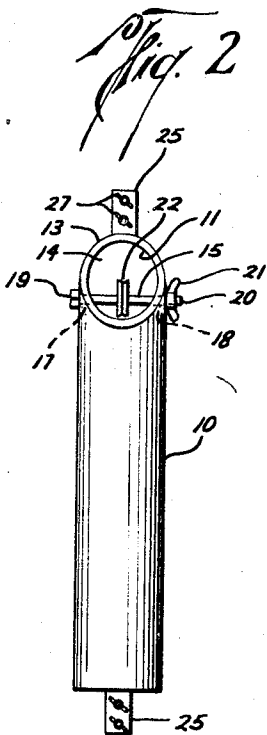
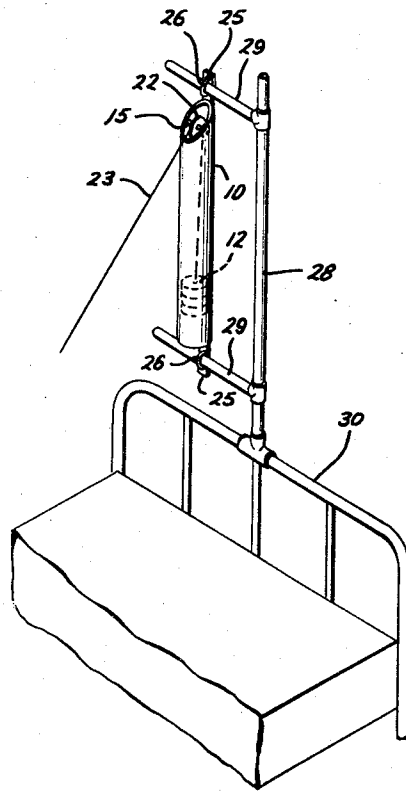
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TRACTION WEIGHT SHIELD

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TRACTION WEIGHT SHIELD

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2 Claims. (Cl. 128—75)

This invention relates to surgical apparatus employed in applying traction to a portion of a patient's body for which such treatment is required, and more particularly to shield or guard for the traction weights employed in such treatment.

Traction is normally applied to a portion of a patient's body, most commonly the leg, by means of weights suspended from a cord or wire line which is trained over a pulley and secured to that portion of the patient's body which is to be held in traction. Conventionally, the pulley is supported from an elevated bracket and the weights are suspended therefrom so that they hang freely in the open. In such arrangements, the weights are subject to bumping or other contact by persons moving about in the vicinity of the patient with attendant pain and possible injury to the patient.

Accordingly, it is a primary object of this invention to provide an effective form of protective shield for enclosing the suspended traction weights.

A further object is to provide a traction weight shield which also provides support for the pulley over which the traction weight suspending line is trained.

An additional object is the provision of a traction weight shield including relatively simple fixtures by which the shield is easily connectible to, and releasable from, a supporting frame.

A more specific object is to provide a traction weight shield which includes a fully closed tubular body adapted to enclose traction weights and having its upper end sloped or cut away at an angle to its longitudinal axis, and further provided with a pulley-supporting shaft mounted transversely of the angular opening through which the traction in line is led, the body having a pair of brackets at its upper and lower ends for securing the shield to a supporting frame.

Other and more specific objects and advantages of this invention will become more readily apparent from the following detailed description when read in conjunction with the accompanying drawing which illustrates one useful embodiment in accordance with this invention.

In the drawing:

Fig. 1 is a perspective view illustrating the manner in which the device in accordance with this invention may be mounted on a hospital bed or the like;

Fig. 2 is a front elevational view of the traction weight shield; and

Fig. 3 is a side elevational view of the shield.

Referring to the drawing, the shield comprises a hollow tubular body 10 having a bore 11, which may be constructed of metal or rigid plastic, or any other material which is of generally rigid character. Body 10 is closed throughout its length in order to furnish a maximum degree of protection for traction weights 12, indicated in broken lines in Fig. 1.

The upper end 13 of body 10 is cut or otherwise formed to slope at an angle to the longitudinal axis of the body to thereby provide the angular opening 14 at

the upper end. For purposes of this description, the lower end of the opening may be termed the "forward end," while the upper end is termed the "rearward end." Mounted transversely of the open end is a shaft 15, which may be in the form of a bolt extending through suitable openings 17 and 18 provided at diametrically opposite points in the wall of body 10 adjacent the edge of opening 14 and at the mid-point of the opening. Bolt 15 may be provided with a head 19 and a threaded end 20 carrying a wing nut 21, by which the bolt may be tightly secured to the body. A grooved pulley 22, of any conventional form, is mounted in the center of shaft 15 and is adapted to receive a line 23 (Fig. 1) which is trained over pulley 22 and leads into bore 11 of body 10, and supports at its inner end the traction weights 12. It will be understood that bore 11 of body 10 is dimensioned to allow free vertical movement of traction weights 12, as may be required in application of traction to the patient. A pair of elongate rectangular straps 24—24, preferably constructed of metal, are secured to the opposite ends of body 10 at its rearward side along a line parallel to the longitudinal axis of the body. Each of the straps 24—24 projects beyond its respective end of the body and the projecting ends 25—25 are each provided with a cooperating U-bolt 26, the ends of which extend through suitably spaced openings in the straps and are fitted with wing nuts 27—27. By means of the U-bolts, the shield may be secured rigidly to a suitable upright frame 28, carrying the horizontal members 29—29, about which the U-bolts may be secured. Frame 28 may be of any conventional form adapted to be mounted on the bedrail 30, or other suitable part of a hospital bed or the like.

From the foregoing, it will be seen that the tubular shield constructed in accordance with this invention, provides a complete closure for the traction weights so as to effectively shield the latter against any possible contact by persons moving in the vicinity of the patient's bed.

While the shape of the shield is preferably circular in cross-section, as illustrated, it is obvious that it may be non-circular; for example, square or hexagonal, depending upon the shape of the traction weights which are to be enclosed thereby.

The lower end of body 10 is left open so that, if desired, the line 23 may be released from the traction apparatus and the weights lowered thereby through the lower end of body 10, so that these weights may be changed, as may be necessary or desired, during the course of treatment of the patient.

The sloping open upper end assures clearance for the line to prevent abrasion or undue wear thereof due to any movements of the traction weights which may occur.

It will be understood that various alterations and modifications may be made in the details of the illustrative embodiment within the scope of the appended claims, but without departing from the spirit of this invention.

What I claim and desire to secure by Letters Patent is:

1. A shield for traction weights, comprising, an elongate, rigid, tubular body closed throughout its length and having an axial bore guidingly enclosing traction weights suspended therein, said body having an open upper end formed to slope at an angle to its longitudinal axis, a shaft mounted on the body transversely of said open upper end at the mid-point thereof, a pulley mounted in the center of the shaft receiving a traction weight-supporting line extending through said open end into the bore of the body, said traction weight supporting line having one end connected to said traction weights, and a pair of mounting fixtures secured to the opposite ends

of said body for securing said shield to a supporting frame, said mounting fixtures comprising elongate straps extending parallel to the longitudinal axis of the body and projecting beyond the ends thereof, and U-bolts separably secured to the projecting ends of said straps. 5

2. A shield for traction weights according to claim 1 wherein said body is circular in cross-section.

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