Jan. 9, 1968 R. J. FRANK 3,362,459

HOSPITAL SCREEN

Filed Oct. 22, 1965

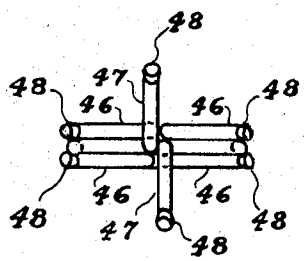


Fig. 4.

Fig. 1.

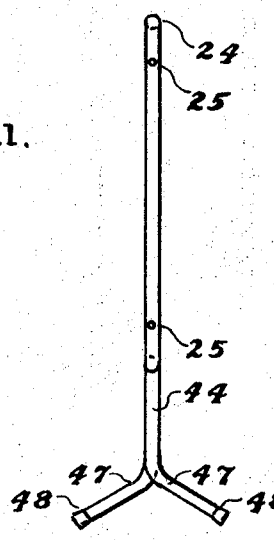


Fig. 2.

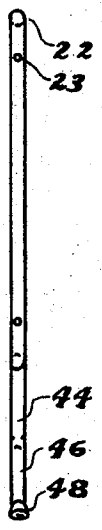


Fig. 3.

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HOSPITAL SCREEN

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ABSTRACT OF THE DISCLOSURE

This invention applies especially to hospital screens applying engineered tubing loop frames interhinged, utilizing the tube ends for legs extending longitudinally at the screen ends and traversely only at the screen center so that the screen stands thereby parallel to the bedside without intrusion on passage space between closely spaced beds in modern congested hospital arrangement.

This invention relates to screens of the folding type and more particularly to hospital screens of the types commonly used to enclose hospital beds.

It is the purpose of this invention to provide a hospital screen of the folding type which will be economical to manufacture, which will be substantial in construction, light in weight and yet sturdy enough to meet the requirements of everyday use.

It is the further purpose of this invention to provide a hospital screen which may be folded and stored in a minimum of space and which will still unfold to provide the necessary areas for concealment and privacy.

A further purpose of this invention is to provide a screen frame structure which will provide a minimum of places for dirt and bacteria to accumulate so as to provide a hospital utensil of sanitary nature.

It is a particular purpose of this invention to provide a frame for hospital screens of the nature which may stand independently erect whether opened flat or partially folded as previously required of leg screens.

It is also a primary purpose of this invention to provide a leg structure for floor support which may be formed integral with the screen frame which will provide point contacts with the hospital floor so as to avoid dirt catching areas along such floors and which will not extend substantially beyond the face of the screen so that when the same is unfolded and in use alongside the hospital bed it will provide adequate support and still not interfere with the passage of attendants closely beside the bed structure.

Certain other substantial improvements and advantages will appear as the appended description unfolds and by reference therefrom to the drawings which form a part of the specification.

In the drawings:

FIG. 1 is in elevation in perspective showing a hospital bed with my improved screen in use there alongside.

FIG. 2 is an end elevation of the frame enclosing the screen panels as shown in FIG. 1 and discloses particularly that form of frame wherein traversely arranged legs are employed.

FIG. 3 is an end elevation of one of the other panels of my complete screen wherein legs parallel with the screen panels are used.

FIG. 4 is a bottom view looking upward of the folded screen showing the intermesh of the folded legs and the point contacts the leg ends make with the floor.

Referring particularly to FIG. 1 the hospital bed **10** is commonly equipped with legs **12** and it is the patient resting in such a bed who is normally screened by the use of the folding screen **20** having sections **22**, **24** and **26** hinged together through such means as the clamps **28** and foldable thereon after the fashion well known to the

art. To support screen panels I prefer to provide rods such as are indicated at **27**, **25** and **23**. Between which rods it is common to stretch opaque or translucent material to obscure the view of passers by, and to give privacy to the bed occupant.

The frames of the outer sections **22** and **26** are bent from tubing **40** utilizing the usual radius bends **42** to provide a substantially rectangular structure whose termini join as at **43** and **44** extend downward and through secondary bends **45** which are preferably between 90 and 180 degrees so that an inclined leg portion **46** is provided which meets the floor at **48** in substantially point contact. In the case of section **22** such legs extend substantially parallel with the balance of the frame and with the panels mounted therein.

The central panel frame **24** is constructed similarly to the panel frame previously described except that in this instance legs **47** extend crosswise or traverse to the plane of the main panel frame and hence prevent the screen from tipping to either side. I have numbered the parts of panel frame **26** similarly to those used for panel frame **22** since the structure of this frame is substantially identical to that described for the first named frame. It will of course be clear to those skilled in the art and with knowledge of such structures that while I have shown the screen fully extended and in the position in which it covers the greatest area and would be commonly used for bedside purposes, such screen may be used in a partially unfolded position for screen purposes standing erect when fully open—an impossibility for present leg screens.

Inspection of the screen structure and particularly of the frame thereof will show that the tubing employed being bent in most instances in a single plane is easily and economically formed through the use of the usual bending equipment and that even in the case of panel frame **24** wherein the legs **47** are at substantially right angles to the plane of the main frame such bends are in fact readily formed with the same equipment through simple manipulation of the frame parts. It will be understood that such a simple easily formed structure is of prime importance to the production of a low cost and widely available product for the general public as well as for quantity production for institutional use. Detailed description of clamps, securing means and the like, such as those securing the leg portions **44**, have been omitted herein as surplusage being well known in the art.

The foregoing description has of course been devoted to the simplest form of my invention and to the form preferred in its construction, but it will be manifest that many modifications in form and in substance will be possible well within the scope of my invention and within the spirit of the appended claim.

Summary

A screen device comprising at least three sections with the alternate frames being similarly constructed. One set of frames having the legs integrally formed therewith and here to extend the plane of said frame while other set of frames have legs integral therewith and bent to extend at right angles to the plane of said frames.

What I claim is:

1. In a hospital wing screen of the type having metal closed loop frame units all adapted to fold but all substantially flat in storage and in use, each said unit supporting a panel insert and each hinged to each other,

(a) a first screen section having a closed loop perimeter frame equipped with two legs extending beneath said loop parallel to the frame face and supporting such frame loop and its parallel panel from the floor at points substantially beneath the screen sides and longitudinally in line therewith,

(b) a second screen section also provided with a closed loop perimeter frame and equipped with legs extending beneath said loop at right angles to the screen loop frame face said legs supporting this frame and its screen panel from the floor in a line transverse to the face thereof to transversely brace the whole screen,

(c) a third closed loop frame screen section equipped with legs disposed similarly to the legs of the first said loop frame and its screen panel,

(d) hinged means joining the abutting sides of said loop frames to fold the same for storage and brace the same in use,

said three loop frames and their dependent legs providing longitudinal and transverse floor support to the whole screen in both open and closed positions all without substantial floor protrusion beyond the screen structure and with no protrusion beyond the screen plane adjacent the its end.

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