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BED CLAMP

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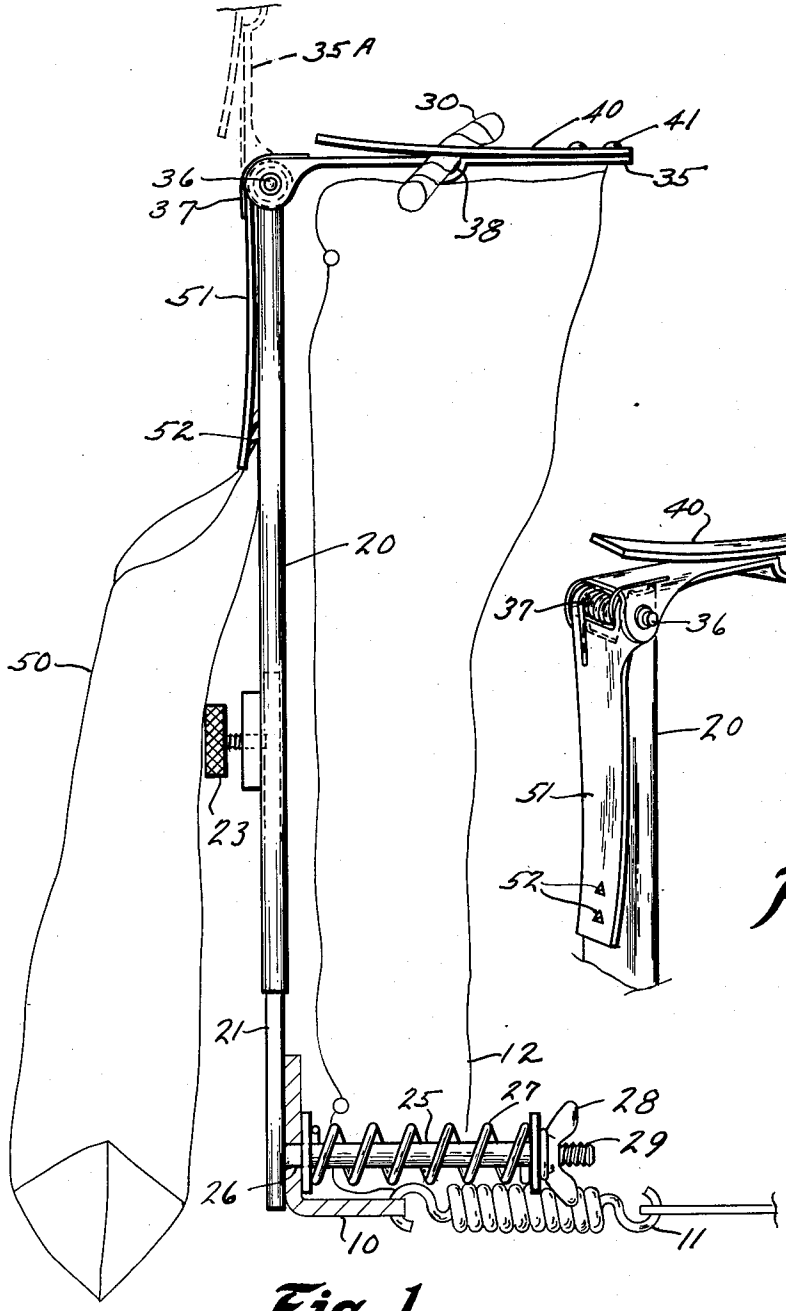


Fig. 1

Fig. 2

INVENTOR.

JOSEPH DE FAZIO

BY

Bates, Beare & McBean

ATTORNEYS.

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BED CLAMP

Joseph De Fazio, Cleveland, Ohio

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5 Claims. (Cl. 5—317)

This invention relates to bed clamps, and particularly to clamps that are intended for holding articles onto beds in hospitals, sick rooms and the like.

In hospitals, the patient's needs frequently require the use of a push-button switch for a signal and a disposal bag for cleansing tissues. The push-button switch includes a cord which leads from the bed to a wall outlet, and the practice heretofore has been to fasten the cord to the bed sheet by means of a safety pin, and to hang the disposal bag at the side of the mattress by also pinning it to the bed sheet. This practice has resulted in the tearing of the sheets to an objectionable degree, particularly in those cases where a restless patient would exert unusual pressure by pulling upon the cord. In addition, the repeated pinning of accessories to the bedding tends to weaken them prematurely and interferes with the rapidity with which bed clothing can be changed. Moreover, water-proofed sheets, such as those made of plastic, are particularly susceptible to tearing if articles are pinned to them. The expense of upkeep of bed clothing is an important factor in hospital maintenance, and although the problem has existed for a long time, there has been, to my knowledge, no practicable solution to it, prior to my conception of the invention set forth in this application.

An object of the invention is to provide a device which will eliminate the necessity for securing either the cord or disposal bag by pins to any part of the bed clothing, and in addition to provide a device which will not interfere with the normal operation of changing such clothing.

A further object of the invention is to provide a device which is adjustable for accommodating beds having mattresses of different thicknesses, and which may be readily applied as an accessory to existing beds.

Briefly, the invention embodied in the present application includes a clamping device which may be removably attached to a bed rail, and which extends vertically at the side of the mattress and has provision thereon for detachably supporting the switch cord and disposal bag within convenient reach of the patient. The clamp is adjustable for mattresses of different thickness, and has the cord holder positioned upon an arm which normally is urged into engagement with the top of the mattress, whereby the switch cord is maintained in readily accessible position to the patient, but is capable of being swung to a vertical position for facilitating changing of the bed clothing.

In the drawings, Fig. 1 is a vertical cross section through a bed having the invention of the present application attached thereto, and Fig. 2 is a perspective view of the upper portion of such device.

Referring to Fig. 1, **10** indicates a bed rail which supports a bed spring **11** and a mattress **12** in the usual way. The device of my invention is adapted to be attached to the bed rail and to project upwardly alongside the mattress, and to extend downwardly onto the top of the mattress or onto the cover therefor.

The device embodying the present invention embodies a support which preferably comprises a pair of telescopically connected members **20** and **21** which are adapted to be held in any desired relative position by means of a clamping screw **23**.

The device is adapted to be fastened to the bed rail **10** by means of a pin **25** which extends through an aperture **26** in the rail in the region of the head end of the bed. The pin is rigidly fastened to the member **21** and is resiliently held in position by means of a spring **27** and

a nut **28** which engages the outermost threaded portion **29** of the pin.

To hold a switch cord indicated at **30** in convenient position adjacent the head end of the bed, I preferably provide an arm **35** which is pivotally connected at **36** to the upper end of the member **20** and which is urged into engaemgent with the top of the mattress, or other covering therefor, by means of a spring **37**. The arm may have a recessed portion **38** into which the cord may be placed and may have a leaf spring **40** which is shown as being fixed to the arm at **41** for exerting tension upon the cord and holding it within the recess but enabling it to be quickly removed whenever desired. The tension exerted by the spring, however, is adequate to retain the cord in the desired position under all conditions of normal use.

To facilitate the removal of the bed clothing, the arm **35** may be swung to a vertical position indicated by the broken lines **35A** in Fig. 1, and the resilient connection between the clamp and the bed rail allows the clamp to be pulled outwardly from the mattress in an amount sufficient to enable the bed sheet or other covering material to be slipped between the mattress and the clamp.

The present invention contemplates additionally a provision for detachably holding a disposal bag indicated at **50**, and, to this end, the member **20** is provided with a spring arm **51** the upper end of which is rigidly fastened to the member **20** and the lower end of which is shown as having prongs **52** projecting inwardly therefrom and operating to bite into the bag, a portion of which is inserted between the arm and the member **20**.

An advantage of the present invention is the fact that the necessity for piercing the bed clothing for the purpose of holding either a switch cord or disposal bag is entirely eliminated, and yet there is no obstruction presented for the normal work of changing the bed clothing. In addition, the invention is well-suited for attachment to any size or make of bed.

I claim:

1. A bed clamp having in combination a pair of bars, a clamping screw for holding the bars in adjustable position in a direction lengthwise of each other, the lower bar having a pin carried thereby and extending laterally thereof, means carried by the pin for clamping it to a bed rail, and arm pivotally carried by the upper bar, means normally coacting between the upper bar and the arm for urging and maintaining the arm in engagement with the top of a mattress, said arm having a recess therein adapted to receive a signal cord, means carried by the arm and adapted to exert pressure upon said cord and to retain it within said recess.

2. A bed clamp having in combination a pair of bars, a clamping screw for holding the bars in adjustable position in a direction lengthwise of each other, the lower bar having a pin carried thereby and extending laterally thereof, yieldable means carried by the pin for clamping it to a bed rail, an arm pivotally connected to the upper bar, a spring normally acting on the arm for urging it into engagement with the top of a mattress, said arm having a recess therein adapted to receive a signal cord, a spring member carried by the arm and adapted to exert pressure upon the cord and to retain it within said recess, and a second spring arm carried by the upper bar and adapted to receive and hold a disposal bag.

3. A bed clamp comprising, a support adapted to extend vertically alongside a mattress and having a length substantially equal to the thickness of the mattress, a pin carried by the support, yieldable means for holding the pin against a bed rail on which said mattress is supported, an arm pivotally carried by the support and adapted to be positioned from an inactive position to extend over the top of the mattress, yieldable means coacting between the arm and support to bias the arm in said last-mentioned position over the mattress, and a yieldable device carried by said arm and adapted to receive and clamp a single cord thereto.

4. A bed clamp comprising a rigid support adapted to extend vertically alongside the mattress and having a lentgh substantially equal to the thickness of the mattress, means carried by the support for removably attaching it to a bed rail on which said mattress is supported, an

arm pivotally connected to the upper end of said support, yieldable means coacting between the arm and support, to bias the arm in predetermined position over the top of the mattress, a clamp carried by said arm for receiving and holding a signal cord in predetermined relation to the mattress, and a second clamp carried by the support for receiving and clamping a disposal bag in fixed position relative to the support.

5. A bed clamp embodying a pair of telescopically connected members forming an upright support, means for connecting one of the members in different positions with respect to each other, an arm pivotally connected to the upper end of one of said members and adapted to be positioned over the top of the bed mattress, yieldable means coacting between the arm and the upper end of said one member to bias the arm in position over the mattress, clamping means on said arm for receiving and holding a signal cord in predetermined position relative to the bed mattress, and one of said members having a yieldable clamping device carried thereby for receiving and holding a disposal bag in fixed position relative to the bed.

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