July 5, 1955 E. M. BOGAR, JR 2,712,138

SHORT RAIL FOR BEDS

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Fig. 1

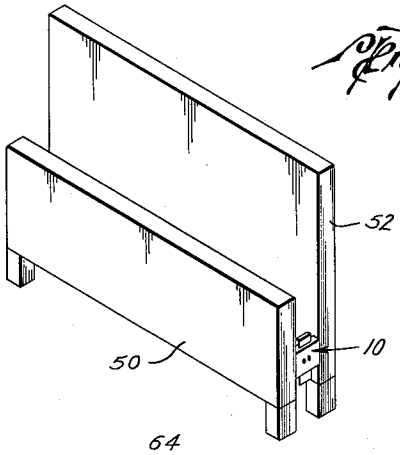


Fig. 2

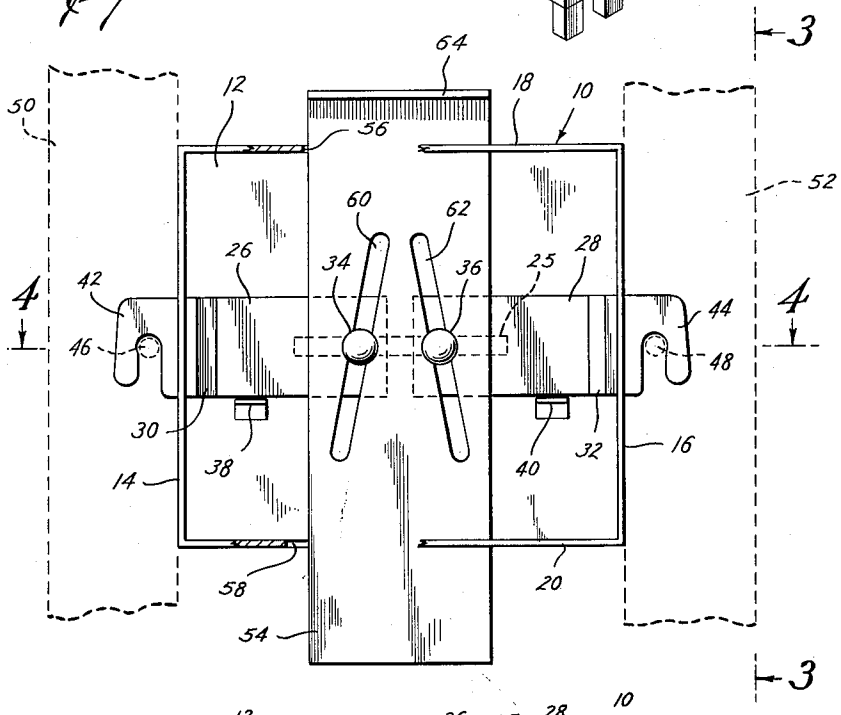
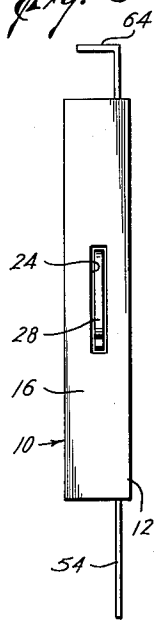


Fig. 3



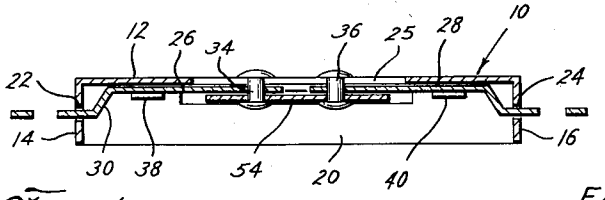


Fig. 4

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SHORT RAIL FOR BEDS

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4 Claims. (Cl. 5—287)

This invention relates to a short rail for beds, and more particularly to a device for use in connecting together the head and foot boards of beds in place of the usual rails of the bed for display purposes.

In placing beds on display in furniture stores and other places it is customary in order to conserve space to dispense with the usual bed rails and substitute some suitable means, such as the devices commonly known as short rails, by which the head and foot portions of the bed can be connected together in close proximity in upright position. The head and foot portions of the beds can thus be displayed together in a minimum of space.

The present invention has for its chief object the provision of a short rail for beds which is easily applied and removed from the head and foot portions of a bed and which is effective to firmly secure the parts together in upright position.

Another object of the invention is to provide a short rail for beds which is constructed to adjust itself to slight variations in the positions of the pins on the head and foot portions with which it cooperates in securing the parts together.

A further object of the invention is the provision of a short rail for a bed having a body which is of substantially rectangular outline and pan or tray-like shape and extensible and retractable arms provided with hook portions at their outer ends engageable with the pins on the head and foot portions of a bed, there being manually operable means cooperable with the arms for moving the arms to retracted positions to draw the head and foot sections of the bed into firm contact with the sides of the body, and also operable to extend the arms to enable the hook portions of the arms to be released from the pins.

A still further object of the invention is to provide a short rail of the character referred to which is of simple design and rugged construction, capable of long withstanding the hard usage to which devices of this kind are customarily subjected.

The above and other important objects and advantages of the invention will best be understood from the following detailed description of a preferred form of the same, when considered in conjunction with the annexed drawings wherein—

Figure 1 is a perspective view showing the head and foot sections of a bed and illustrating the manner in which the invention is used with the same;

Figure 2 is a side elevational view, on a somewhat enlarged scale, showing the details of construction of the invention and illustrating the relationship of the parts when the same is in operative position on the head and foot sections of a bed;

Figure 3 is an end elevational view of the invention as illustrated in Figure 2; and

Figure 4 is a cross-sectional view taken along the line 4—4 of Figure 3, looking in the direction indicated by the arrows.

Referring now to the drawings in greater detail, the invention comprises a body **10**, which in the present illustration, is of rectangular outline and general pan or tray-like shape, having a bottom wall **12**, end walls **14** and **16** and upper and lower side walls **18** and **20**, respectively, which are disposed substantially at right angles to the plane of the bottom **12**. The body is preferably formed in one piece of sheet metal and is open opposite the bottom **12**.

Vertical slots **22** and **24** are provided centrally of the end walls **14** and **16**, respectively, through which the outer end portions of oppositely extending arms **26** and **28**, respectively, project. Within the body **10** these arms are offset toward the bottom **12**, as indicated at **30** and **32**, respectively, so that the arms lie in contact with the bottom **10** for the major portion of their lengths, and at their inner ends the arms are perforated to receive pins or rivets **34** and **36**, which also pass through an elongated slot **25** in the bottom wall **10**. The bottom **10** is also provided with lugs **38** and **40**, preferably bent from the material of the bottom, upon which the arms **26** and **28** are slideably supported. At their outer ends the arms **26** and **28** are formed with hook portions **42** and **44**, respectively, adapted to be hooked over the pins, indicated at **46** and **48**, respectively, of the foot and head portions indicated at **50** and **52**, respectively of a bed to secure these portions in upright position.

The invention includes an operating member **54**, in the form of a slideable plate extending through a slot **56** in the upper side wall **18** and a slot **58** in the lower side wall **20**, and which is slideable vertically in the body. This plate has elongated slots **60** and **62**, which converge upwardly, and through which the pins **34** and **36**, respectively, are slideably extended. At its upper end the member **54** is bent to form a hand hold portion **64** by which the plate may be raised or lowered.

In making use of the invention, the plate **54** is raised relative to the body **10**, whereby the arms **26** and **28** are extended outwardly of the end walls **14** and **16** by reason of the downward divergence of the slots **60** and **62**. In the extended condition of the arms **26** and **28**, the hook portions **42** and **44** are hooked over the pins **46** and **48** of the head and foot sections of the bed, which have been placed in upright positions and spaced apart a short distance. The plate **54** is then lowered by pressing downwardly in the body, causing the arms **26** and **28** to be retracted inwardly of the body by the sliding of the rivets **34** and **36** relative to the slots **60** and **62**, whereby the head and foot sections will be drawn into firm contact with the end walls of the body to securely connect the sections in upright position.

The slot **58** in the lower side wall **20** of the body may be of somewhat greater length than the width of the plate **54**, so that the lower portion of the plate **54** may move in the slot toward or away from the end wall **14** or the end wall **16**, whereby the hook portions **42** and **44** of the arms may be moved to adjust for slight variations in the positions of the pins **46** and **48** of the bed sections.

When it is desired to disconnect the bed sections it is only necessary to exert an upward pull on the plate **54**, whereupon the arms **26** and **28** will be moved outwardly by the action of the rivets **34** and **36** in the slots **60** and **62**, and the hook portions may be lifted off of the pins **46** and **48**.

It will thus be seen that the invention as described above provides a short rail device of simple construction and great strength and durability which is easily and quickly applied and removed, and which is effective to securely connect the bed sections and firmly maintain them in upright position.

While the invention has been disclosed herein in connection with a specific embodiment of the same, it will be understood that this is intended by way of illustration only, and that numerous changes can be made in

the construction and arrangement of the various parts without departing from the spirit of the invention or the scope of the appended claims.

Having thus clearly shown and described the invention, what is claimed as new and desired to secure by Letters Patent is:

1. A short rail for beds comprising a tray-like body of generally rectangular shape having a bottom wall and substantially vertical end walls, each of said end walls having a centrally disposed vertical slot therethrough, horizontally aligned, movable arms extending through the slots and slideably carried on the body, each of said arms having a hook portion at its outer end and said bottom wall having an elongated horizontally disposed slot opposite the inner end portions of said arms, a vertically slideable operating member on the body and having horizontally spaced, upwardly converging, elongated slots therethrough, and means on said arms engageable with said bottom wall in said horizontal slot and said member in said converging slots to cause said arms to move inwardly of the body upon downward movement of said member relative to the body.

2. A short rail for beds comprising a tray-like body of generally rectangular shape having a bottom wall, upper and lower side walls and substantially parallel vertical end walls, each of said side and end walls having a longitudinal slot, oppositely movable, horizontally disposed arms slideably mounted on the body and whose outer ends extend through and beyond the slots in said end walls, each of said arms having a hook formed in its outer end, a vertically moveable operating member slideably mounted on the body and whose opposite ends extend through and beyond the slots in said side walls, said member having horizontally spaced, upwardly converging slots and said bottom wall having a horizontally disposed slot opposite the inner end portions of said arms, and means on said arms extending through and engageable with said bottom wall in said horizontal slot and extending through and engageable with said member in said converging slots to move the arms inwardly upon downward movement of said member.

3. A short rail for beds comprising a tray-like body of generally rectangular shape having a bottom wall and substantially vertical end walls, each of said end walls having a centrally disposed longitudinal slot, oppositely movable, horizontally disposed arms slideably mounted on the body, each of said arms having an inner portion in slideable engagement with said bottom wall and an outer portion offset from said inner portion and extending outwardly of the body through the slot in one of said end walls, means on said outer portions engageable with a bed section to move the section with the arms, an operating member mounted on the body for vertical movement thereon and having horizontally spaced, elongated, upwardly converging slots therethrough opposite said inner portions, and means on said inner portions slideably engageable with said member in said converging slots to cause said arms to move inwardly of the body upon downward movement of said member relative to the body.

4. A short rail for beds comprising a tray-like body of generally rectangular shape having a bottom wall and substantially vertical end walls, each of said end walls having a slot therethrough, oppositely movable horizontally disposed arms extending through the slots and slideably carried on the body, each of said arms having a hook portion thereon exteriorly of the body, an operating member mounted on the body for vertical movement thereon and having elongated, longitudinally converging slots therethrough, and means on said arms positioned in slideable engagement with said member in said converging slots to cause said arms to move inwardly of the body upon vertical movement of said member in one direction and outwardly of the body upon vertical movement of said member in the other direction.

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