Aug. 18, 1953 R. E. WARREN 2,648,850

SIDE GUARD FOR BEDS

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Fig. 1.

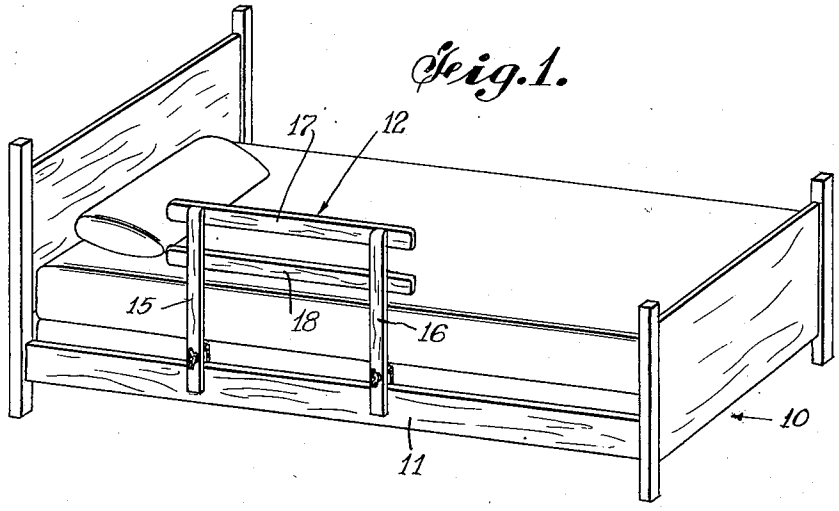


Fig. 2.

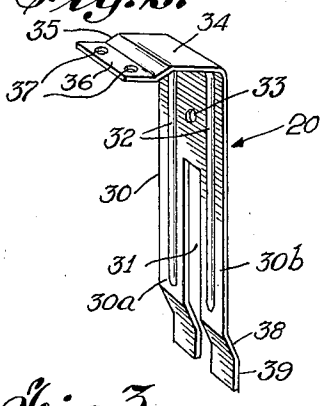


Fig. 6.

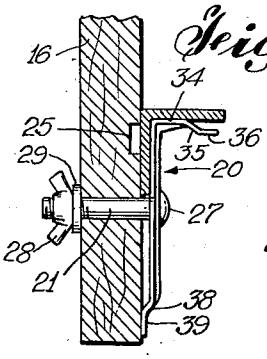


Fig. 7.

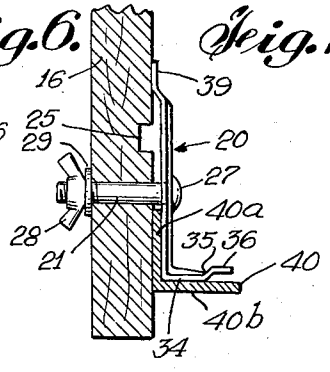


Fig. 3.

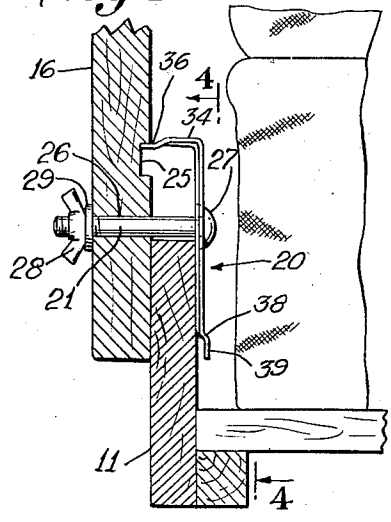


Fig. 4.

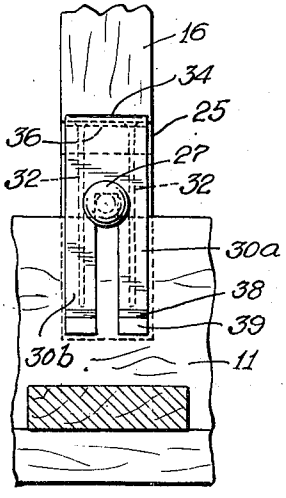
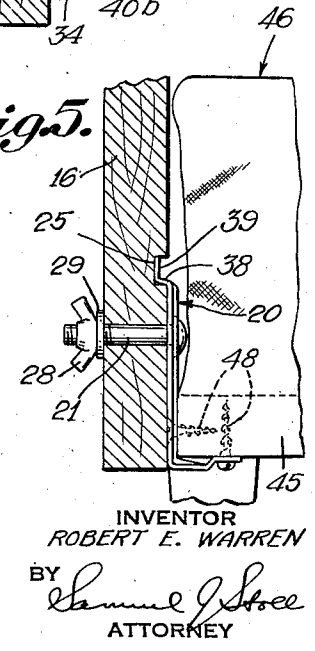


Fig. 5.



INVENTOR
ROBERT E. WARREN
BY Samuel J. Steele
ATTORNEY

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SIDE GUARD FOR BEDS

Robert E. Warren, Springfield Gardens, N. Y.

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5 Claims. (Cl. 5—331)

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This invention relates to an improved side guard for beds.

Side guards or bed guards of the general character of this invention have heretofore been devised and patented for the purpose of preventing children and invalids from falling out of bed while sleeping. These bed guards are attached to one of the sides, or to both sides, of an adult bed and they are generally removable when their presence is no longer needed. These bed guards are most frequently used for the purpose of temporarily converting an adult bed into a youth bed, the object being to provide a transition phase between cribs and adult beds. The bed guards may be removed from the adult bed when the child is old enough to sleep in an unguarded adult bed.

The bed guards of the prior art may be divided into two categories: the first category includes universal type bed guards which are intended for mounting on beds of every possible conventional construction; the second category includes bed guards which are intended for certain types of bed construction only. Speaking generally, there are three different types of bed construction which are normally encountered: the first is provided with bed rails made of wood, the second is provided with angle-iron bed rails wherein said bed rails are L-shaped in cross section, and the third is provided with inverted angle-iron bed rails. Still another type of bed is known as a "Hollywood" bed or divan. This type of bed is provided with a box spring having a framework which is generally made of wood. The universal bed guards of the prior art are intended for mounting on all three types of bed as well as on the divan. The other group of bed guards of the prior art is intended for use either on a bed with bed rails made of wood, or on a bed having angle-iron bed rails, but not on beds of both types, and certainly not on the so-called "Hollywood" beds.

The universal bed guards of the prior art have been unsatisfactory in many respects: In the first place, their construction is much too costly; in the second place, their performance leaves much to be desired; and in the third place, they are not as universal as they are intended to be, since they require adaptors for mounting on the different types of bed rails.

It is accordingly the principal object of this invention to provide a bed guard of the character described which is simple in construction and readily adapted for mounting on all of the types of bed above mentioned, including the "Hollywood" type of bed. The constructional features

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of the present bed guard are simple, fool-proof, and readily adapted for mass production on a low cost basis. Briefly, a bed guard made in accordance with the present invention comprises a pair of vertical posts, a pair of horizontal rails supported by said posts, and a pair of brackets which are fastened to said posts and which attach said posts to the bed rail of the bed. These brackets constitute the heart of the invention. Although the principal form of the invention includes a pair of posts, a pair of horizontal rails, and a pair of brackets, it will readily be understood that a suitable bed guard may be made in accordance with the present invention with a greater or lesser number of horizontal rails, and even vertical posts.

Another important object of the present invention is the provision of a bed guard of the character described which is adapted for shipping and selling on a "knock-down" basis. This bed guard may very readily be set up and equally as readily mounted on the side rail of a bed by totally inexperienced people such as housewives and the like. Special tools and equipment are not needed either for the purpose of assembling or for the purpose of installing.

A preferred form of this invention is shown in the accompanying drawing in which:

Fig. 1 is a perspective view of an adult bed having side rails made of wood and showing a bed guard made in accordance with the preferred form of this invention mounted on one of said side rails.

Fig. 2 is a perspective view of one of the two brackets by which the vertical posts of the bed guard are fastened to the side rail of the bed.

Fig. 3 is a sectional view, enlarged and fragmentary, showing one of the vertical posts of the bed guard mounted on the wooden side rail of the bed by means of the bracket shown in Fig. 2.

Fig. 4 is a view looking in the direction of arrows 4—4 of Fig. 3.

Fig. 5 is another sectional view showing how one of the posts of the bed guard is fastened by means of said bracket to the framework of a "Hollywood" type of bed.

Fig. 6 is still another sectional view showing how one of the vertical posts of the bed guard is fastened by means of said bracket to an inverted angle-iron type of side rail.

Fig. 7 is an additional sectional view showing one of the vertical posts of the bed guard mounted on an angle-iron type of side rail which, in section, is shaped like an L.

The bed 10 which is shown in the drawing is

provided with a pair of side rails 11 which are made of wood. A bed guard 12 made in accordance with this invention is shown mounted on one of said side rails 11.

Bed guard 12 comprises the following elements which are clearly shown in Figs. 1, 2, and 3: a pair of uprights or posts 15 and 16 respectively, a pair of horizontal bars or rails 17 and 18 respectively, a pair of brackets 20 and a pair of bolts 21 by which said brackets are fastened to said uprights and by which said brackets and uprights are fastened to the side rail of the bed. The uprights and the horizontal bars or rails of bed guard 12 may be made of wood or any other suitable material. In the preferred form of this invention they are made of wood, as the drawing clearly shows. Bracket 20, on the other hand, should be made of more substantial material such as steel. In practice, bracket 20 comprises a metal stamping which is cut and bent from said steel.

Each of the two uprights 15 and 16 is provided with a horizontal notch or groove 25 and with a horizontal, transverse hole 26. The hole is, of course, adapted to accommodate bolt 21. This is a carriage type of bolt, having a dome-shaped head 27 and a square neck under the head. A wing nut 28 is provided on said bolt, as is a washer 29.

The specific means by which the cross bars 17 and 18 are fastened to uprights 15 and 16 is not important to the present invention. They may be fastened to each other by means of screws or bolts or by any other conventional means. Dowels and furniture glue may, if desired, be utilized for this purpose. In practice, however, what is done is to ship the uprights and the cross bars to the ultimate consumer in "knock-down" or unassembled condition. Appropriate holes are provided in these several members as are wood screws, so that all the customer need do is to put the screws in the proper holes and tighten them with a screw driver.

Bracket 20 comprises a main body portion 30 having a vertically or longitudinally extending slot 31 formed therein. Ribs 32 are provided for rigidity and strength. Hole 33 is also provided between groove 31 and the top end 34 of said body portion 30. The top end 34 is, as the drawing clearly shows, bent over substantially at right angles to the main body portion 30 and for purposes of convenience, the main body portion may be described as the main vertical portion of the bracket, whereas top end portion 34 may be described as the horizontal portion thereof. It will further be noted that the horizontal top end portion 34 dips diagonally down at 35 and then continues horizontally once again to form what may be described as the offset fastening plate portion 36. This offset plate portion is provided with a pair of holes 37 to accommodate wood screws, as will shortly appear. Ribs 32 extend across the top end portion 34 as will be apparent from an examination of Fig. 3. The lower end of the main body portion 30 of the bracket is also diagonally offset at 38 and it then once again descends vertically to form a vertical plate portion 39. Reference to Fig. 2 will disclose the fact that slot 31 is open at its bottom end and closed at its top end. In other words, in the preferred form of this invention, slot 31 bifurcates the lower half, or more, of body portion 30 and provides it with a pair of legs 30*a* and 30*b* respectively. Each of these legs is provided with a diagonal offset portion 38 and with a vertical plate portion 39.

The manner in which bracket 20 may be applied to one of the vertical posts or uprights 15 and 16 in order to support said upright on side rail 11 on bed 10 is clearly shown in Figs. 3 and 4. It will be noted that bolt 21 extends through slot 31 as well as through hole 26 in the upright. The square neck or shoulder of the bolt rides in said slot 31 and the clearance between said square neck or shoulder and the sides of the slot is such as to prevent the bolt from turning in the slot. It may move longitudinally of the slot but it cannot rotate therein. The head of the bolt engages the main body portion 30 of the bracket and wing nut 28 bears against washer 29 and presses it against the upright. Horizontal plate portion 36 of the bracket projects into recess 25 in the upright. The side rail 11 of the bed is accommodated between the main body portion 30 of the bracket, and more particularly its legs 30*a* and 30*b*, and the upright, immediately below bolt 21. Hence when the wing nut is tightened on the bolt, the bracket will clamp the side rail 11 against the inside of the upright. The main body portion 30 of the bracket will be maintained in parallel relation to the upright by reason of the presence of its horizontal portion 34, including its offset plate portions 35 and 36, which collectively serve as a spacer at the upper end of the bracket.

The same bracket 20 may be used to mount the bed guard on a bed having an angle-iron side rail 40. See Fig. 7. The only change is in the manner in which the bracket is mounted on the upright of the bed guard. In the first application of this invention, horizontal portion 34 and its offset plate portions 35 and 36 are situated on top and legs 30*a* and 30*b* and their offset plate portions 38 and 39 are situated at the bottom. In Fig. 7, however, the bracket is inverted so that its legs project upwardly and its horizontal portion 34 is disposed at its bottom end. In cross section, angle iron 40 is shaped like an L and its upright portion 40*a* is placed between the main body portion 30 of the bracket and the upright, immediately below bolt 21. Horizontal portion 34 of the bracket rests upon the horizontal portion 40*b* of the angle iron and plate portions 39 bear against the side of the upright or post of the bed guard. Plate portions 39 are offset from main body portion 30 to the extent of the thickness of the upright portion 40*a* of the angle iron. In Fig. 3, horizontal portion 34 and offset plate portions 35 and 36 served as spacers on the opposite side of the bolt, from the wooden bed rail 11. In Fig. 7, plate portions 39 and offset plate portions 38 serve as spacers on the opposite side of the bolt from angle iron 40.

When the angle iron is inverted, as in Fig. 6, bracket 20 must be positioned in reverse or inverted relation to its position in Fig. 7. Its horizontal portion 34 and offset plate portions 35 and 36 are now at the top and legs 30*a* and 30*b* and offset plate portions 38 and 39 are now at the bottom. This is similar to the manner in which the bracket is disposed in Fig. 3 with one exception: In Fig. 3 offset plate portion 36 bears against the upright of the bed guard, whereas in Fig. 6 said offset plate portion is pointed in the opposite direction, that is away from the upright of the bed guard. The relationship between the bracket and the bed rail is identical in Figs. 6 and 7, the only difference being that in Fig. 7 the bracket is mounted above the horizontal portion 40*b* of the bed rail, whereas in Fig. 7 it is mount-

ed below said horizontal portion of the bed rail. Hence, instead of horizontal portion **34** of the bracket resting upon horizontal portion **40b** of the bed rail, said horizontal portion **34** bears against the underside of said horizontal portion of the bed rail.

Fig. 5 shows how the same bracket may be used to support the same bed guard on the wooden framework **45** of day bed or "Hollywood" bed **46**. Plate portion **36** and main body portion **30** of the bracket are fastened to said wooden framework by means of wood screws **48** which project through holes **37** and **33** respectively of said plate portion **36** and main body portion **30**. The bifurcated end of the bracket now projects upwardly and bolt **21** may be slipped into the longitudinal slot **31** of said bracket and brought downwardly to the position which it is shown to occupy in Fig. 5. Offset plate portions **39** of the bracket project into recess **25** of the upright of the bed guard to prevent vertical movement in either direction of said upright relative to said bracket.

It will be observed from the foregoing that bracket **20** renders the bed guard most adaptable to every type of conventional bed, including the type known as a day bed or "Hollywood" bed. The bed guard is not only adaptable to all of these beds, but it may also very conveniently be mounted thereon without special tools or equipment or adaptors. Bracket **20** constitutes its own adaptor and it adapts the bed guard for mounting on any conventional bed rail or day bed frame.

It will be understood from the foregoing that the bed guard and its bracket or brackets, as the case may be, constitute but a preferred form of this invention, and other forms of the invention may be had within the broad scope and spirit of the invention.

I claim:

1. A bed guard of the character described, comprising at least one upright, at least one horizontal bar mounted on said upright, and at least one bracket connected to the upright by means of a bolt for mounting said upright on the side rail of a bed, said bracket having a main body portion with an opening formed therein for said bolt, at least one horizontally extending portion at its lower end projecting in one lateral direction therefrom and a vertically extending offset portion at its upper end projecting in the opposite lateral direction therefrom.

2. A bed guard of the character described, comprising at least one upright, at least one horizontal bar mounted on said upright, and at least one bracket connected to the upright by means of a bolt for mounting said upright on the side rail of a bed, said bracket being turnable on said bolt relative to said upright when the bolt is loose and being fixed to said upright when the bolt is tight, said upright having a recess formed therein on the side facing the bracket, said bracket having a main body portion with an opening formed therein for said bolt, at least one horizontally extending portion at its lower end which extends in one lateral direction from said main body portion and a vertically extending offset portion at its upper end which is offset in the opposite lateral direction from said main body portion, one of said portions entering the recess in the upright when the bracket is disposed in one position relative to said upright, the other portion being adapted to enter the recess when the bracket is rotated through 180 degrees in horizontal and vertical planes.

3. A bed guard in accordance with claim 2, wherein two uprights are provided, two horizontal bars mounted on said uprights, and two brackets connected to said uprights.

4. A bracket for a bed guard of the character described, comprising a main body portion which is bifurcated at its lower end and which is provided with offset and horizontal portions at its top and bottom ends, the offset portion at its top end projecting in one direction laterally from said main body portion and the portions at the bottom end projecting in the opposite direction, laterally from said main body portion.

5. A bed guard of the character described, comprising at least one upright, at least one horizontal bar mounted on said upright, and at least one bracket connected to the upright by means of a bolt for mounting said upright on the side rail of a bed, said bracket being turnable on said bolt relative to said upright when the bolt is loose and being fixed to said upright when the bolt is tight, said upright having a recess formed therein on the side facing the bracket, said bracket having a main body portion with an opening formed therein for said bolt, at least one offset portion at its lower end projecting in one direction therefrom and another offset portion at its upper end projecting in the opposite direction therefrom, one of said offset portions entering the recess in the upright when the bracket is disposed in one position relative to said upright, the other portion being adapted to enter the recess when the bracket is rotated through 180 degrees in horizontal and vertical planes, the opening formed in the main body portion of the bracket being a longitudinally extending slot through which the shank of the bolt projects, the shank of the bolt being provided with a square shoulder which engages the sides of the slot to prevent rotation of the bolt in said slot.

ROBERT E. WARREN.

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