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DEVICE FOR PROTECTING OCCUPANT OF INFANT'S CRIB

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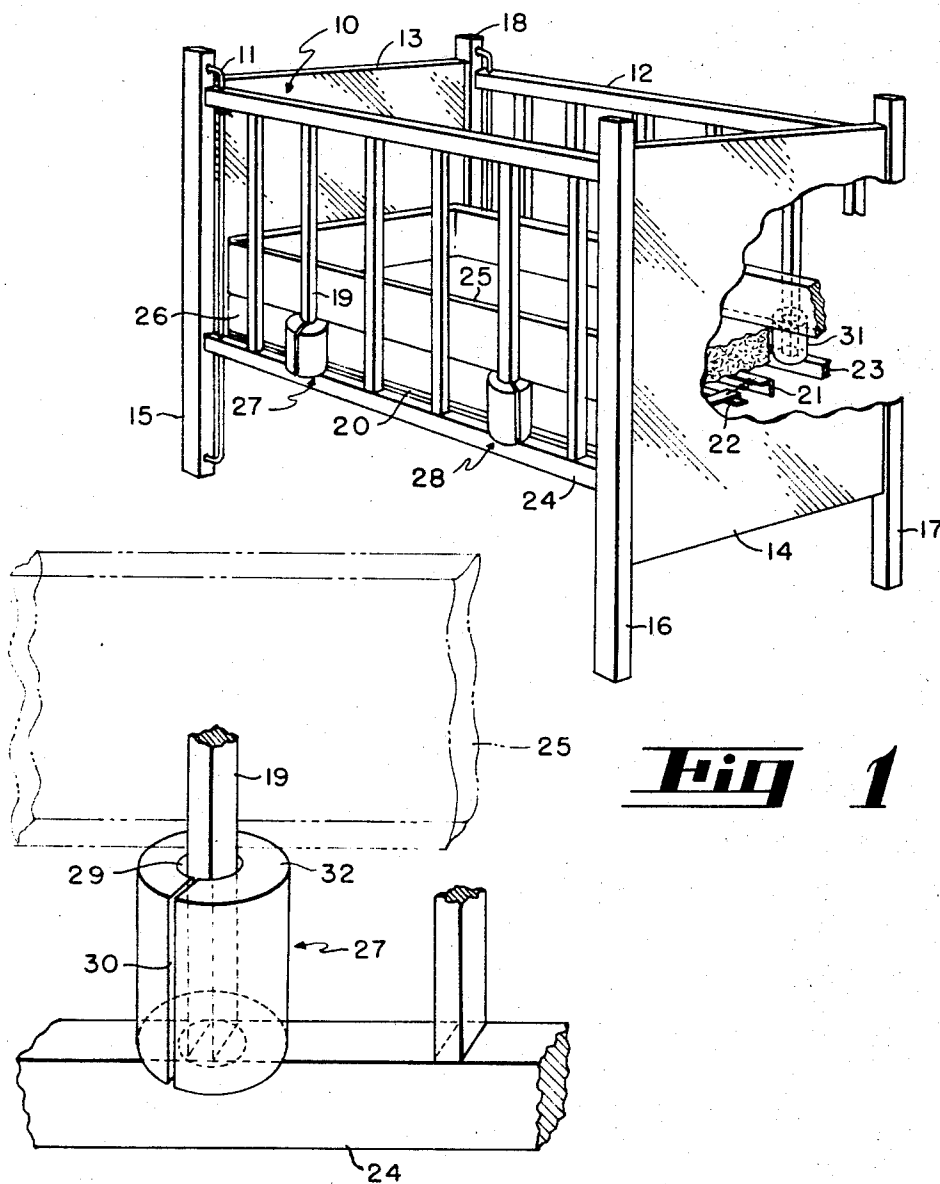


Fig 1

Big 2

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DEVICE FOR PROTECTING OCCUPANT OF INFANT'S CRIB

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3 Claims

ABSTRACT OF THE DISCLOSURE

In a crib of the type having a frontal gate of the kind which is raised and lowered, a combination of an internal bumper and bumper supports is provided for the protection of the infant-occupant. The bumper is installed so as to define a protective compartment bottomed by the mattress. Novel bumper supports maintain the vertical positioning of the bumper.

FIELD OF THE INVENTION

The present invention is a safety device for installation in a child's crib. Conventional cribs generally comprise four posters or vertical supports definitive of an elevated box-like formation comprising two sides, a slatted rear and a slatted front, commonly referred to as a "drop side" or gate. The expression "gate" is hereinafter employed to designate such a frontal barrier, suitably mounted for vertical sliding adjustment on guide rods secured to the frontal posters.

The invention is of particular utility as employed in such a crib.

The invention is a safety device for the protection of the occupant-child. Sleeping children are prone to roll against the rungs or slats of the gate and the rear side, resulting in pressure marks and contusions. Children are inclined to the habit of extending limbs through the slats. This tendency is not only conducive to disturbed and arrested sleep but also results in sprains and similar injuries.

Fatalities have ensued when infants became caught and smothered in consequence of these tendencies. In order to protect children against the hazards mentioned above, bumpers of soft material of generally quadrangular configuration have been devised for installation internally of the crib. But bumpers suffer from the disadvantage and limitation of dropping down into the space between the mattress and the slats, thereby becoming substantially useless. This disadvantage is aggravated when the gate is raised or lowered.

An object of the invention is to provide, in combination, a bumper and bumper supports which minimize the risks and prevent the hazards mentioned above and effectively safely retain a child within the bounds of the crib.

Another principal object of the invention is to provide bumper supports for maintaining the bumper in a proper position, vertically spaced from the mattress, in an effective protective posture.

Further objects of the invention are to provide bumper supports characterized by the following features:

- (1) Made of inexpensive and readily available materials.
- (2) Easily fabricated.
- (3) Readily stored, installed and removed.
- (4) Replaceable at low cost.
- (5) Not impaired as to effectiveness by lifting and lowering of the gate.

For a better understanding of the invention, together with other and further objects, advantages and capabilities thereof, reference is made to the following description

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of the specific embodiment thereof illustrated in the accompanying drawing.

DETAILED DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a combination of bumper supports and bumper, in accordance with the invention, as installed in a crib, the figure being partly broken away for exposition of detail; and

FIG. 2 is an enlarged perspective view of one of the bumper supports provided in accordance with the invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, there is shown a conventional crib which comprises a slidably mounted front barrier or gate 10 (often referred to as a drop side), a rear barrier 12 (which may optionally be slidably mounted), and end panels 13 and 14, all securely assembled in relation to upright posters 15, 16, 17 and 18, to constitute a crib.

The front gate 10 is suitably adjustably secured to rails such as 11, one positioned on poster 15, and the other on poster 16, so as to permit the gate to be raised and lowered, as desired, and maintained in its upper or crib-closing position.

The front and rear barriers or gates are formed with rungs or slats as indicated at 19. A conventional spring arrangement is provided, it comprising the front and rear spring-sustaining sections 20 and 21, and the usual supporting and coil spring expedients 22. It need be shown only fragmentarily, as these are well known to the art. The rear and front barriers have lower rails 23 and 24, respectively.

In accordance with one aspect of the invention, there is provided a quadrangular bumper 25 which partially lines the interior of the crib and forms a guard, together with a pair of frontal bumper supports 27 and 28 and a pair of rear bumper supports, of which one is numbered 31. In accordance with the primary aspect of the invention there are provided bumper supports per se. It has been found in practice that two supports in front and two at the rear are adequate for the protection of infants, and for securing the bumper 25 in position. The desired level of the bumper 25 is that at which its lower edge is at the level of the upper surface of the mattress 26, whereby the bumper and mattress defined a soft protective compartment for the infant.

The bumper 25 may be made of any soft pliable material or it may comprise a cloth cover or equivalent, filled with a soft material such as cotton or excelsior, to give an example.

The bumper supports may be made of any resilient form-sustaining material with adequate compressive strength to support the portion of the bumper load which they carry. Soft rubber and polyurethane are also suitable. A suitable material is any flexible, expanded, cellular synthetic elastomer with stabilizing compounds added.

Referring now to FIG. 2, it illustrates a bumper support in detail. The bumper support 27 is cylindrically formed and it has a flat upper surface 32 and a corresponding lower surface and internal bore 29. In order to provide for the installation and removal of the bumper and in order that it may be secured to a rung such as 19, in snap ring grasping fashion, it is split as indicated at 30. A bumper support is installed or removed by spreading or distorting it, enlarging the gap 30 so as to permit placement on or retraction from the rung 19, as appropriate.

A portion of the upper surface of each bumper support is adapted to abut against the lower surface of the bumper 25, and a portion of the lower surface of each bumper support is adapted to abut against the lower rail

of a gate or barrier, for example 24, whereby the bumper is maintained at the proper level with respect to the mattress.

When the gate 10 is lowered the bumper supports 27 and 28 are also lowered, but the accompanying circumstances are generally then such that another person is in attendance or the infant is out of the crib, so that when the gate is lowered it is not material whether the bumper supports 27 and 28 provide support for the bumper or not. However, at all times when the gate is in its closed position the bumper 25 is maintained in the desired vertical position whereat it protects the child against abrasive or percussive contact with the crib or the projection of limbs through the rungs 19.

While there has been shown and described what is considered to be the preferred embodiment of the invention, it will be understood by those of ordinary skill in the art that various changes and modifications may be made therein without departing from the true scope of the invention as defined in the appended claims.

Having fully disclosed my invention, I claim:

1. In an infant's crib of the type comprising a frontal gate formed with vertically extending slats and a lower horizontal rail, said crib having a mattress loosely fitting within the confines of said slats, the combination of:

a protective bumper guard disposed in relation to the mattress to provide, and to confine an infant-occupant within, a soft box-like compartment, and a plurality of bumper guard supports disposed adjacent the periphery of said mattress between said bumper guard and said lower horizontal rail for positively vertically supporting said bumper guard substantially independently of said mattress.

2. The combination in accordance with claim 1 in which each bumper guard support is of a soft elastic material formed with upper and lower abutment surfaces and with a split whereby it may be easily installed in embracing relation to a slat, under the bumper guard, or readily removed.

3. A bumper guard support for installation in an infant's crib of the type having vertically extending slats, a horizontal plane for support, a mattress having upper and lower surfaces and horizontally positioned adjacent said horizontal support plane and loosely fitting within the confines of said slats, and a bumper defining protective walls, said bumper guard support comprising a form-sustaining positioning member made of soft elastic material, said member vertically supporting said bumper guard adjacent the upper surface of said mattress substantially independently of said mattress, said support member having a longitudinal split whereby it may readily be installed in embracing relation to a slat.

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