Nov. 16, 1971 M. J. DOYLE 3,619,824

CRIB BUMPER.

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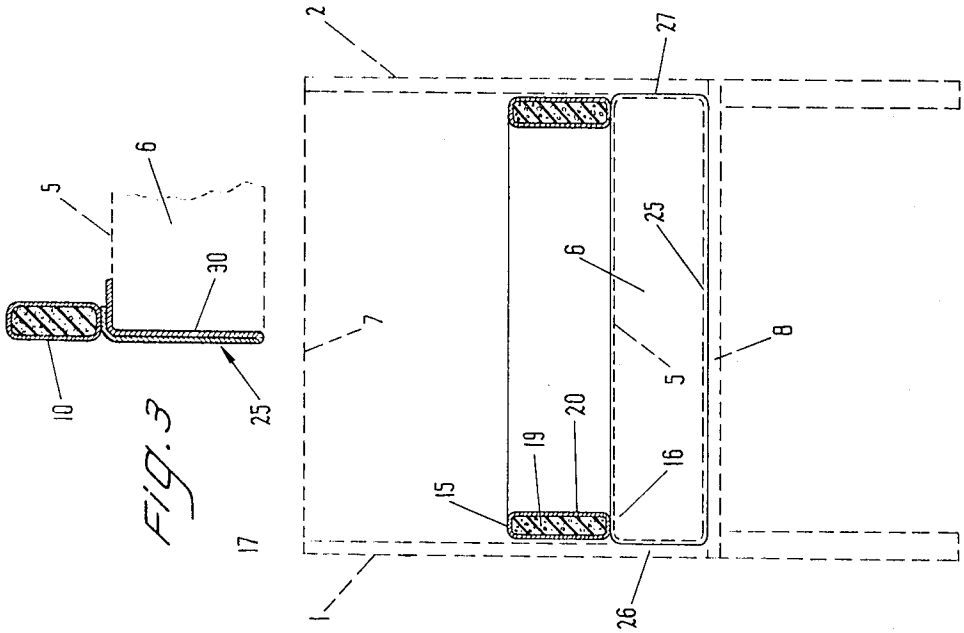


FIG. 3

FIG. 2

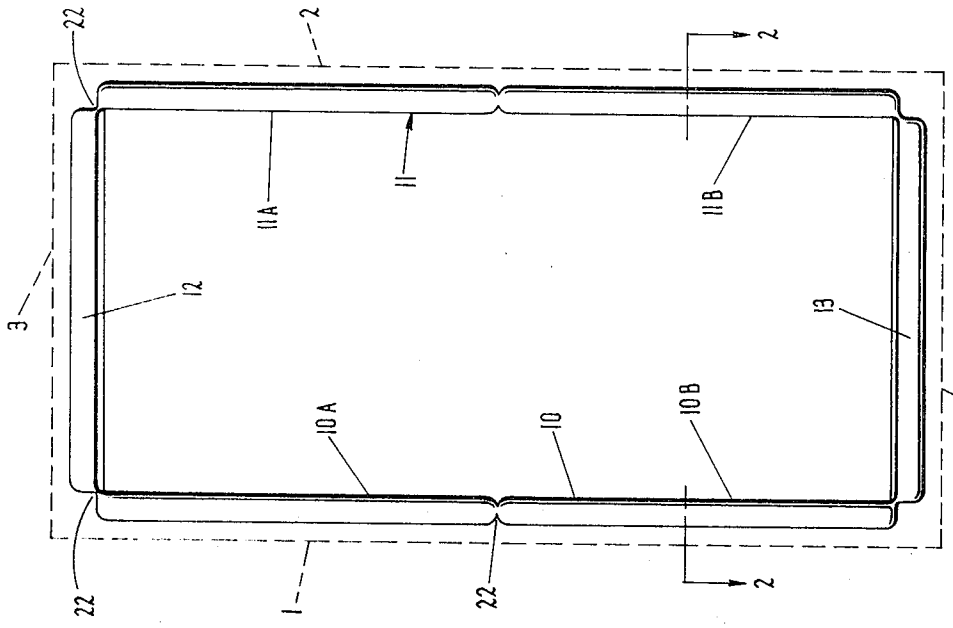


FIG. 1

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CRIB BUMPER

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ABSTRACT OF THE DISCLOSURE

A crib bumper for use in infants' cribs having side rails and a mattress, with an upper surface of the mattress below the upper edges of the side rails of the crib. The bumper is provided with a sheet attached at its side edges to the lower edges of opposite sides of the bumper. The sheet may extend across the crib below the mattress to secure the bumper.

SUBJECT MATTER OF INVENTION

The present invention relates to a bumper for use in an infant's crib, and in particular to a bumper for an infant's crib having side rails extending above the crib mattress.

BACKGROUND OF INVENTION

For some time infants' cribs have been provided with bumpers that line the rails and are designed to prevent the bumping of the infant against the hard wooden or metal rails that form the crib. Bumpers which have been commercially available heretofore are ordinarily formed of elongated resilient compressible members flexibly secured end to end and are arranged in a rectangle within the rails of the crib. The bumpers have been conventionally held in the crib by strings that extend from the elongated members and are tied to the side rails and occasionally the head and footboards of the crib.

Such commercial bumpers are not altogether satisfactory because the strings that hold the bumpers in place frequently break or are easily loosened by an infant. In addition, the strings do not provide a very secure attachment for the bumpers to the crib and often don't properly hold the lower edges of the bumpers in place. Moreover, infants are often able to slip underneath the bumper and force part of the their body between adjacent rails.

SUMMARY OF INVENTION

The foregoing disadvantages of the presently commercially available bumpers are overcome in the present invention, in which it is an object of the present invention to provide an improved crib bumper for use in infants' cribs.

It is also an object of the present invention to provide an improved crib bumper which is not easily loosened or untied by an active infant, which does not require time-consuming tying or retying, which is not susceptible to breakage, fraying and inadvertent knotting. A still further object of this invention is to provide an improved means of securing a crib bumper so that an infant cannot lift its lower edges and put its feet under or flip the bumpers over the side rails.

A futher object of the present invention is to provide a bumper which is securely held in place, but nonetheless permits normal usage of blankets and mattress. A still further object of the present invention is to provide a bumper having means for securely holding the bumper in place in such a manner as to preclude the infant's inadvertent loosening of the bumper. A still further object of the present invention is to provide an improved bumper which is easily adjustable for cribs of different

sizes and which is not likely to be torn or damaged during usage.

In the present invention there is provided a crib bumper formed of a series, preferably four, of elongated members adapted to function as cushions on the inner surfaces of the side rails. These elongated members, which are flexibly connected end to end to form a rectangle, have secured between alternate ones of said elongated members a flexible means preferably in the form of a flexible sheet that is adapted to be placed underneath the crib mattress with its periphery extending upwardly at either side of the mattress and terminating in an integral attachment with opposite elongated members.

BRIEF DESCRIPTION OF DRAWINGS

The foregoing objects and advantages of the present invention will be more clearly understood when considered in conjunction with the accompanying drawings in which:

FIG. 1 is a top plan view of a crib bumper embodying the present invention and illustrating a crib in dotted outline;

FIG. 2 is a cross-sectional view taken along the line 2—2 of FIG. 1; and

FIG. 3 is a cross-sectional detail of the invention showing a modified form of using the invention with the cross-sectional detail taken in a view corresponding to that of the left portion of the line 2—2 of FIG. 1.

DETAIL DESCRIPTION OF PREFERRED EMBODIMENTS

The bumper, which is the subject matter of this invention, is designed for use with conventional infants' cribs that vary somewhat in dimension. These cribs generally are rectangular in shape and are provided with side rails **1** and **2** and end members **3** and **4**. The side rails and end members generally project above the upper surface **5** of the crib mattress **6**, a distance such as illustrated at **7**. This distance normally varies depending upon the exact location of the support **8** for the mattress **6**. The support **8** usually is vertically adjustable and may comprise for example a spring that is secured to the frame of the crib by adjustable hooks or catches. The side of most cribs are provided with a series of rails.

The crib bumper is preferably made of a series of interconnected elongated members that are continuous with one another to form a series of side members **10** and **11** and end members **12** and **13**. These members may be formed of a single length, as illustrated by the members **12** and **13**, or may, if desired, be formed of a series of segments, as illustrated at **10A**, **10B** and **11A**, **11B**. These members have continuous upper edges **15** and lower edges **16**. The lower edges **16** are designed to rest on the upper surface **5** of a crib mattress **6**. The upper edges **15** ordinarily are positioned below the upper edges **17** of the crib rails **1** and **2** and end members **3** and **4**. These members **10, 11, 12** and **13** are preferably formed of a cushioning material which may typically comprise a flexible resilient compressible inner material such as foam rubber or down **19** continuously covered with a sheet, preferably waterproof, of fabric or plastic material **20**. The successive segments **10A–10B**, **12** etc., may thus be defined by vertical stitch lines or heat seals **22** that define successive segments one from the other and also provide a hinge line for successive segments.

Preferably, the length of these segments **10A–10B**, **11A–11B**, **12** and **13** should be at least five times their thickness. The lengths of these segments should be such as to permit the lining of the rails **1** and **2** and end members **3** and **4** with the bumper. The bumper may, if desired, be of continuous circular members, as illustrated, or alternately may be split into a series of segments by

separating one set of adjacent segments, such for example as at segments **10B** and **13**.

The elongated members **10** and **11** generally form the opposite sides of the bumper and are designed to be placed adjacent to the side rails **1** and **2**. A flexible web, preferably in the form of a sheet **25**, extends loosely between the lower edges **16** of the opposite side members **10** and **11**. This sheet **25** should have a length between the opposite side elements which is greater than the normal width of the crib mattress **6** between the side rails **12** and **2**, plus twice the normal height of the mattress **6**.

The flexible sheet **25** is preferably positioned beneath the mattress **6** with its marginal areas adjacent to the members **10** and **11** extending parallel to the opposite sides of the mattress **6**, as illustrated at **26** and **27**. The sheet **25** may be formed of any suitable fabric or sheet material, and might for example be formed of a cotton or if desired a waterproofing material such as rubberized fabric.

In the modified usage of the invention, as illustrated in FIG. 3, the elongated members are formed with a continuous sheet **25**, as illustrated, with this sheet suitably attached to the lower edges **16** of the opposite members **10** and **11** by stitching or heat sealing. The sheet **25**, however, is preferably formed of a waterproofing material such as a vinyl plastic or rubber. In the modified use, the sheet **25** is folded back upon itself in a double fold, as illustrated at **30**, with the sheet extending downwardly and thence upwardly on opposite sides of the mattress and with the intermediate portion of the sheet **25** extending over the upper surface **5** of the mattress **6**, thus providing a waterproofing cover for the mattress as well as a means for securing the bumper at the sides of the mattress in such a fashion as to preclude an infant from putting his head or foot below the bumper and through the rails of the crib.

In another modified form of the invention, the sheet **25** may extend continuously from each lower side member **10** and **11** and be separated centrally along its length so that effectively two separate sheets are used with each depending from one of the two side members **10** and **11**. This arrangement is, however, not considered as satisfactory as the preferred embodiment of the invention.

What is claimed is:

1. A bumper for use in an infant's crib having side rails and a mattress with the upper surface of the mattress substantially lying in a plane below the upper edges of said side rails comprising a plurality of elongated members having upper and lower edges adapted to extend longitudinally coextensive with and on the inner sides of said side rails, said lower edge adapted to rest on the upper surface of said mattress, said member providing

a cushioning member, and a flexible means extending lengthwise of at least one of said side members, said flexible means depending from at least one of said elongated members and extending continuously and coextensively along substantially the full length of said at least one of said elongated members and adapted to be positioned and extend below said mattress.

2. A bumper as set forth in claim **1** wherein said side rails are parallel to one another and said elongated members include at least a pair adapted to be positioned parallel and adjacent to said parallel side walls with said elongated members formed of compressible resilient material, and said flexible means comprises means integrally connected to and depending from each of said pair of elongated members.

3. A bumper as set forth in claim **2** wherein said flexible means includes at least one flexible web integrally engaged with at least one of said pair of elongated members.

4. A bumper as set forth in claim **3** wherein said flexible web means is integrally engaged with each of said pair of elongated members and has a total length normal to the edge of the elongated member to which it is attached that is greater than the width of the crib mattress normally positioned between said side rails to which said pair of elongated members is normally parallel.

5. A bumper as set forth in claim **4** wherein said flexible web comprises a sheet having parallel side edges with said side edges secured to each of side pair of elongated members, said sheet having a width between said parallel side edges at least equal to the width of the crib mattress normally used therewith plus twice the normal height of said mattress.

6. A bumper as set forth in claim **5** including four of said elongated members flexibly secured end to end with said sheet secured at its side edges to the lower edges of alternate ones of said elongated members.

References Cited

UNITED STATES PATENTS

2,649,594	8/1953	Hertz et al.	5—331
3,018,492	1/1962	Rosen	5—93
3,137,870	6/1964	Fink	5—93
3,430,272	3/1969	Thorn, Jr.	5—100

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5—92, 329