

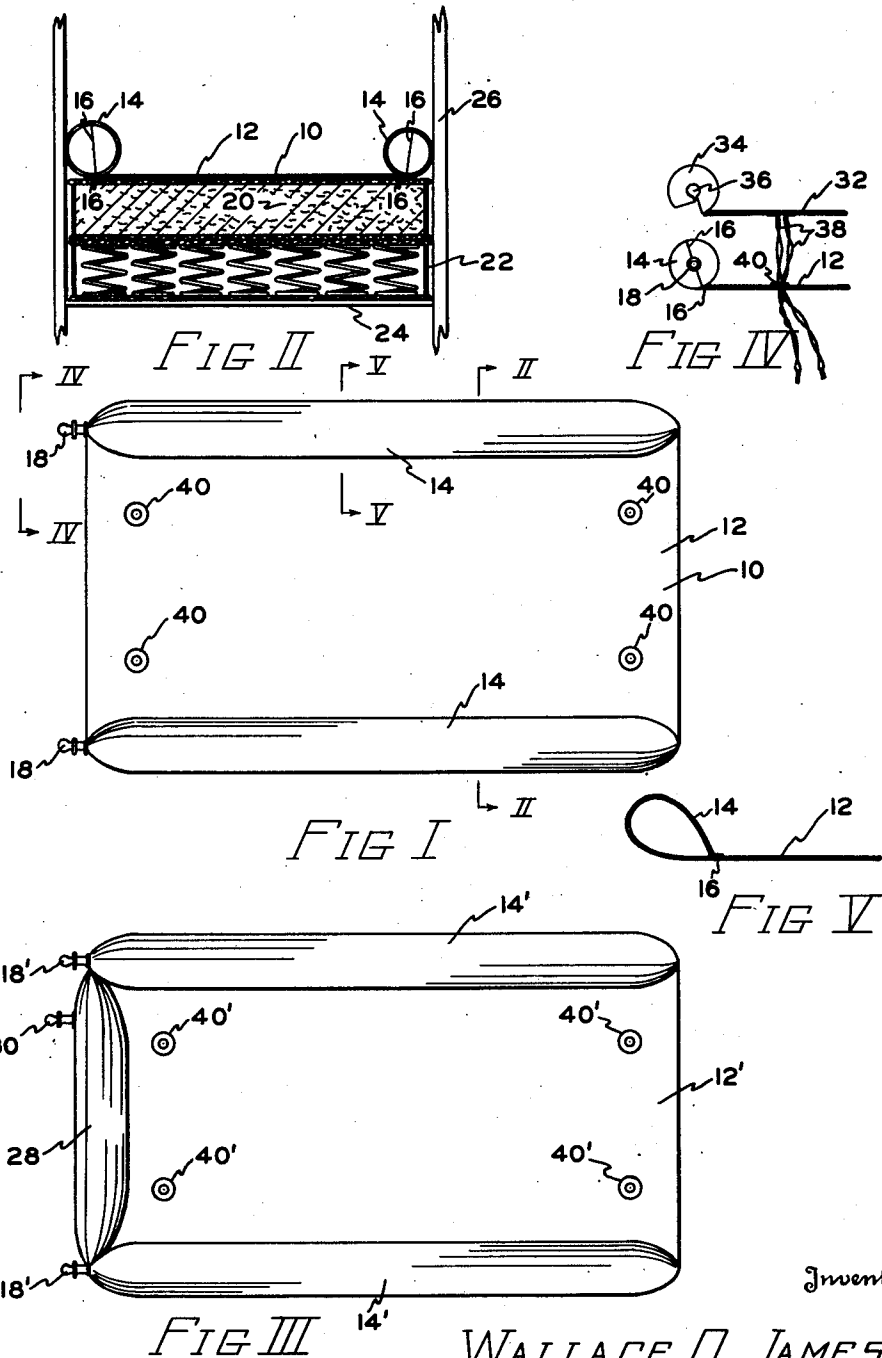
July 7, 1953

W. O. JAMES

2,644,173

IMPERVIOUS SHEET WITH INFLATABLE SIDES

Filed March 13, 1948



Inventor

WALLACE O. JAMES

By *Bluman & Patch*

UNITED STATES PATENT OFFICE

2,644,173

IMPERVIOUS SHEET WITH INFLATABLE SIDES

Wallace O. James, Jackson, Mich.

Application March 13, 1948, Serial No. 14,785

2 Claims. (Cl. 5—331)

1

This invention relates to impervious sheets used on baby beds, and more particularly to a structure in which the sheet will act as a protector for the baby bed and for the baby as well.

The use of an under sheet on baby beds made of a material which is impervious to liquids is well known, such materials as rubber sheeting, and common oil cloth having been used therefor in the past. Present day baby beds, being of a fairly large size for a youngster of tender age, likewise require the use of a set of so called bumpers," which are in reality a set of pads attached to the vertical sides of the bed, functioning to prevent the baby's harming itself by striking the sides of the bed, and preventing the baby's pushing its toys out of the bed, thereby requiring the services of some older individual to retrieve them from the floor.

Another problem commonly associated with babies and their unusual sleeping habits arises when the young mother and father try to pay a social call on some friends and take the new baby along. The problem immediately arises of providing a place for the child to sleep, including the necessary safety equipment for the protection of the child and the bed on which it is allowed to sleep.

My invention, comprising a sheet of some impervious material formed with one or more inflatable tube-like edges, has been made to solve all of the above problems, by providing an article which is most useful in the baby's own home, and which article takes up a minimum amount of space when it is desired to take the baby along to some other place and to allow it to sleep there.

It is therefore an object of this invention to provide an impervious sheet for a baby bed, the sheet having inflated tubular sides which will act as bumpers when it is in use in the baby bed.

A further object is to provide an impervious sheet with a plurality of inflated tubular side portions which will function to keep the baby on the center portion of the sheet when the sheet is used on a full-sized bed.

A still further object is to provide an impervious sheet to be used on a baby bed, this sheet being fitted with an easily removable cover of a washable material.

Further objects and advantages will be apparent from a consideration of the following specification in connection with the appended claims and the accompanying drawings in which,

2

Fig. I is a plan view of a baby sheet constructed according to my invention.

Fig. II is a view in section along the line II—II of Fig. I, with the sheet placed in position on a baby bed,

Fig. III is a plan view of an alternate construction in which there are inflatable tubes along two sides and across one of the ends of the sheet,

Fig. IV is a broken view on the line IV—IV of Fig. I showing the relationship of the fitted cover portion to the impervious bed sheet, and

Fig. V is a view in section on the line V—V of Fig. I and showing the method of constructing the tubular edges.

In the drawings, I have shown in Figs. I and II my baby bed sheet with a central flat portion 12, formed of an impervious material such as one of the vinyl resins. Formed along each of the longitudinal edges of the portion 12 is an inflatable tubular portion 14, likewise of the same material. The tubular portions 14 may be fabricated separately from the section 12 and attached thereto by any convenient means, but I prefer to form the sections 14 merely by lapping the material of section 12 over upon itself and forming a tightly sealed joint by any known means, so that a tubular structure is formed. In using a vinyl resin as the material for this structure, it is possible to "weld" this material by the use of appropriate heat and pressure, the welded seam or joint 16 being as impervious to the passing of liquids or air as the vinyl resin itself. To provide means for inflating and deflating the tubular portion 14, I have provided a simple valve 18 in the end of each of the portions 14 which will allow the tubes 14 to be blown up by air from the mouth, will seal the air inside the tube 14, and will allow its removal when desired. In Fig. II, I have shown my baby sheet 10 in position on a mattress 20 supported by springs 22 in the bed frame 24. Under these conditions, the tubular sections 14 will be held in a fairly rigid vertical position by reason of their abutment with the vertically extending bed slats 26. When used in this manner, the tubular portion 14 will act as a bumper to keep the child from hurting itself against the vertically extending slats 26. It will also serve to retain toys, rattles, etc. on the bed where the child can play with them. The showing in Fig. I is approximately the way my invention will look when laid on a large size bed, under which conditions the tubular section 14

3

will serve to keep the baby from rolling off the bed.

The modification shown in Fig. III comprises the flat section 12' and the longitudinal extending tubular portion 14' equipped with the simple valves 18'. Across one or both of the ends there may be formed an extra tubular portion 28, and, by the addition of the valve 30, the tube 28 may be used in a manner similar to the uses of the tubular section 14. It is also possible to construct the sheet with a single continuous inflatable tube running around the entire circumference and requiring but one valve to allow its being inflated.

I contemplate in the use of my bed sheet 10 that it is most advisable to combine therewith a washable cover 32, the side portions of which are formed with an open hem 34 of a size and shape to completely cover the tubular portion 14, and equipped with an aperture 36 to admit the passage of the valve 18. To hold the washable cover 32 in close proximity with the baby sheet 12, and to prevent its removal therefrom, I have provided a pair of tapes 38 sewed to the under side thereof, and positioned directly above the grommet 40 so that the tapes 38 may be entered through the grommet 40 and then tied around a part of the bed structure, such as the vertically extending slats 26. When using the modification shown in Fig. III, the tapes will be entered through the grommet 40'. This combination of the impervious sheet with the inflatable side portions and the associated easily removable washable cover provides a structure with the advantages of an impervious sheet, a set of bumpers, and means for holding the sheet and associated structure in a desired position on a baby-size bed.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:

1. An accessory for baby beds comprising a central sheet portion, a plurality of inflatable

4

tubular members secured to and adjacent the edges of said portion, means for inflating and deflating said tubular members, a plurality of grommets positioned in said sheet portion and defining apertures therethrough, a cover portion overlying said sheet portion and said tubular members, and tying tapes attached to said cover portion and removably extending through said grommets, whereby said cover sheet may be removably affixed to a bed while retaining said central sheet in a desired position.

2. A crib-sheet for baby beds comprising a flat panel formed of a single thickness of a relatively impervious material, a plurality of inflatable tubular members secured to and adjacent the edges of said panel, means for inflating and deflating said tubular members, means defining a plurality of apertures in said panel, a cover member formed to overlay said panel and to embrace said tubular members, and a plurality of tapes attached to said cover member and removably extending through said apertured means whereby said panel and said cover member may be removably attached to a bed.

WALLACE O. JAMES.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
429,894	Doremus	June 10, 1890
655,987	Jones	July 31, 1900
1,061,259	Blofield et al	May 13, 1913
1,261,314	Stoddard	Apr. 2, 1918
1,329,687	Underwood	Feb. 3, 1920
1,392,533	Smyth	Oct. 4, 1921
1,570,470	Fritsche et al.	Jan. 19, 1926
1,576,211	O'Kane	Mar. 9, 1926
2,327,794	Hurt	Aug. 24, 1943

FOREIGN PATENTS

Number	Country	Date
159,299	Great Britain	Feb. 22, 1921