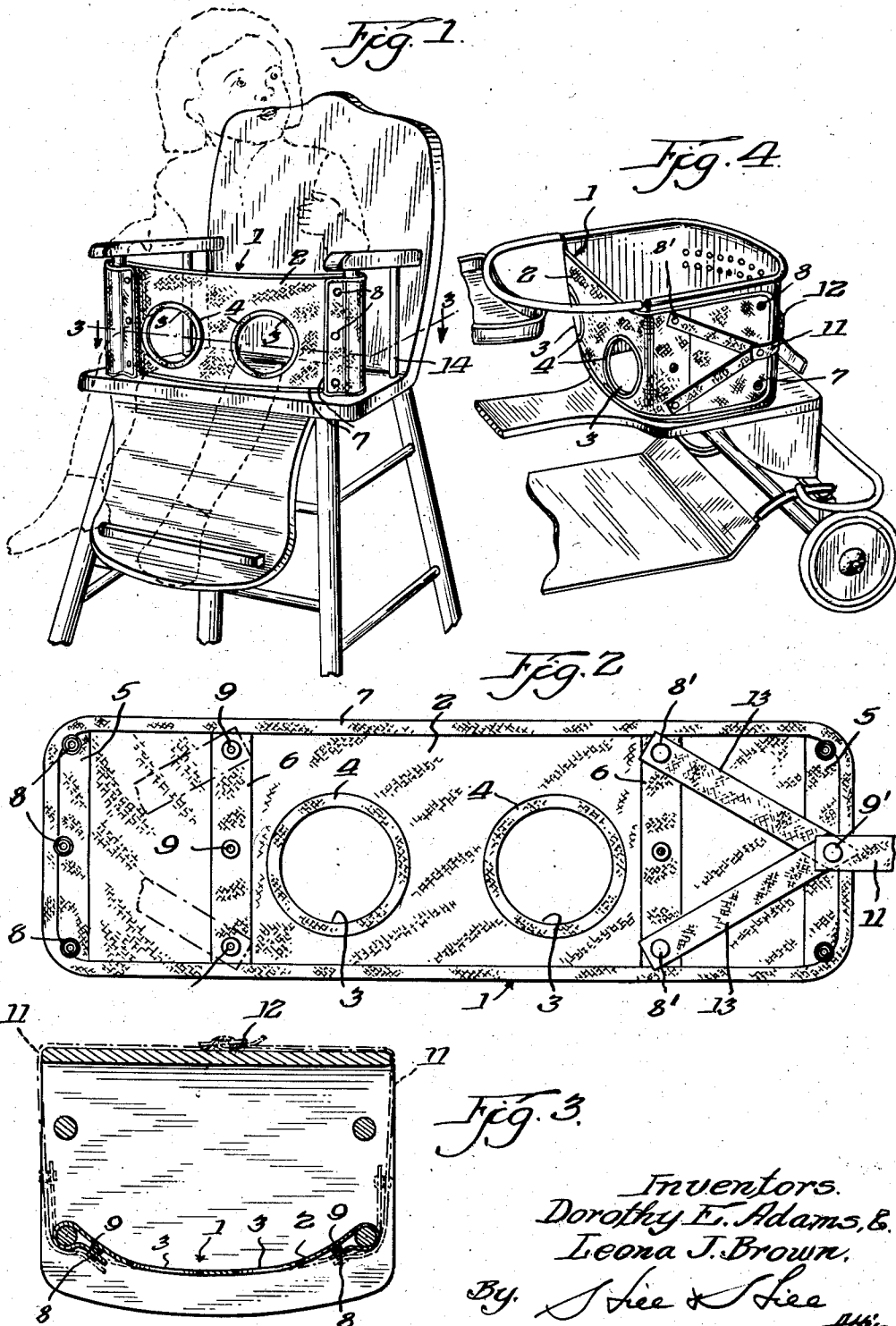


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D. E. ADAMS ET AL
CHILDREN'S SAFETY DEVICE

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CHILDREN'S SAFETY DEVICE

Dorothy E. Adams, Chicago, and Leona J. Brown, Carpentersville, Ill.

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The invention relates generally to children's safety devices and more particularly to a guard member for holding infants and young children in a high chair or other article.

While there have been somewhat similar devices in the past seeking to accomplish the same general results, these prior devices have not proved wholly satisfactory. The present invention, therefore, has among its objects the production of a child's safety belt for use on high chairs and other objects which is very simple in construction, application and use, and very efficient in operation.

Another object of the invention is the production of such a safety belt which may be readily attached to or detached from the object to which it is applied and which may be folded into a small compact mass when not in use, whereby it may be readily carried when traveling, etc.

Another object of the invention is the production of such a safety belt which is not quickly soiled as it does not come in contact with food or parts of the child's body other than the legs.

A further object of the invention is the production of such a child's safety belt which is provided with very flexible attaching means, enabling its application to objects of various sizes and shapes.

A further object of the invention is the production of such a safety device which may embody a band constructed to be attached in and of itself on a high chair or other object and which may be provided with a belt or strap for attaching the band on objects which are so shaped that use of the band alone would not be practical, the construction being such that snap fasteners may be utilized to attached portions of the band to itself or to the belt, the fastening arrangements being such that pull and stress are evenly distributed on the belt and band, and in which the snap fasteners are so placed as to be inaccessible to the baby, whereby the latter cannot, unassisted, remove the band.

Many other objects and advantages of the invention will be obvious to those skilled in the art from the disclosure herein given.

To this end our invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts:

Fig. 1 is a perspective view of a high chair with a safety device embodying the present invention mounted thereon;

Fig. 2 is a plan view of a safety belt embodying the present invention, illustrating application of the extension belt or strap thereto;

Fig. 3 is a sectional view taken approximately on the line 3—3 of Fig. 1; and

Fig. 4 is a perspective view of a portion of a child's stroller illustrating the application of the safety device

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thereto, utilizing the attaching bands to hold the same in place.

Referring generally to the drawings, 1 indicates a guard band constructed in accordance with the present invention having a generally rectangular shaped body 2 formed from suitable fabric or the like, either in a single or a double ply depending upon the nature of the particular material employed, and as desired. The band is provided with a pair of openings 3 therein of generally circular shape of a size and spaced apart a sufficient distance to receive the legs of a small child or infant. The periphery of the openings 3 may be edged by a suitable binding strip 4 of fabric or the like. Extending across each end of the band 1 is a reinforcing strip 5 and positioned between each of the latter and the adjacent hole 3 is a second reinforcing strip 6, the strips 5 and 6 being secured to the band by stitching passing through the same or other suitable means. A binding strip 7 may extend around the periphery of the band 2, finishing off the edges thereof, the latter being stitched or otherwise suitably secured to the band. In some instances, the material utilized for the body of the device may be such that either or both the banding strips 4 and 7 and reinforcing strips 5 and 6 may be omitted.

Attached to the band 2 at each of the reinforcing strips 5 is a plurality of fasteners 8, three fasteners being employed along each strip 5 in the embodiment of the invention illustrated. Similarly attached to the reinforcing strips 6 is a like number of cooperable fastening elements 9. The elements 8 are illustrated in the drawings as being female elements of a common type of snap-fastener, while the elements 9 comprise the male elements adapted to be locked in engagement with the elements 8, whereby each end portion of the band 2 may be folded around and secured to the body of the band at the reinforcing strips 6, forming a pocket or channel extending along each end portion of the band.

The device may also be provided with a separable attaching band or strap 11 adapted to be secured to the end portions of the band, in effect operatively extending the length of the latter. As illustrated in Figs. 3 and 4, one-half of the strap 11 may be provided with a buckle 12 adapted to receive the free end of the other half for connecting the ends together. As illustrated in Fig. 2, the end of each strap adapted to be secured to the band 2 may be provided with a pair of angularly extending leg portions 13 secured at their adjacent ends to the adjacent end of the strap 11. In the embodiment of the invention illustrated, the portions 12 are attached to the end of the strap 11 by a fastener 9' corresponding to the fastener 9 on the band, and in like manner the free end of each portion 13 may be provided with a fastener 8' corresponding to the fastener element 8. It will be apparent that with this construction the strap 11 may be secured to the band 2 by means of the fasteners 8' and 9' together with the portions 13, it being particularly noted that the strap 11 is thus connected to both of the reinforcing strips 5 and 6 at three points, spaced both longitudinally and laterally, whereby stresses are transmitted evenly from the band to each end of the belt.

Where it is desired to use the device on a highchair or other object having rungs 14 or the equivalent, it may be desirable to utilize merely the band 2 without the strap or belt 11, in which case the end portions of the band may be wrapped around one of the rungs such as the front rung 14 and each end portion secured by means of the fasteners 8 and 9 to the body of the band, whereby the rungs 14 are encircled by the end portion of the band which is thereby held in position on the chair. As illustrated in dotted lines in Fig. 1, the child may be seated in the chair with its legs extending through the openings 3

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in the band, which then functions to prevent the child from slipping forward off of the chair seat. Where the chair is provided with a plurality of rungs at each side thereof, it may be desired where the device is to be utilized in connection with a small baby to attach the device to one of the intermediate rungs rather than the front rung, the construction thus providing a degree of adjustment in the mounting thereof on the chair to accommodate children and infants of different size and age.

It will be particularly noted from a reference to Figs. 1 and 3, that the arrangement of the fastening elements 8 and 9 is such that they are substantially inaccessible to the baby and consequently the latter cannot, unassisted, remove the band.

In the event the device is to be employed on a chair or other structure which does not embody rungs similar to those illustrated in Fig. 1, as for example, the stroller illustrated in Fig. 4, which is provided with a solid metal back-rest, the belt 11 may be attached to the band 2 as illustrated in Figs. 2 and 4, and the band placed in position across the front of the seat portion, following which each half of the band is extended around the seat back and buckled in place, firmly retaining the band in operative position. Due to the arrangement of the fastening means between the belt and band and the transmittal of stresses from one to the other as a result thereof, the band and belt will withstand all normal stresses resulting from the actions of a child retained thereby.

It will be appreciated from the above description that when the device is mounted on a highchair or the like, such as that illustrated in Fig. 1, it will normally be positioned beneath the usual tray upon which the child's dishes or other objects are placed so that it is effectively removed from possible contact with food and the like, and at the same time, as only the child's legs are in contact with the strap, it will not be readily soiled. However, the construction is such that it may be readily fabricated from materials which will withstand washing or for that matter sterilizing, so that the device may readily be maintained in a clean and sanitary condition. It will be further noted that when the device is attached to a highchair or the like, in the manner illustrated in Fig. 1, any forces upon the band as a result of the activity of the child retained thereby will be transmitted substantially directly from the band to the chair posts or rungs, with the stresses on the fasteners 8 and 9 being primarily shear stresses rather than oppositely directed separating stresses.

Having thus described our invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of our invention; hence, we do not wish to be understood as limiting ourselves to the exact form, construction, arrangement and combination of parts herein shown and described, or uses mentioned.

What we claim as new and desire to secure by Letters Patent is:

1. A child's safety device comprising an elongated generally rectangular-shaped band of flexible material having a pair of leg-receiving openings therein, said band having a plurality of fastening elements adjacent each

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end of the band, fastening elements spaced from each end of the band and cooperable with the first-mentioned elements for securing the adjacent free end of the band thereto, whereby such free end may be wrapped around a supporting object and secured to the band, and additional means for fastening the band to an object comprising a pair of separable belt elements each arranged at its free end for engagement with respective first and second-mentioned fastening means on said band, and in effect extending opposite ends of the latter.

2. A child's safety device comprising an elongated generally rectangular-shaped band of fabric material having a pair of leg-receiving openings therein, an edge binding encircling the peripheral edges of the band and the opening therein, a reinforcing strip extending across the band adjacent each end thereof, a second strip extending across the band portions intermediate the first strip and adjacent leg opening, a plurality of fastening elements mounted on each end of the reinforcing strip, fastening elements mounted on each intermediate reinforcing strip cooperable with the first-mentioned elements for securing the adjacent free end of the band thereto, whereby such free end may be wrapped around a supporting object and secured to the band, and additional means for fastening the band to an object comprising a pair of separable belt elements each arranged at its free end for engagement with respective first and second-mentioned fastening means on said band, and in effect extending opposite ends of the latter.

3. A child's safety device comprising an elongated generally rectangular-shaped band of fabric material having a pair of leg-receiving openings therein, an edge binding encircling the peripheral edges of the band and the opening therein, a reinforcing strip extending across the band adjacent each end thereof, a second strip extending across the band portions intermediate the first strip and adjacent leg opening, three fastening elements mounted on each end of the reinforcing strip, three fastening elements mounted on each intermediate reinforcing strip cooperable with the first-mentioned elements for securing the adjacent free end of the band thereto, whereby such free end may be wrapped around a supporting object and secured to the band, and additional means for fastening the band to an object comprising a pair of separable belt elements, each having a pair of diverging terminal portions, the latter having fastening elements thereon, said belt being cooperable with end elements on the intermediate reinforcing strips, and a third cooperable with an intermediate fastening element on the end reinforcing strips.

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