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(11)

EP 0 799 585 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
08.10.1997 Bulletin 1997/41

(51) Int Cl.⁶: **A44B 11/12**, A45F 5/02,
A61J 17/00

(21) Application number: **97302342.7**

(22) Date of filing: **04.04.1997**

(84) Designated Contracting States:
DE ES FR GB IT

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(30) Priority: **04.04.1996 GB 9607234**

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(54) Clip and infant soother incorporating such a clip

(57) A clip comprises an L-shaped lever 8 journalled in side walls 6 to pivot freely. One leg 14 traps material 24 against a rear wall 4 as the clip moves to an over-centre position. This arrangement is used in known

strap adjusters. Slots 22 are provided in the side walls, between the axis of rotation of the lever and the rear wall 4, so that the clip can be attached to the edge of a wide piece of material. The clip is particularly suitable for use in attaching an infant soother to a garment, via a strap.

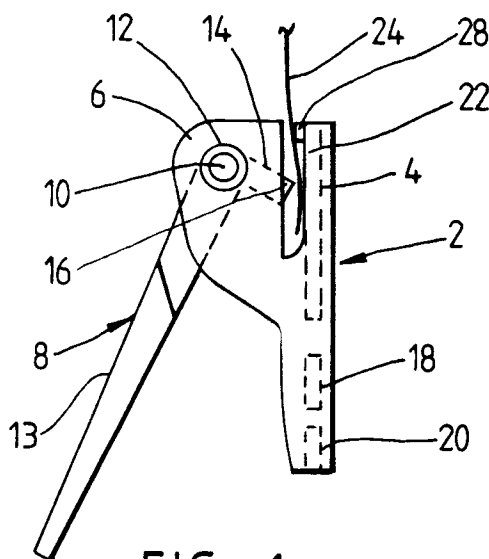


FIG. 1

EP 0 799 585 A1

Description

The present invention relates to a clip and to an infant soother, such as a dummy or teething ring, incorporating such a clip.

It is known to attach an infant soother to the infant's clothing, so that the soother does not fall to the ground or become lost when the infant discards it. Existing designs use a spring-loaded clip, but the small parts in these clips make them undesirable for use with infants.

A first aspect of the present invention provides a clip comprising a body portion having a rear wall, a side wall projecting from the rear wall, an L-shaped lever mounted on the side wall and pivotable about an axis, one leg of the lever co-operating with the rear wall to trap a sheet of material therebetween, wherein a channel is provided in the side wall, between the axis and the rear wall.

The invention arises from a modification of known strap adjusters. These use an L-shaped lever which pivots to trap a strap between an end of one of the legs of the lever. In the known adjusters, the lever is mounted between two side walls, which limit the width of the material (i.e. a strap) on which the adjuster is used. By providing a slot in a side wall, the adjuster can be clipped to the edge of a wide piece of material.

Another aspect of the invention provides a clip having a first wall, a lever mounted to pivot freely about an axis parallel to the first wall between an open position and a closed, over-centre position to trap a piece of material between the lever and the wall, wherein an endless channel is formed between the axis and the first wall.

Yet another aspect of the invention provides an infant soother comprising a strap attached at one end to a clip as defined hereinabove, and at another end to a soother, such as a dummy or teething ring.

The invention will be further described by way of example with reference to the accompanying drawings, in which:

Figure 1 is a side view of a clip forming an embodiment of one aspect of the invention, in an open position;

Figure 2 is a plan view of the clip of Figure 1, in a closed position;

Figure 3 is a cross-section along the lines III-III of Figure 2; and

Figure 4 is a view of an infant soother forming an embodiment of another aspect of the invention.

Referring to Figures 1 to 3, a clip 2 has a rear wall 4 and two side walls 6. An L-shaped lever 8 is mounted to pivot freely between the side walls 6, by two stubs 10 which are journaled in apertures 12 in the side walls 6 to pivot about an axis A-A'. The lever snap-fits between the walls 6.

The lever has a long leg 13 which is gripped by the user for operation of the clip 2. A short leg 14 pivots into a position in which material is trapped between the free end 16 of the leg 14 and the rear wall 4. The lever 8 pivots to an over-centre position, so it is locked in place.

Two bars 18, 20 are provided between the side walls 6, below the rear wall 4, for attaching the clip to a strap (see figure 4).

The side walls 6 each have a slot 22 formed between the rear wall 4 and the axis A-A'. To mount the clip 2 on a piece of material 24, the edge of the material 24 is fed into the slots 22 and extends between the leg 14 and rear wall 4. The leg 13 is then pressed towards the rear wall 4, to trap the material 24, as seen in figure 3.

The free end 16 of the leg 14 may be serrated or corrugated to enhance the grip on the material 24. A nib 28 is formed at the upper edge of the rear wall 4.

By providing a slot 22 in at least one of the walls 6, between the axis A-A' and the wall 4, an endless channel is formed, allowing the clip to be attached to an edge of a wide piece of material.

As seen in Figure 3, the long leg 13 of the lever 8 can be enlarged to carry a logo, or be formed into an interesting decorative shape, for example.

Referring to Figure 4, an infant soother comprises a dummy 30 and a strap 32 secured at one end 33 about a ring 34 of the dummy 30 by a hook and loop or surface fastener 36. The other end 38 of the strap 32 is secured in a similar manner about one of the bars 18, 20 of a clip 2' of Figures 1 to 3. Thus, the dummy 30 can be secured to an edge of an infants garment by the clip 2'.

Claims

1. A clip comprising a body portion having a rear wall (4) a side wall (6) projecting from the rear wall (4), an L-shaped lever (8) mounted on the side wall (6) and freely pivotable about an axis (A-A'), one leg (14) of the lever (8) co-operating with the rear wall (4) to trap a sheet of material (24) therebetween, wherein a slot (22) is provided in the side wall (6), between the axis (A-A') and the rear wall (4).
2. A clip as claimed in claim 1, wherein two side walls (6) are provided and the lever (8) is mounted between the side walls (6).
3. A clip having a first wall (4), a lever (8) mounted to pivot freely about an axis (A-A') parallel to the first wall (4) between an open position and a closed, over-centre position to trap a piece of material (24) between the lever (8) and the wall (4), wherein an endless channel extending in the direction of the axis (A-A') is formed between the axis (A-A') and the first wall (4).
4. An infant soother comprising a strap attached at

one end to a clip (2) as defined in any one of claims
1 to 3, and at another end to a soother (30), such
as a dummy or teething ring.

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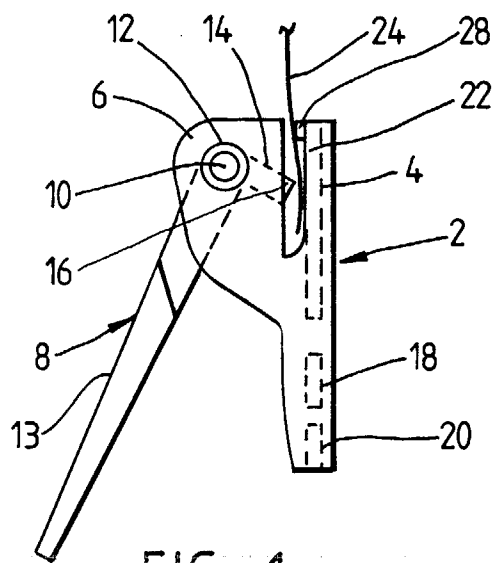


FIG. 1

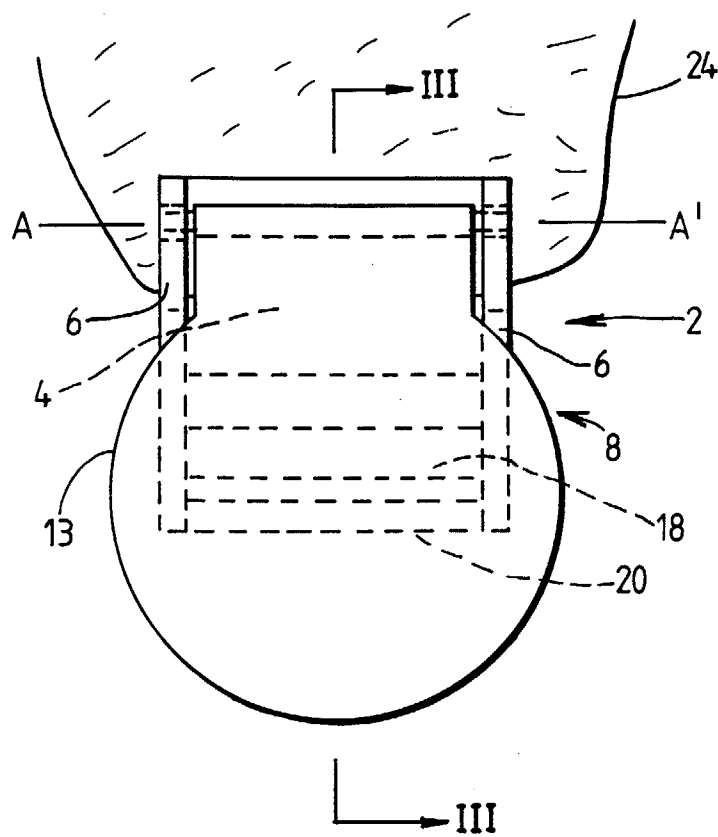


FIG. 2

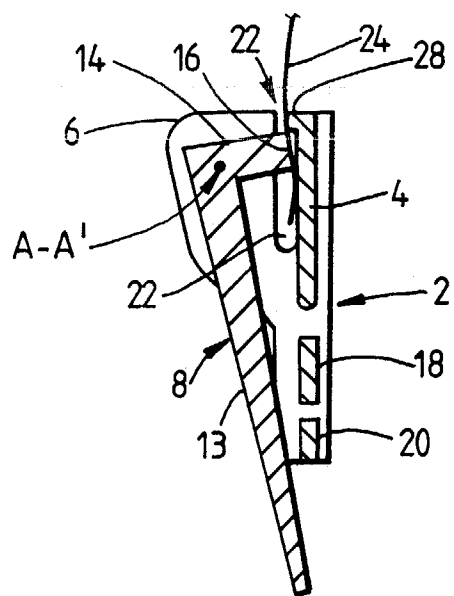


FIG. 3

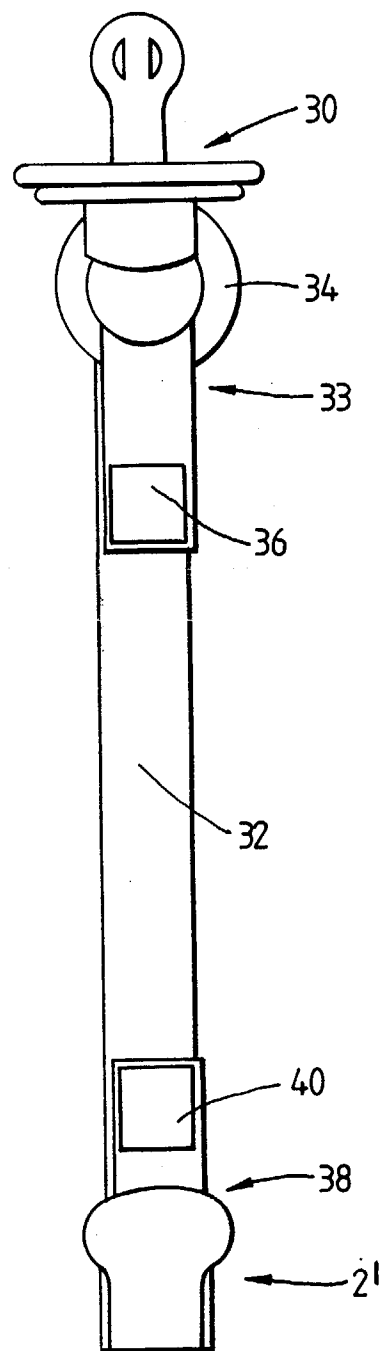


FIG. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 97 30 2342

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	GB 525 915 A (BUTTONS LIMITED)	1-3	A44B11/12
Y	* the whole document *	4	A45F5/02
	---		A61J17/00
Y	US 4 765 037 A (J.S. PERRY)	4	
	* column 2, line 20 - line 43; figure 1 *		

A	DE 90 04 462 U (INTERLOCK AG)	1	
	* page 10, paragraph 2 - page 13, paragraph 3; figures 1-6 *		

			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A44B A45F A61J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 July 1997	Examiner Garnier, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document			

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