

June 24, 1958

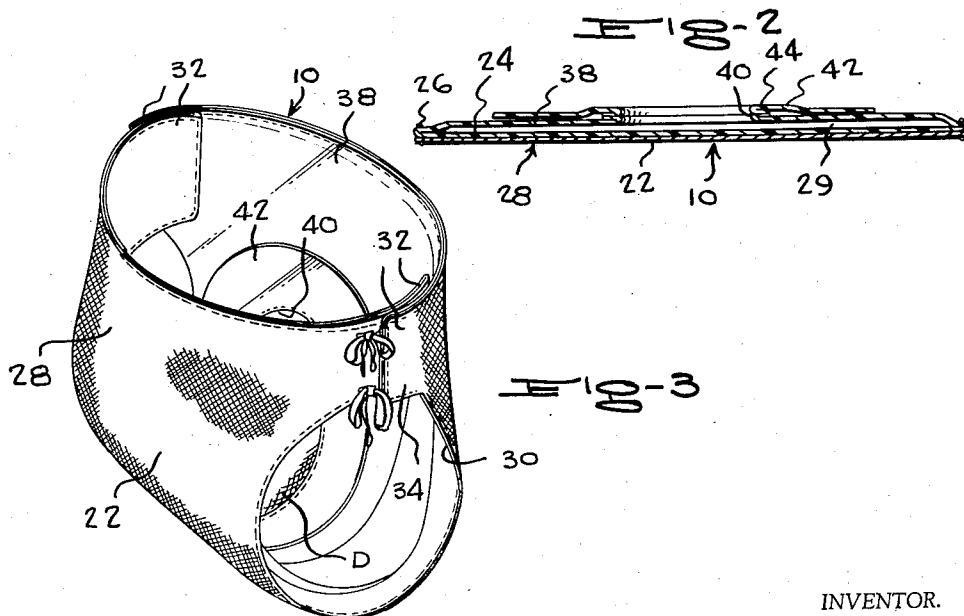
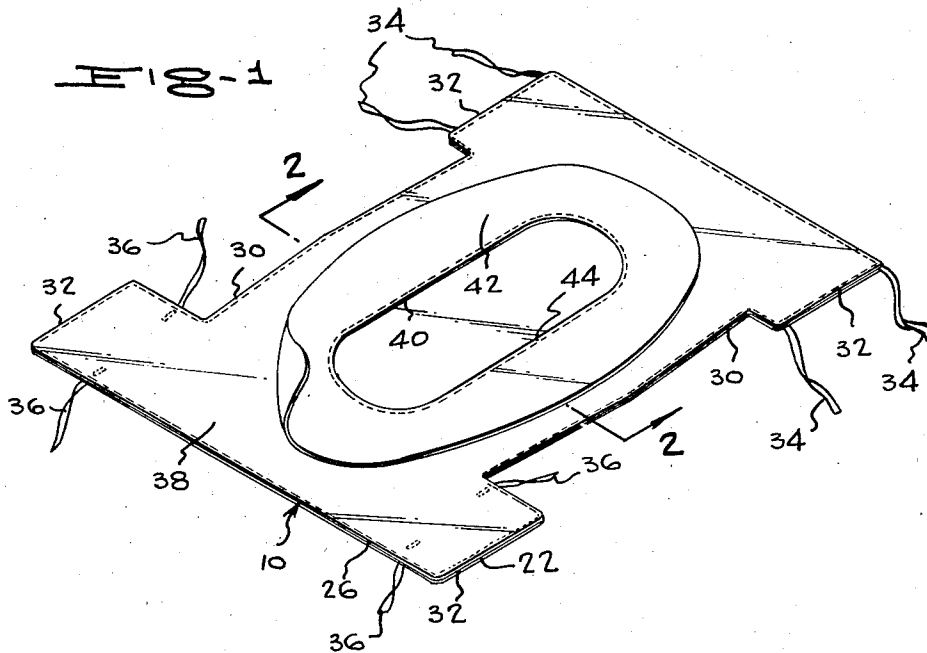
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COMBINATION CAST PROTECTOR AND DIAPER HOLDER

Filed Sept. 27, 1957

2 Sheets-Sheet 1



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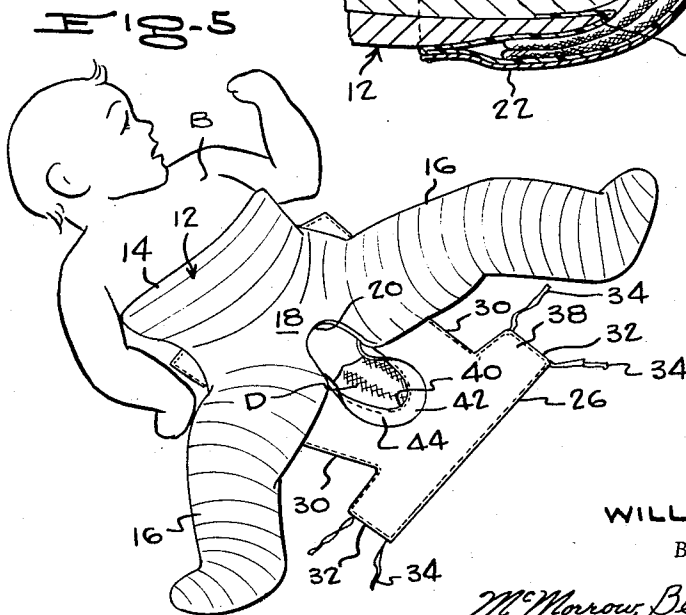
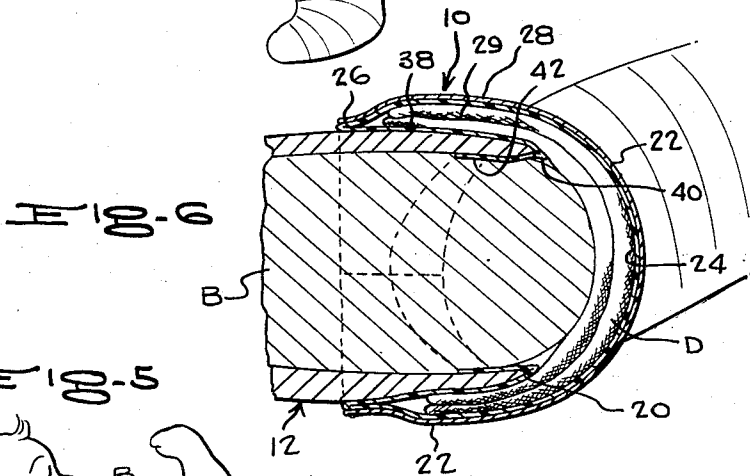
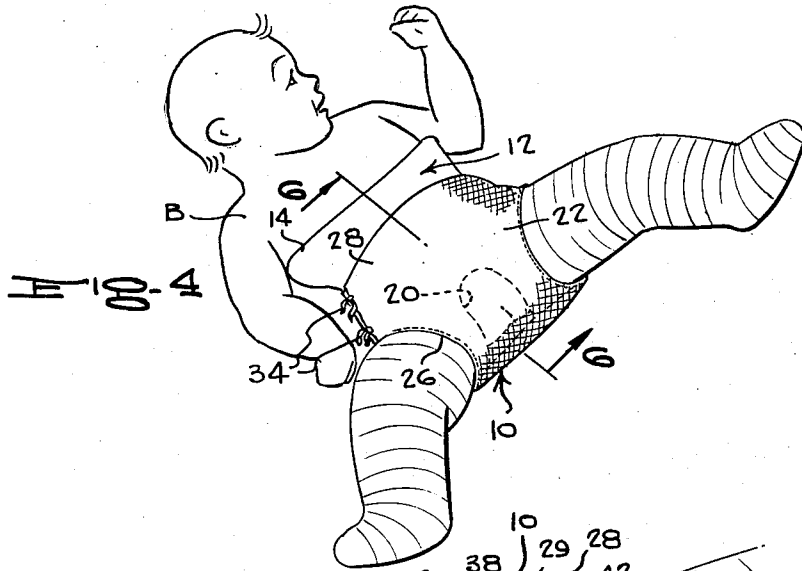
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2 Sheets-Sheet 2



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2,840,077

COMBINATION CAST PROTECTOR AND DIAPER HOLDER

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Application September 27, 1957, Serial No. 686,774

4 Claims. (Cl. 128—284)

This invention relates generally to garments for infants. More particularly, the invention, summarized briefly, is a garment that is designed to provide protection for a cast from wastes eliminated by the infant, with the garment at the same time holding a diaper in position to receive said wastes.

It is sometimes necessary for an infant, who has not as yet been toilet-trained, to be placed in a cast that extends completely about the lower portion of the trunk of the body, and about the legs, for the purpose of aiding in treatment of the infant for dislocated hip or hips, broken hip or hips, broken pelvis, broken legs, etc. Such a cast is known as a "frog-leg" type, and is provided, at the lower end of the trunk, with an opening through which wastes eliminated by the infant may pass.

It has been found that the cast tends to become wet and soiled, and definitely unsanitary, in the region of the cast that extends about said opening. This is readily understandable, in view of the fact that in many instances, the diaper will come in direct contact with the cast. In other instances, the edge of the opening is wholly unprotected, and is therefore impinged upon the eliminated wastes. Keeping the cast dry and clean is a very serious problem, accentuated by the long period of time during which the cast must remain upon the infant. The conventional use of diapers or diaper holders is not possible, since ordinary diaper holders are designed to fit fairly snugly against the child's body, this being impossible, of course, where the body is directly contacted by the cast. Further, even should there be a space between the child's body and the cast, it is impossible to insert a complete diaper holder into said space.

There has been, therefore, no protection for the edge of the opening, that is, for the wall of the cast opening, the inner surface of the cast immediately adjacent and surrounding said opening, and the outer surface of the cast in the same region.

The main object of the present invention is to provide a combination cast protector and diaper holder that will eliminate all the difficulties that have been described above.

Another object of importance is to provide, in a device of this nature, a protective portion of the protector or diaper holder, which will overlie the wall of the opening and the inner surface of the cast in the area surrounding the diaper, while still providing full comfort so far as the child is concerned.

Yet another object is to provide a garment of the character described which will be particularly designed to facilitate its application or removal.

A further object is to facilitate the swift insertion or removal of a conventional diaper, in the garment.

Other objects and advantages will become apparent from a consideration of the following description and the appended claims in conjunction with the accompanying drawings wherein:

Figure 1 is a perspective view of the combination

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garment, fully opened and showing the inner surface thereof;

Figure 2 is a transverse sectional view, on a slightly enlarged scale, substantially on line 2—2 of Figure 1;

Figure 3 is a perspective view of the garment, as it appears when it is brought up about the trunk of the infant in its use position;

Figure 4 is a perspective view on a reduced scale showing the garment applied to a surgical, "frog-leg" cast;

Figure 5 is a view like Figure 4 in which the garment has been opened; and

Figure 6 is an enlarged sectional view on line 6—6 of Figure 4.

Referring to the drawings in detail, the garment 10 constituting the present invention comprises a generally rectangular covering overlying the lower portion of a surgical cast generally designated 12 having the body or trunk part 14 merging into the leg portions 16, said cast having the usual approximately oval, comparatively large opening 20 at the crotch 18, through which opening wastes eliminated from the body B of the infant may pass.

The garment includes an outer panel 28 which may be of laminated construction, including an outer or covering plate 22 of fabric, and an inner piece 24 which may be of a flexible, thin material such as plastic. The outer piece can be ornamentally colored or otherwise finished, so as to provide a dressy or attractive appearance for the panty-type protector constituting the present invention.

The outer and inner pieces 22, 24 are stitched together throughout their peripheries, at 26, as shown in Figure 1. In this connection, the outer panel 28 need not necessarily be of laminated formation, of course.

In any event, elongated, shallow recesses 30 are formed in the opposite sides of the outer panel 28, and define at opposite ends of said sides laterally outwardly extending projections 32, the projections at one end of the panel being narrower than those at the opposite end. Extending laterally outwardly from each of the narrower projections 32 are ties 34. Cooperating ties 36 are extended longitudinally of the outer panel, from the other projections 32, so that when the projections are overlapped to provide leg openings as shown in Figure 3, said projections may be tied together, also as best shown in this figure of the drawing.

An inner panel 38, also of a waterproof material, is secured at its periphery to the periphery of the outer panel by the stitching 26. Inner panel 38 thus cooperates with the outer panel in defining a cavity, extending over substantially the full area of the garment, designated at 29 and adapted to receive a conventional, folded diaper D.

Centrally formed in the inner panel 38 is an elongated opening 40 corresponding in size and configuration to the cast opening 20. Said opening communicates with the cavity 29 as shown in Figure 2. Extending about the opening, and secured to the inner panel 38 in overlying relation thereto, is a protective, wide, continuous lip or flange 42, the inner edge of which is registered with the edge of the opening 40, said flange 42 being secured by stitching 44 to the inner panel 38.

The flange 42 is also formed of a flexible, waterproof material such as plastic.

In use of the invention, one first inserts a folded diaper D in cavity 29, through opening 40. The center portion of the diaper is thus exposed through the opening so as to receive wastes eliminated by the infant through opening 20 of the cast.

The garment with the inserted diaper is then applied as shown in Figure 5. The garment is merely placed at one end under the trunk portion 14 of the cast, and

then folded upwardly over the crotch, in a manner similar to application of a conventional diaper, after which the ties 34, 36 are connected as shown in Figures 3 and 4. However, before the garment is brought up and tied, the flange 42 is inserted, over the full circumference of the opening 40, into the opening 20, and is pushed up into overlying relation to the inner surface of the cast, through the full area of said inner surface that surrounds the opening, as clearly shown in Figure 6.

It is thus immediately apparent that the cast is completely protected from the wastes and from being impinged upon by the diaper itself. The diaper is fully enclosed in a waterproof, flat pocket as shown in Figure 6, with waterproofing material being interposed directly between the diaper and the surface of the cast. Further, the edge portion of the opening 20, both on the inner and outer surfaces of the cast, are covered by waterproofing material as at 42, 38 respectively. Therefore, when the wastes are eliminated, they can under no circumstances impinge upon the edge portion of the opening, or upon the inner surface of the cast. A clean, dry cast is thus assured, with possibility of soilage being reduced to a full minimum. At the same time, the application or removal of the garment, and the changing of diapers, is accomplished with maximum speed and ease.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation, and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. A combination surgical cast protector and diaper holder, for application to a surgical cast having a trunk-encircling portion formed at its lower end with an opening, comprising: an outer panel; an inner panel peripherally secured to the outer panel to cooperate with the outer panel in forming a cavity between the panels in which a diaper may be disposed, said inner panel having a centrally disposed opening adapted to be registered with that of the cast; and a protective flange secured to the inner panel in position extending about said opening thereof, so as to cooperate with the inner panel in embracing between them the portion of the cast that surrounds the cast opening.

2. A combination surgical cast protector and diaper

holder, for application to a surgical cast having a trunk-encircling portion formed at its lower end with an opening, comprising: an outer panel; an inner panel peripherally secured to the outer panel to cooperate with the outer panel in forming a cavity between the panels in which a diaper may be disposed, said inner panel having a centrally disposed opening adapted to be registered with that of the cast; and a protective flange secured to the inner panel in position extending about said opening thereof, so as to cooperate with the inner panel in embracing between them the portion of the cast that surrounds the cast opening, said flange being formed from a wide, continuous strip of flexible material.

3. A combination surgical cast protector and diaper holder, for application to a surgical cast having a trunk-encircling portion formed at its lower end with an opening, comprising: an outer panel; an inner panel peripherally secured to the outer panel to cooperate with the outer panel in forming a cavity between the panels in which a diaper may be disposed, said inner panel having a centrally disposed opening adapted to be registered with that of the cast; and a protective flange secured to the inner panel in position extending about said opening thereof, so as to cooperate with the inner panel in embracing between them the portion of the cast that surrounds the cast opening, said flange being formed from a wide, continuous strip of flexible material, at least the inner panel and flange being formed of a waterproof material.

4. A combination surgical cast protector and diaper holder, for application to a surgical cast having a trunk-encircling portion formed at its lower end with an opening, comprising: an outer panel; an inner panel peripherally secured to the outer panel to cooperate with the outer panel in forming a cavity between the panels in which a diaper may be disposed, said inner panel having a centrally disposed opening adapted to be registered with that of the cast; and a protective flange secured to the inner panel in position extending about said opening thereof, so as to cooperate with the inner panel in embracing between them the portion of the cast that surrounds the cast opening, said outer panel including means at its opposite ends for connecting the ends of the outer panel together at opposite sides of the outer panel, in position receiving said trunk portion of the cast.

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