

May 7, 1940.

E. F. CRAMER

2,199,781

SANITARY DIAPER

Filed June 14, 1937

2 Sheets-Sheet 1

Fig. 1.

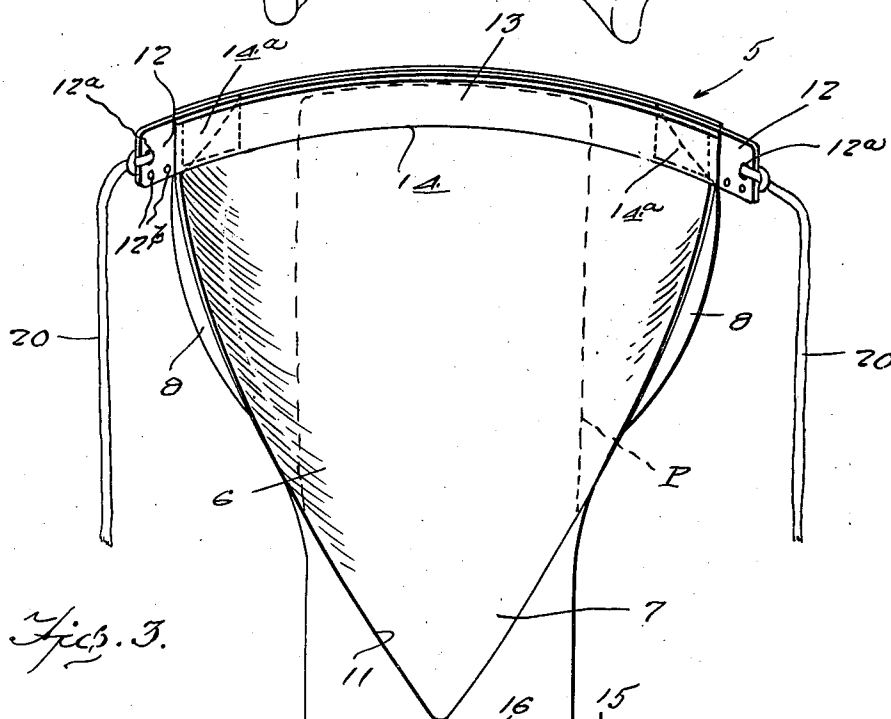
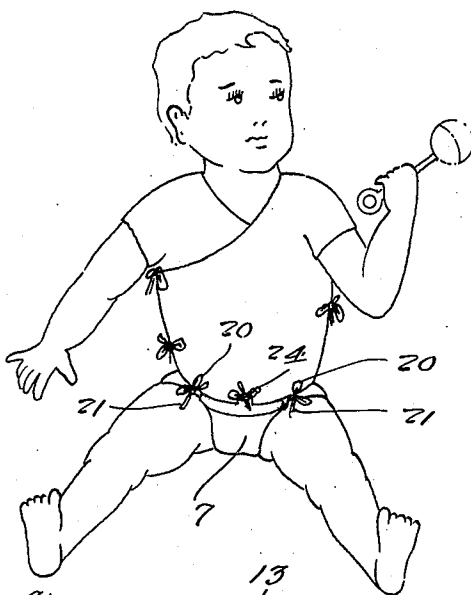
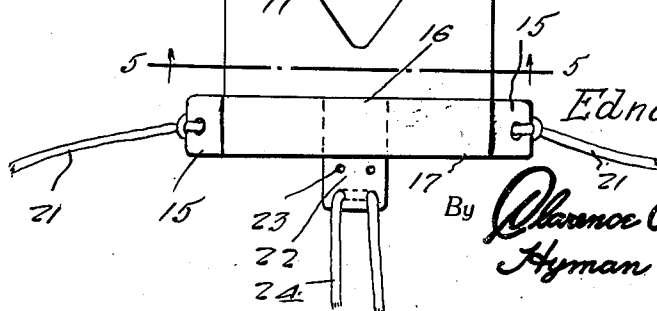


Fig. 3.



Inventor

Edna F. Cramer

By

Clarence A. O'Brien
Hyman Berman

Attorneys

May 7, 1940.

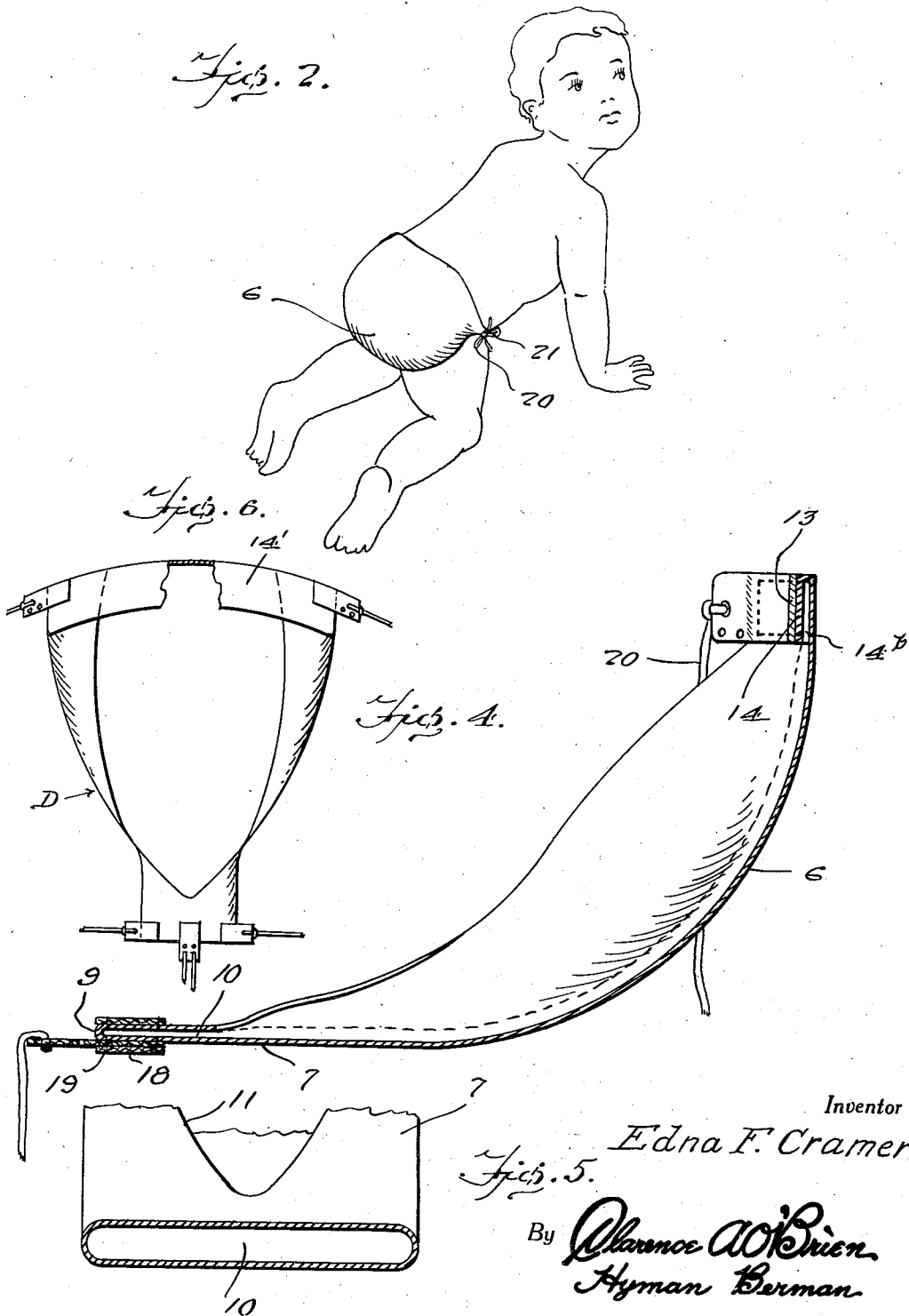
E. F. CRAMER

2,199,781

SANITARY DIAPER

Filed June 14, 1937

2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE

2,199,781

SANITARY DIAPER

Edna F. Cramer, Burlingame, Calif.

Application June 14, 1937, Serial No. 148,210

4 Claims. (Cl. 128—286)

This invention relates to an improved infant's diaper or baby pants, and the object of the invention is to provide a novel device of this character wherein further cloth diapers may be dispensed with, and consequently, the continuance laundering thereof; and which will also protect people handling babies wearing this device from having their clothing soiled; and which also will protect bed clothing, carpets, chairs, and other articles of furniture on which the baby may be rested from being soiled or injured, and whereby these objects may be accomplished without the diaper or baby pants of the present invention binding upon or irritating the legs or flesh of the infant, while at the same time, the diaper or baby pants will be form fitting so as not to be baggy or cumbersome, even when the baby is in a sitting posture.

The invention, together with its objects and advantages will be best understood from a study of the following description, taken in connection with the accompanying drawings, wherein:

Figure 1 is a view showing the diaper in front elevation and applied to the infant, the infant being shown in a sitting posture.

Figure 2 is a perspective view of the device as applied, showing the infant on which it is applied in a crawling position.

Figure 3 is a top plan view of the device.

Figure 4 is a longitudinal sectional view through the device.

Figure 5 is a transverse sectional view taken substantially on the line 5—5 of Figure 3.

Figure 6 is a view similar to Figure 3 and illustrating a slightly modified form of diaper.

In accordance with the present invention, the diaper or pants is adapted to be employed in conjunction with a pad of suitable oblong shape and of a material that is very soft in texture so that, as a consequence, the pad will not irritate the skin, while at the same time, the material from which the pad is made is highly absorbent. To this end, the diaper, in each form of the invention, comprises a body portion formed from a single thin soft sheet of any type commercial rubber, such as "latex," etc., or any suitable flexible rubberized or moisture-proof material.

Also, in each form of the invention, the sheet from which the body is formed, is cut, shaped, and dimensioned to provide an integral seat portion 6 which is adapted to also extend upwardly across the back of the baby. At the side edges thereof, the back and seat portion 6 is bulged as at 8 to conformably fit the buttocks, while in-

tegral with the seat 6 and extending forwardly therefrom is a flap 7 of tubular form, closed at its free forward end as at 9 to provide a pocket 10, the upper wall of which presents a V-shaped notch 11 for the pocket.

At the upper edge of the back 6 of the diaper, the body sheet 5 is folded upon itself as shown, and the folded edge 14 at its respective opposite ends is cemented, vulcanized, or otherwise suitably united to the seat portion 6 as at 14a to provide at the upper edge of the back of the diaper, a pocket 14b complementary to the pocket 10. Thus, it will be seen that the pad, indicated by broken line in Figure 3 and indicated by the reference character P has one end thereof fitting within the pocket 14b and the other end thereof fitting within the pocket 10 so that the pad is held in proper position within the confines of the diaper or pants.

Referring to the pad P, it is to be understood that the same will be of suitable soft material of high absorbent qualities and of oblong shape similar to commercial sanitary pads with the exception of course, that the pad used with the diaper will be slightly longer than the commercial sanitary pads now well known in the art.

The diaper or pants shown in Figures 1 to 5 inclusive is particularly intended for day use, and in this form of the invention there projects from the upper corners of the back of the diaper durable elastic tabs 12. These tabs 12 are provided with apertures 12a to accommodate the ends of tapes 20 tied to the tabs 12a as shown in Figure 1. Also, the tabs 12 are each provided with a pair of apertures 12b for pinning stocking supporters thereto.

Also, extending across the back of the diaper at the inner side thereof and from one edge to the other edge of the diaper is a reinforcing strip 13 of non-stretching or non-elastic rubber, and the strip 13 is cemented or otherwise secured in position.

Extending from opposite corners of the front flap 7 at the free end of the latter are durable elastic tabs 15 suitably apertured so that tapes 21 may be tied thereto as shown. Tabs 15 are cemented, vulcanized, or otherwise processed to the body of the diaper.

Also attached to the front flap by cementing, vulcanizing, or in any other suitable manner, and extending forwardly therefrom, is a durable elastic tab 22 which is provided with relatively spaced pairs of relatively spaced openings 23. Either pair of said openings 23 may be used to accommodate a tape 24 that may be tied to a

tape on the shirt worn by the infant as shown in Figure 1, or which may accommodate a safety pin for further securing the free end portion of the front flap 7 to the shirt of the infant at the front thereof.

Extending transversely across the flap 7 at the inner side thereof, and from one edge to the other edge of the flap 7 is a single oblong strip 16 of non-stretching or non-elastic rubber attached to the body of the diaper by cementing, vulcanizing, or similar processes.

Also extending transversely of the flap 7 at the outer side or face thereof adjacent to the free end of the flap is an oblong strip 18, identical to strip 16 and attached by cementing, vulcanizing, or similar processing to the flap 7.

Strips 16 and 18 are primarily used to prevent lateral stretching of the material of flap 7, while strip 13 is provided to prevent lateral stretching of the material from which the diaper is formed from the inner side of the back pocket 14, and with the tapes 20 fastened at one end to elastic tabs 12, tied to tapes 21, which are also fastened at one end to tabs 15, reinforcing strips 13, 16 and 18, will tend to hold the end edge portion of the back 6 and the front flap 7 snugly against the body of the infant, yet stretch, give, or ease slightly at the elastic tabs so that the tie tape cannot bind or cut the infant's body.

The diaper shown in Figure 6 is primarily intended for night use and is substantially identical with the diaper shown in Figures 1 to 5 inclusive, except that the diaper for night use omits the reinforcing oblong strip as would correspond to the strips 13, 16 and 18, shown and described in connection with the diaper shown in Figures 1 to 5 inclusive.

Another distinctive characteristic of the diaper shown in Figure 6 and indicated generally by the reference letter D is that the edge of the sheet from which the diaper is made is so bulged and has the bulged portion extending fully to the back upper edge of the diaper to provide with the inwardly folded end edge 14' a pocket extending across the entire back of the diaper for the full width of the diaper in order to accommodate a larger pad in order to prevent leakage of saturated pads.

It will thus be seen that a baby's diaper or baby's pants constructed in accordance with the present invention, when used in conjunction with a suitable pad will not irritate, chafe, or bind, while at the same time, it will be form-fitting, and the use of an absorbent pad in connection therewith will obviate the repeated washing of the diaper by simply renewing the pad.

Having thus described my invention, what is claimed as new is:

1. In a diaper, a body formed of a sheet of material having one end portion adapted to extend flatwise across the back of the wearer at the waistline, the side edges of the sheet adjacent the back being rolled inwardly to provide a bulge at each side of the body of a wearer for accommodating the buttocks of the wearer, said inwardly extending side edges merging into a tubular end portion adapted to extend between the legs and upwardly across the stomach, and providing a pocket for receiving one end of a pad to be disposed between the body of the wearer and the body of the diaper.

2. In a diaper, a tubular body split longitudinally from one end for a portion of the length of said tubular body to provide a seat and back for the diaper adapted to extend across the back of the wearer at the waistline, the opposite side edges of said body adjacent the waistline being cupped to accommodate the buttocks of a wearer, the other end portion being maintained in its tubular form and adapted to extend between the legs and up across the stomach, said tubular end providing a pocket for a portion of a pad to be disposed between the body of the diaper and the body of the wearer.

3. In a diaper, a body formed of a sheet of elastic flexible moisture-proof material having one end portion adapted to extend flatwise across the back of the wearer at the waistline and folded upon itself to form a pocket for accommodating one end of a pad, the side edges of the sheet adjacent the back being rolled inwardly to provide a bulge at each side of the body of a wearer for accommodating the buttocks of the wearer, said inwardly extending side edges merging into a tubular end portion adapted to extend between the legs and upwardly across the stomach, and providing a pocket for receiving the other end of the pad to be disposed between the body of the wearer and the body of the diaper.

4. In a diaper, a tubular body split longitudinally from one end for a portion of the length of said tubular body to provide a seat and back for the diaper adapted to extend across the back of the wearer at the waistline, the split end of the tubular body being folded upon itself to form a pocket for accommodating one end of a pad, the opposite side edges of said body adjacent the waistline being cupped to accommodate the buttocks of a wearer, the other end portion being maintained in its tubular form and adapted to extend between the legs and up across the stomach, said tubular end providing a pocket for accommodating the other end of the pad to be disposed between the body of the diaper and the body of the wearer.

EDNA F. CRAMER.