Jan. 24, 1950 M. ABRAMSON 2,495,307

BREAST SHIELD

Filed Jan. 2, 1947

FIG. 1

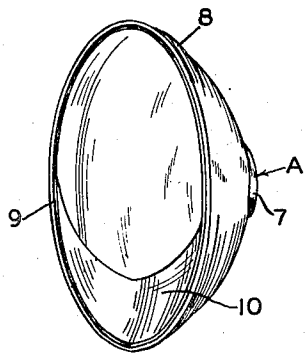


FIG. 2

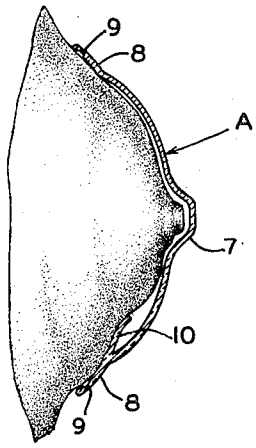


FIG. 4

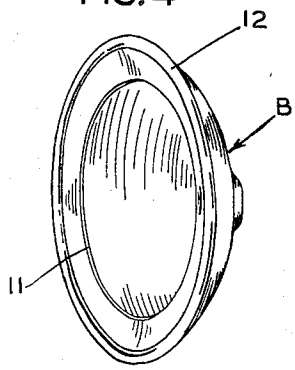


FIG. 5

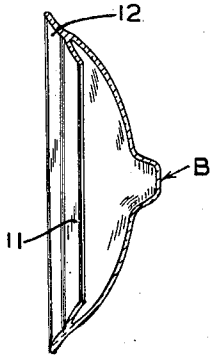


FIG. 3

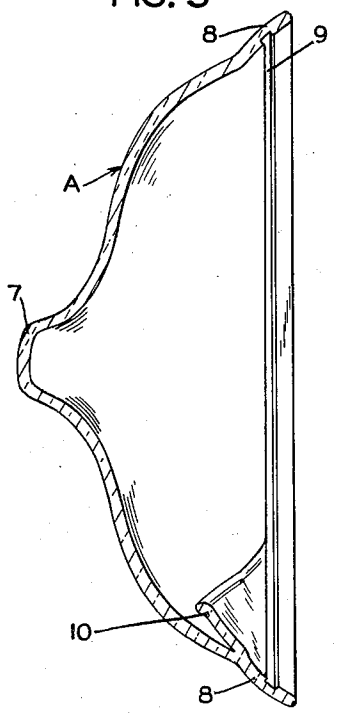
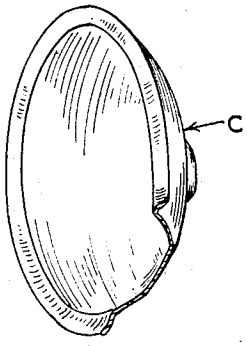


FIG. 6



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BREAST SHIELD

Milton Abramson, Minneapolis, Minn.

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2 Claims. (Cl. 128—282)

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This invention relates to a breast shield for nursing mothers.

It is among the objects of the invention to provide a novel and improved breast shield for nursing mothers, made of light weight, hard plastic material which can be worn by the nursing mother and will act to protect the nipple against injury, which shield may be maintained in clean and sanitary condition at all times so as to prevent the possibility of infection or injury to the breast and particularly the nipple thereof.

Another object is to provide such a breast shield which includes a ledge to catch and retain any milk which may seep from the breast nipple, thereby preventing soilage of the clothing of the wearer.

Another object is to provide such a breast shield which, while protecting the breast from injury, can be worn underneath the clothing of the nursing mother without changing the natural appearance of the woman wearing the same.

A further object is to provide such a breast shield which can be sealed to the base of the breast and which will hold in position on the breast.

The object and advantages of the invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the various views and in which:

Fig. 1 is a perspective view illustrating a breast shield embodying the invention looking toward the rear portion of the shield;

Fig. 2 is a view in vertical section through the breast shield showing it applied for use on a woman's body;

Fig. 3 is a vertical longitudinal section through the breast shield taken on enlarged scale;

Fig. 4 is a view similar to Fig. 1 but showing a slightly modified form of shield;

Fig. 5 is a vertical longitudinal section through the shield illustrated in Fig. 4; and

Fig. 6 is a perspective view looking toward the rear side of a further modification of the device, a portion of the shield illustrated in Fig. 6 being broken away and other portions being shown in section.

Referring first to the form of the device illustrated in Figs. 1, 2 and 3, there is there shown a breast shield designated as an entirety by the letter A. This shield is formed from a single piece of hard plastic, preferably either transparent or translucent so that the sanitary condition of the shield can be readily observed. The shield

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itself is of general cup-shape made to conform to the contour of the breast of a nursing mother. It is provided with a central forwardly bulged or domed portion 7 of such size as to loosely receive the breast nipple of the wearer. It also is provided with a circumferential edge flange 8 which curves outwardly away from the enlarged central bulged main body portion of the cup to form a sealing flange which will engage and seal the shield to the base of the breast of the wearer. On its inner surface this sealing flange 8 is provided with a circular groove 9 adjacent its periphery, which, when the shield is applied to the breast of the wearer, will form a suction chamber with the base of the breast whereby the shield may be held in place on the breast after a part of the air has been exhausted from the chamber so formed. The contour of the flange 8 is such that no sharp edge of the shield will be presented which might otherwise cut or lacerate the flesh of the nursing mother.

Extending across between opposite points in the lower internal portion of the shield and joining a portion of the flange 8 is a web 10, which forms a milk-retaining ledge which will underlie the nipple of the breast so as to catch and retain any milk that may seep from the breast nipple. The curvature of the ledge 10 is such as to fit the lower portion of the breast without cutting or lacerating the same.

Of course the breast shields will be supplied in pairs and they will be applied directly to the two breasts of the nursing mother to be worn underneath the clothing. They may be held in place by the ordinary brassière, or the edge flange 8 and groove 9 alone may be employed for holding the shields in place. When worn under the clothing, they will not change the natural appearance of the wearer. The shields will act to protect the breasts and particularly the nipples thereof from injury as by being struck or the like when the nipples are in a sore and tender condition. The shields are quite rigid, and being made from a hardened plastic they will not absorb dirt and they may be very easily washed and cleaned and kept in sanitary condition. Thus they act to prevent infections from being set up in the breasts of the nursing mother. Of course the ledges 10 will be disposed downwardly when the shields are being worn, and if any milk should seep from the nipples of the breast, the ledges 10 will catch this milk to prevent the same from wetting or soiling the clothing of the wearer.

Referring now to the form of the device shown in Figs. 4 and 5, there is there shown a breast

shield B, which is similar in all respects to the breast shield A with the exception that in the shield B there is provided a milk-retaining ledge 11 which is circular, and thus with the device B it is unnecessary to locate the shield in any particular manner in respect to the milk-retaining ledge as in the case of the shield A where the ledge 10 only extends about a portion of the cup. Also in the shield B the sealing flange 12 is not equipped with a groove as in the case of the flange 8 of the shield A, and accordingly the shield B will be held in place on the breast as by a brassière which will fit over the shield.

Referring to Fig. 6, the shield C there shown is quite similar to the shields A and B with the exception that in the case of the shield C no milk-retaining ledge is provided and the groove 9 which is formed in the shield A is lacking in the shield C, and accordingly this shield will be retained in place by a brassière while being worn.

It will be seen that a highly efficient and sanitary breast shield has been provided for nursing mothers which will protect the nipples of the breast, give the breast proper support, and serve to maintain the nipples in clean and sanitary condition at all times.

Experimentation has shown that the use of my breast shield fully protects the nipples of the breasts of the nursing mother against any possible irritation from her clothing and thus largely obviates the use of ointments on the nipples, which ointments may be distasteful to the nursing baby or such ointments may make the nipple slippery causing the nursing baby's mouth to slip off therefrom. Also the time required for the postpartum hospital care of the nursing mother is substantially reduced and irritation and possible infection of the nipples considerably lessened by the reduction in repeated handling of the nipples.

It will of course be understood that various changes may be made in the form, details, arrangement, and proportion of the various parts without departure from the scope of the present invention which, generally stated, consists in the matter shown and described and set forth in the appended claims.

The cup-shaped breast shield is imperforate and has a smooth inner surface. The shield covers or receives the nipple, areola and an adjacent portion of the breast.

I claim:

1. A breast shield for nursing mothers comprising a one-piece, cup-shaped substantially rigid imperforate member having a smooth inner surface formed to cover the nipple, areola and an adjacent portion of the breast, said member having a reduced forwardly extending central domed portion to loosely receive the nipple, an uninterrupted circumferential edge flange portion which extends outwardly away from and integral with the cup-shaped member to form a sealing flange which will engage and seal the shield directly to the breast, and said flange having a circular groove adjacent its periphery to form a suction chamber to assist in holding the shield in place.

2. A breast shield for nursing mothers comprising a one-piece, cup-shaped substantially rigid imperforate member having a smooth inner surface formed to cover the nipple, areola and an adjacent portion of the breast, said member having a reduced forwardly extending central domed portion to loosely receive the nipple, which said portion merges into an enlarged central bulged portion, an uninterrupted circumferential edge flange portion which extends outwardly away from and integral with the bulged portion to form a sealing flange which will engage and seal the shield directly to the breast, and said flange having a circular groove adjacent its periphery to form a suction chamber to assist in holding the shield in place.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
296,609	Pattee	Apr. 8, 1884
577,311	McCleary	Feb. 16, 1897
676,379	Young	June 11, 1901
1,222,494	Thomas	Apr. 10, 1917
1,676,858	Ferber et al.	July 10, 1928
2,054,491	Tynan	Sept. 15, 1936
2,067,268	Hans	Jan. 12, 1937
2,191,545	Schneider	Feb. 27, 1940

FOREIGN PATENTS

Number	Country	Date
6,740	Great Britain	Apr. 20, 1889