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R. W. JOHNSON

1,705,366

SANITARY NAPKIN

Filed May 24, 1927

Fig. 1.

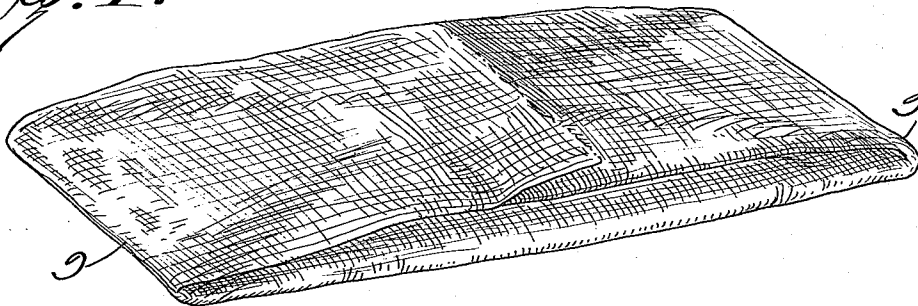


Fig. 2.

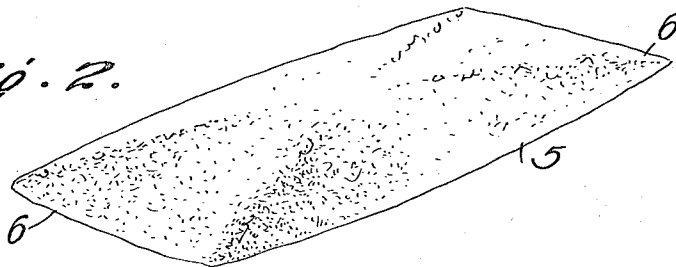


Fig. 3.

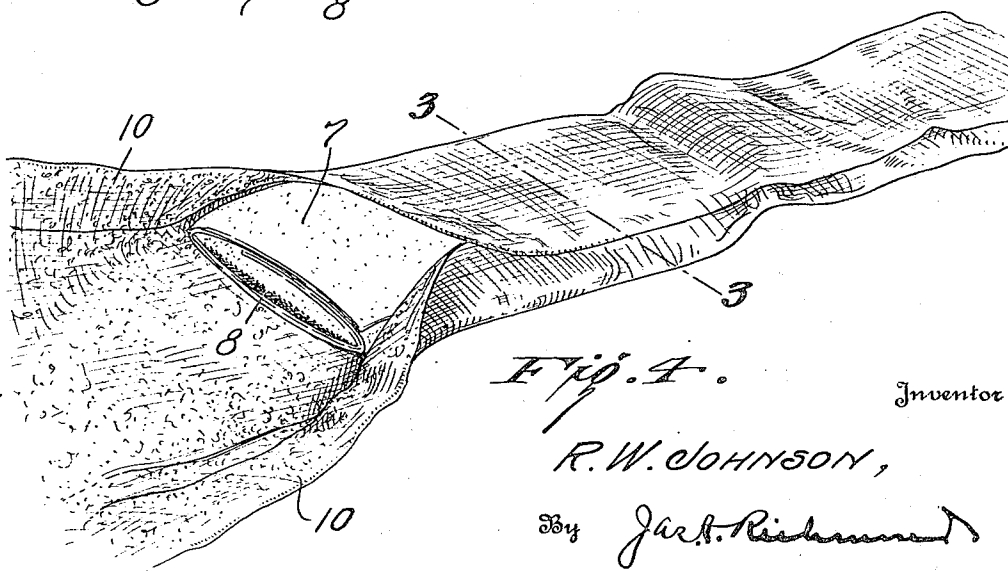
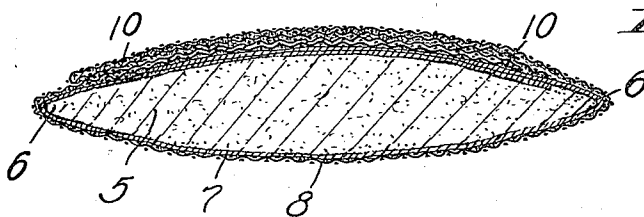


Fig. 4.

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SANITARY NAPKIN.

Application filed May 24, 1927. Serial No. 193,847.

The cellulosic materials now generally employed as fillings for sanitary napkins have the merit that they are more or less disposable in an obvious way, but suffer the disadvantage that in pad form they are bulky, comparatively stiff and non-conformable, so that the napkin as a whole is unsightly in appearance and in use is awkward and discomforting.

10 The object of my invention is to construct sanitary napkins in such way that they will present a pleasing appearance, be highly efficient, readily disposable, and as soft and conformable as though filled with absorbent cotton.

In achieving this object I provide for a material reduction of bulk by so shaping the pad, regardless of whether it is of the layer built type or of the free fibrous type, that its greatest thickness will be at the center from whence it will decline to feather edges. Thus shaped, the pad is encompassed in a light weight cellulosic vest an appropriate area of which is fluid repellant. The vested pad is next enclosed in filmated gauze. Filmated gauze per se is claimed in my co-pending application Ser. No. 191,761. It consists of surgical gauze the interstices and one face of which are clothed with a superficial film of free fibrous material, preferably cotton slivers, for the purpose and with the result of reinforcing the absorbent power of the gauze and softening the texture of the gauze. This it does to a marked degree. The result is a napkin pleasing to the eye, exceedingly soft and conformable, and having superior capacity notwithstanding the absence of bulk.

The invention is illustrated in the annexed drawings, wherein

Figure 1 is a perspective view of the complete article.

Fig. 2 is a similar view of the pad.

Fig. 3 is a sectional view of the pad, vest and envelope.

Fig. 4 is a perspective view, with the covering or envelope drawn back to disclose the nature of its inner surface and to disclose the edge folds.

50 According to my invention I form the pad 5, irrespective of whether it is of the layer

built type or of the free subdivided type, meaning of course in each instance that the pad is composed of readily disintegratable material, such as cellulose, so that its thickest portion is in the middle and so that it declines therefrom to feather edges 6. This is the first essential looking to convenience of adjustment, conformability, and comfort in service, and is predicated on the removal or omission of bulk, where bulk is not necessary and ought not to be, in order to insure the contour that will make for comfort without the hazard of inefficiency.

The pad constructed and shaped as described is equipped with a vest 7 which is a light cellulosic fabric which encloses the sides of the pad and leaves the ends free and has its face 8 treated in the usual way to make it fluid repellant. The vest 7 is desirable in cases where the pad material is of the finely subdivided or fugitive type. In the case of a layer built pad, the full vest is not necessary, it being sufficient to treat the proper surface of the pad.

The next essential is the gauze envelope 9, and, as stated at the outset, this is preferably surgical gauze a face of which is filmed, without positive connection, with free fibrous material, such as purified cotton slivers. In applying the gauze envelope to the pad, its unmodified portion is outside, and the edges of the gauze are turned as at 10 to eliminate raveling and also to provide for four thicknesses of soft textured, porous and highly absorbent material.

It will be manifest from the foregoing that I have provided a highly efficient, soft textured, readily conformable article, shaped on rational lines and having the requisite capacity despite the absence of bulk.

Having described my invention, I claim—

As an article of manufacture, a sanitary napkin possessed of attributes to meet modern requirements of hygiene and dress, said napkin embodying a soft conformable or self-adaptable or moldable absorbent filling free from rigidity or stiffness and sharp corners, clothing protection on the lower face of the filling, and a light weight porous covering fabric having externally the quality of gauze and having internally a soft downy texture

which appreciably cushions the article and adds to the yielding or conformable property thereof, said covering fabric being manifold-
ed on the upper face of the filling whereby it
5 provides without bulk a soft pad or cushion,
a cross-section of which shows a stratiform
arrangement of gauze separated by downy

absorbent cushion mediums, said pad or cushion being pervious to fluid and operating to transfer fluid in a uniform or regulated way to the main filling. 10

In testimony whereof I affix my signature.

ROBERT W. JOHNSON.