April 5, 1960 A. SOSTRIN 2,931,055

FLEXIBLE COVER

Filed Feb. 12, 1958 2 Sheets-Sheet 1

Fig. 1.

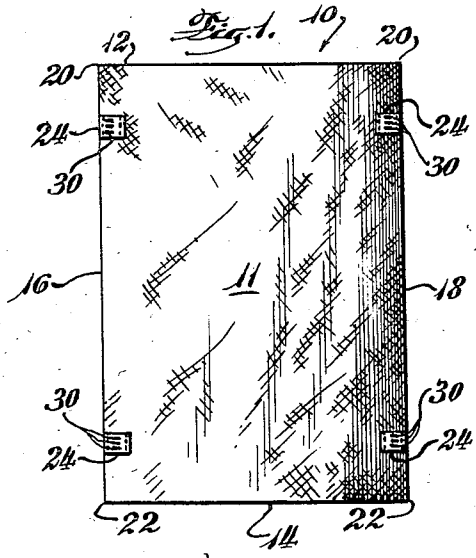


Fig. 2.

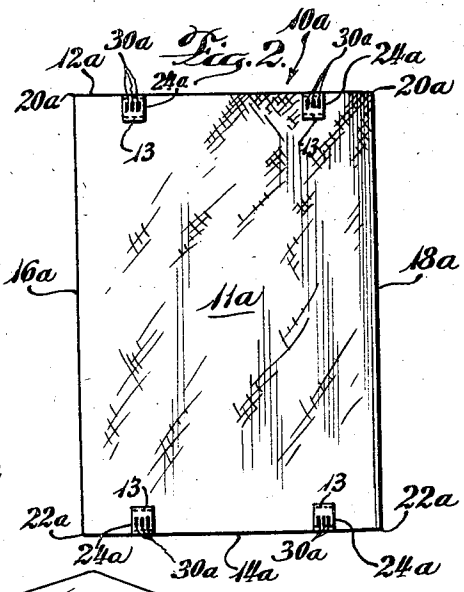


Fig. 3.

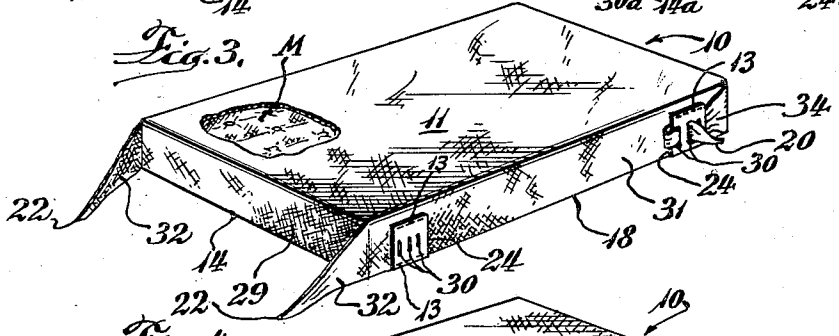


Fig. 4.

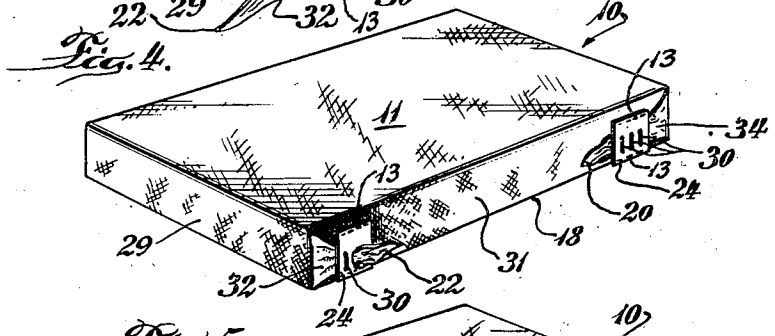
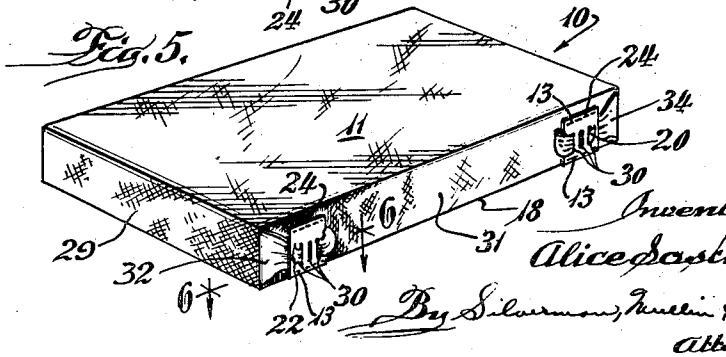


Fig. 5.



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FLEXIBLE COVER

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Fig. 6.

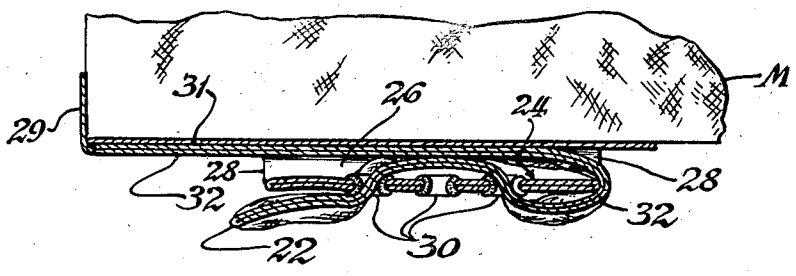


Fig. 7.

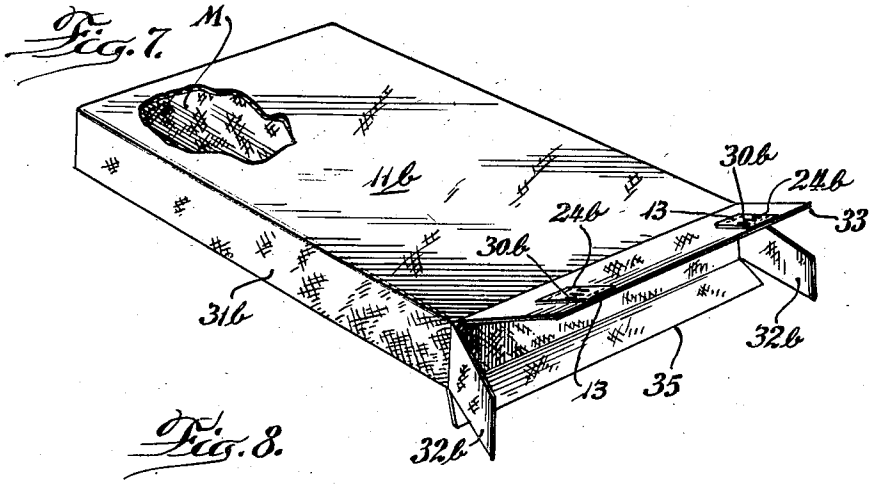
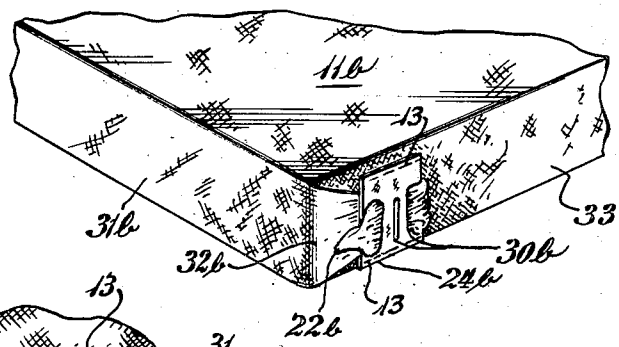


Fig. 8.



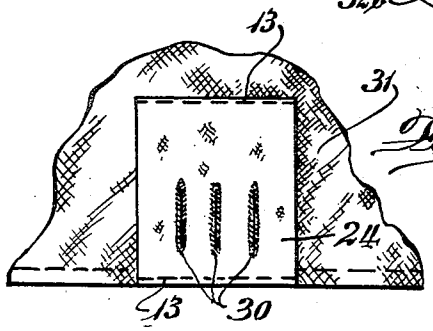


Fig. 9.

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FLEXIBLE COVER

Alice Sostrin, Chicago, Ill.

Application February 12, 1958, Serial No. 714,881

5 Claims. (Cl. 5—334)

This invention relates to removable covers for beds, mattresses, cushions and the like, and more particularly relates to improvements in bed sheets and the like affording self-fastening and adjustable covers requiring no additional or auxiliary means for fastening the same in snug operational position.

The age-old conventional flat sheet is still today the most widely used type of bed sheet. This type of bed sheet is nothing more than a rectangular sheet of textile material whose dimensions are sufficiently larger than those of the bed or mattress which it is intended to cover as to afford overhanging portions. In operation, these overhanging portions on all four sides of the sheet are normally tucked under the mattress. The objectionable features of this type of bed sheet are obvious and well known, the primary one being its inability under conditions of normal use to remain in snug-fitting unwrinkled condition on the mattress due to the lack of means effective to maintain the sheet under tension.

More recently, attempts have been made to provide a self-fastening bed sheet which would remain in snug-fitting and unwrinkled condition while in use. Thus, among others, we have today the type of bed sheet commonly known as the "contour" sheet. The "contour" sheet is a flat sheet having permanently pre-formed end pockets which are adapted to snugly accommodate therein the ends of the mattress. However, these bed sheets, too, are characterized by a plurality of objectionable features such as, for example, the great difficulty in mounting the sheet in operational position due to the bulk of the mattress, the close fit of the sheet and pockets, etc. Moreover, because it is necessary to make the sheet almost identical in length to the mattress, any shrinkage in the sheet increases the difficulty of fitting the same on the mattress. As a matter of fact "contour" sheets are characteristically relatively short lived because of inherent tearing at the corners. Further in order to mount the sheet on the mattress, it is necessary to lift, manipulate and partially fold said mattress. The bulk and weight of the mattress not only contributes to the difficulty of the operation but the operation itself is highly injurious both to the mattress and the sheet.

It is therefore a principal object of this invention to provide a self-fastening bed sheet which will overcome all of the disadvantages mentioned hereinabove.

Other attempts to provide a satisfactory self-fastening bed sheet have likewise resulted in structures which have numerous objectionable features. For example, they suggest the use of additional fastening means such as zippers, snaps, hooks, buttons and the like. The use of such foreign fastening means is obviously undesirable.

It is therefore another important object of the invention to provide a self-fastening bed sheet which is constructed entirely of standard, inexpensive sheet material, thereby eliminating the use of all foreign fastening means such as elastics, plastics, zippers, snaps, hooks, buttons and the like.

A further object of the invention is to afford a bed

sheet of simple, regular shape and design to facilitate ready laundering and pressing of the same.

Another object is to provide a bed sheet of the character described which can be conveniently folded and stored.

Still a further object is to afford a bed sheet in which the fastening means are adjustable to accommodate various sized mattresses.

Yet another object is to provide a self-fastening bed sheet which is inexpensively fabricated because it requires a minimum amount of fabric. Actually the improved sheet may be considerably smaller than the conventional flat sheet since the edges need not be tucked under the mattress.

Yet a further object is to afford a bed sheet which, because of the simplicity of its fastening means, is extremely durable.

Still another object is to provide a self-fastening bed sheet in which the fastening means insure secure fastening and retention of snug fit under tension.

An additional important object is to afford a self-fastening bed sheet especially adaptable for hospital use. Since "contour" sheets cannot be applied while a patient remains in bed, they have not been adopted by hospitals.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel features of construction, design and operation hereinafter fully described, illustrated in the accompanying drawings and particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

For the purpose of facilitating an understanding of my invention, I have illustrated in the accompanying drawings preferred embodiments thereof, from an inspection of which, when considered in connection with the following description, my invention, its mode of construction and operation, and many of its advantages should be readily understood and appreciated.

Referring to the drawings in which the same characters of reference are employed to indicate corresponding or similar parts throughout the several figures of the drawings:

Fig. 1 is a plan view of a bed sheet embodying the principles of my invention, showing the same in fully opened position;

Fig. 2 is a similar view of a modified form of the invention;

Fig. 3 is a perspective view showing the bed sheet in an intermediate step during the attachment or removal of the same;

Fig. 4 is a similar view showing the bed sheet in another intermediate step during the attachment of the same;

Fig. 5 is a similar view showing the bed sheet in fully secured operational position, as if on a mattress;

Fig. 6 is a fragmentary sectional view taken on the plane of line 6—6 in Fig. 5 and viewed in the direction indicated;

Fig. 7 is a perspective view of another structure embodying the principles of my invention, showing the same in open and unfastened position;

Fig. 8 is a fragmentary perspective view of the structure of Fig. 7, showing one corner of the same in fully secured operational position, as if on a mattress or cushion;

Fig. 9 is a fragmentary view showing certain details of construction.

Referring now to the drawings, the preferred embodiment of the removable cover embodying the invention in the form of a bed sheet is designated generally by ref-

erence numeral 10. It may be formed of conventional flexible textile material or the like.

It will be noted in Fig. 1 that the bed sheet in its fully opened position may comprise a rectangular body portion 11 having a top edge 12, a bottom edge 14 and lateral edges 16 and 18. Formed by the aforementioned edges are head corners 20 and foot corners 22. The body portion 11 may be sufficiently large to extend over the top and vertical sides of a mattress M as shown in Figs. 3, 4, 5 and 6.

Attached along each marginal lateral edge portion of the body 11 and in spaced relationship with the top edge 12 or bottom edge 14 may be a pair of self-material bands 24 positioned to afford sockets 26 open at both ends 28 as shown in Fig. 6. The sockets are provided by rows of stitching 13 along two opposite edges of band 24 to the body member as shown in Fig. 9.

Each of said bands 24 is provided with a plurality of slits or buttonholes such as 30, each being spaced one from the other as shown in the several figures of the drawings. It will be noted that slits 30 extend in a plane transverse to the body edge along which the respective band 24 is attached. The shape and size of these slits is such as to enable the same to function in a manner and for a purpose to be subsequently described.

As indicated in Figs. 3, 4 and 5 of the drawings, in operation the sheet is placed in covering relationship over a mattress with the overhanging portions thereby forming vertical head and foot panels 29 and vertical side panels 31. The natural draping of these panels at their extremities forms triangular-shaped foot tongues 32 and head tongues 34. These tongues cooperate with the sockets and slits to provide the self-fastening means which will now be described in detail.

After the foot tongues 32 and head tongues 34 have been formed, they are folded back along the lateral sides of the sheet 11. Each tongue is then threaded through its cooperating socket 26 and out through one of the slits 30 as shown in Fig. 4. The appropriate slit is selected in accordance with the size of the mattress in order to insure the proper snug fit. The tongues are then doubled back and threaded in and out of the next outwardly adjacent slits. As indicated in Figs. 5 and 6 the tongues 32 and 34 may be drawn completely through the sockets 26 and then doubled back in the threading motion through the slits. This latitude in the choice of the proper slits obviously renders the bed sheet adjustable to compensate for various sized mattresses and also for any shrinkage which might occur in the sheet after laundering. In any case, a snug fitting bed sheet is assured.

It is important to note that when tongues 32 and 34 are threaded through the cooperating sockets and slits as described above, there is a pinching or wedging of said tongues due to the disparity in size of the slits and tongues. This pinching or wedging resulting from the threading of the comparatively broad tongues through the small slits serves to frictionally engage said fastening means so that the cover is unlikely to inadvertently become unfastened while in operative position.

It should also be noted that the rectangular shape of the cover, with no protrusions, attachments or trailing members, serves to expedite and simplify its laundering, pressing, folding and storage. Further, since the cover's self-fastening means are composed of self-material, the possibility of additional foreign fastening means coming loose from or tearing the cover, is eliminated, thereby increasing its life and simplifying its maintenance.

In Fig. 2 of the drawings, there is illustrated a modified form of the bed sheet. In this embodiment similar parts are identified by like numerals with the added suffix "*a*."

In this embodiment it will be noted that the structure is identical with the preferred embodiment previously described with the exception that the corresponding tabs 24*a* are positioned adjacent the top and bottom edges of body 11*a* instead of along the lateral edges. The slits 30*a* now extend transversely to the top and bottom edges 12*a* and 14*a*. In operation the tongues are folded back along the top and bottom sides of body 11*a* instead of being folded along the lateral sides. In all other respects this embodiment is identical with the preferred embodiment and functions in the same manner.

In Fig. 7 of the drawings, still another modification is illustrated. Again similar parts are designated by like numerals, but with the added suffix "*b*."

In this embodiment the single sheet 11 has been replaced by a pre-formed cover-sack 11*b* which is open at one of its ends. This cover has an upper flap 33 and a lower flap 35 in addition to the tongues 32*b* which correspond with the comparable tongues in the preferred embodiment. Only two tabs 24*b* are provided and they are positioned along the outer edge of flap 33. Here, the object desired to be covered, such as a mattress, cushion or pillow is first placed inside the cover-sack 11*b*. Lower flap 35 is folded up and upper flap 33 is folded down to cover lower flap 35. The tongues 32*b* are then threaded through the sockets formed by bands 24*b* and the slits 30*b* in the identical manner as described for the preferred embodiment.

Although several embodiments of my improved self-fastening cover have been disclosed hereinabove, it should be apparent that additional embodiments will suggest themselves to those skilled in the art. Thus, for example, the number of fastening members 24 may be varied as may also their positions. If desired a sheet having a mattress-end pocket at one end may be used with fastening bands 24 formed at the other end. Such a combination sheet combines all of the inherent advantages of my invention, including the ease of application, with the advantages of the "contour" sheet. Similarly, the application of the bed sheet may be varied. Thus, for example, two such sheets may be used as a mattress cover, one sheet being placed on the bottom and one on the top with their sides over-lapping one another.

It should also be apparent from the drawings and from the above description that I have provided a unique, simple but effective self-fastening bed sheet and cover having self-fastening means for insuring the retention of the sheet or cover in operational position so as to afford a smooth, even, unwrinkled surface unaffected by normal use of the same. This sheet is so designed that the fastening means do not interfere with the laundering, folding and storage of the sheet and do not appreciably increase the cost over the usual flat sheet.

It is believed that my invention, its mode of construction and operation and many of its advantages should be readily understood from the foregoing without further description, and it should also be manifest that while preferred embodiments of the invention have been shown and described for illustrative purposes, the structural details are nevertheless capable of wide variation within the purview of my invention as defined in the appended claims.

What I claim and desire to secure by Letters Patent of the United States is:

1. A self-fastening cover of textile material comprising a rectangular body portion and a plurality of textile bands, said bands positioned adjacent the corners of said body portion to afford open-ended sockets, said bands having a plurality of slits formed in spaced relationship one with the other, said corners affording tongues, said sockets and slits adapted to cooperate with said tongues to adjustably fasten said cover in article-covering relationship.

2. A self-fastening cover comprising a rectangular member of textile material having end edges and side edges, four textile bands positioned along said side edges one adjacent each corner of said member to afford four open-ended sockets, said bands having a plurality of buttonhole slits formed in spaced relationship one with the other and extending transversely of said side edges, said cover drapable over an article with the marginal edges

thereof extending over the sides thereof to form four corner tongues, said tongues adapted to be threaded in interwoven relationship through a plurality of said slits whereby to secure said cover in article-covering relationship.

3. A self-fastening cover comprising a rectangular member of textile material having end edges and side edges, four textile bands positioned along said end edges one adjacent each corner of said member to afford four open-ended sockets, said bands having a plurality of buttonhole slits formed in spaced relationship one with the other and extending transversely of said end edges, said cover drapable over an article with the marginal edges thereof extending over the sides thereof to form for corner tongues, said tongues adapted to be threaded in interwoven relationship through a plurality of said slits whereby to secure said cover in article-covering relationship.

4. In a bed sheet having a textile rectangular body member, the combination with said member of four textile bands positioned respectively adjacent each corner of said member to afford open-ended sockets, said bands having a plurality of slits formed in spaced relationship one with the other, said sockets and slits adapted to cooperate with said corners to adjustably fasten said bed sheet in article-covering relationship, said slits extending in a plane transverse to the adjacent body edge along which each respective band is attached, and the marginal edges of said body member drapable over the sides of an article to form corner tongues, the adjustable fastening

of said bed sheet being effected by threading each of said tongues through its adjacent socket and out of a preselected one of said slits, then doubling back said tongue and threading the same through another of said slits.

5. In a cover for mattresses, cushions and the like; the combination of a textile sack open at one end and having top and bottom end flaps and a pair of corner tongues together with a pair of textile bands positioned along the marginal edge one near each of the sides of said top flap to afford two open-ended sockets, said bands having a plurality of buttonhole slits formed in spaced relationship one with the other and extending transversely of said top flap marginal edge, said top and bottom flaps foldable one over the other, said tongues adapted to be threaded in interwoven relationship through a plurality of said slits whereby to secure said cover in article-containing relationship.

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