Oct. 31, 1950 W. L. KESSLER 2,528,313

MATTRESS COVERING SHEET

Filed Jan. 21, 1949

Fig. 1

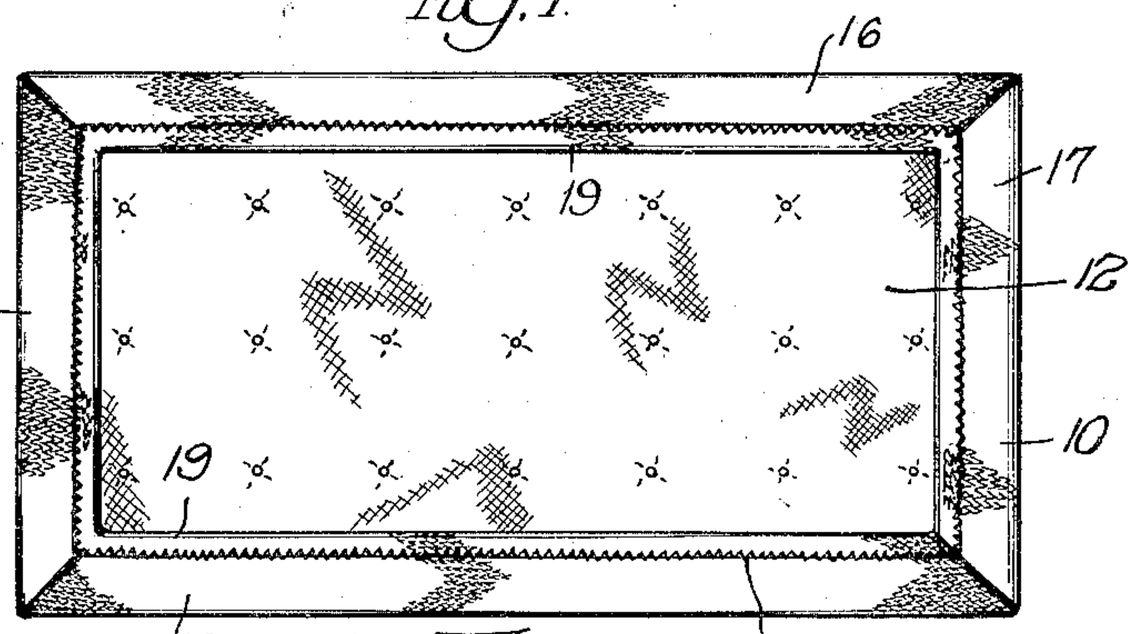


Fig. 2

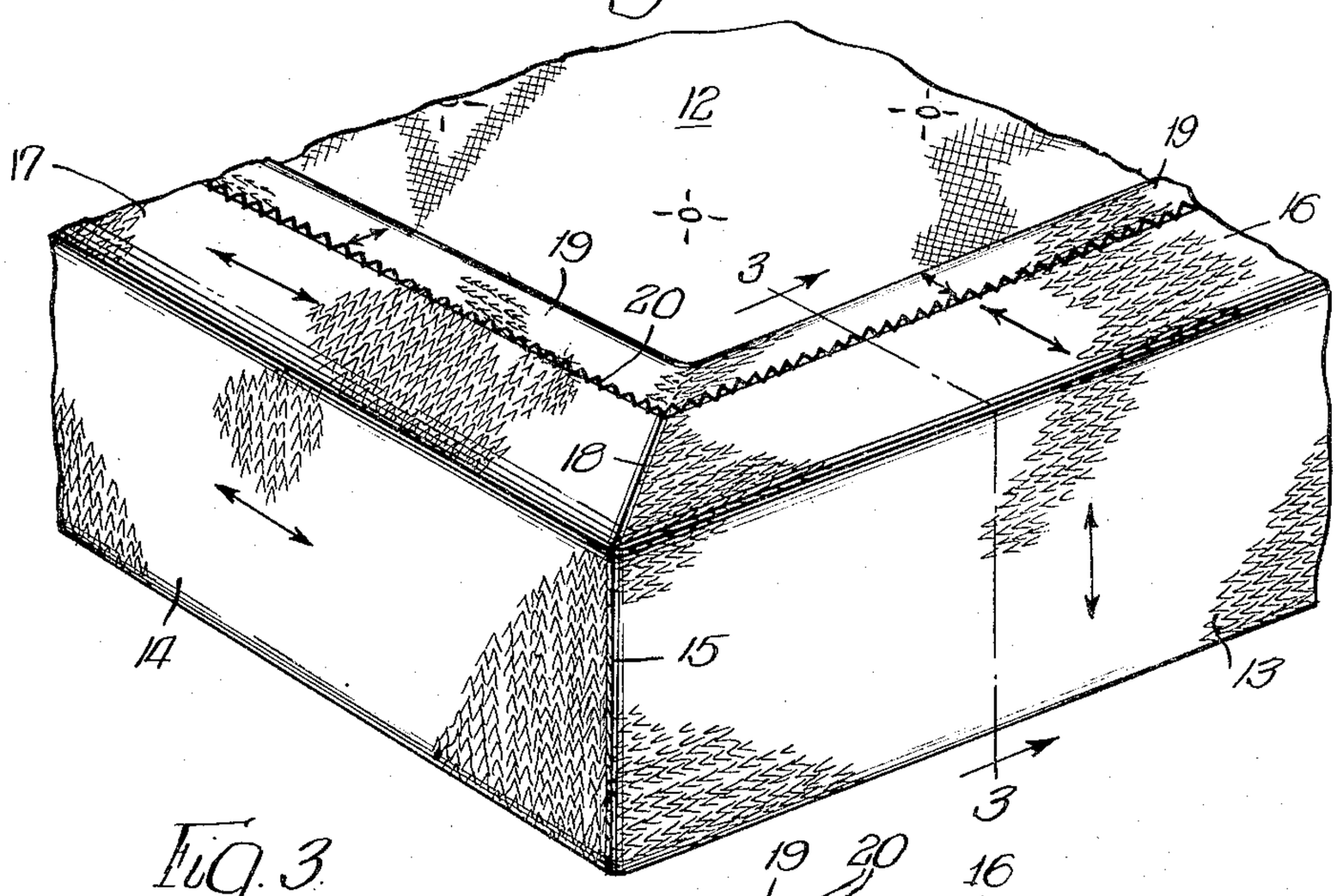
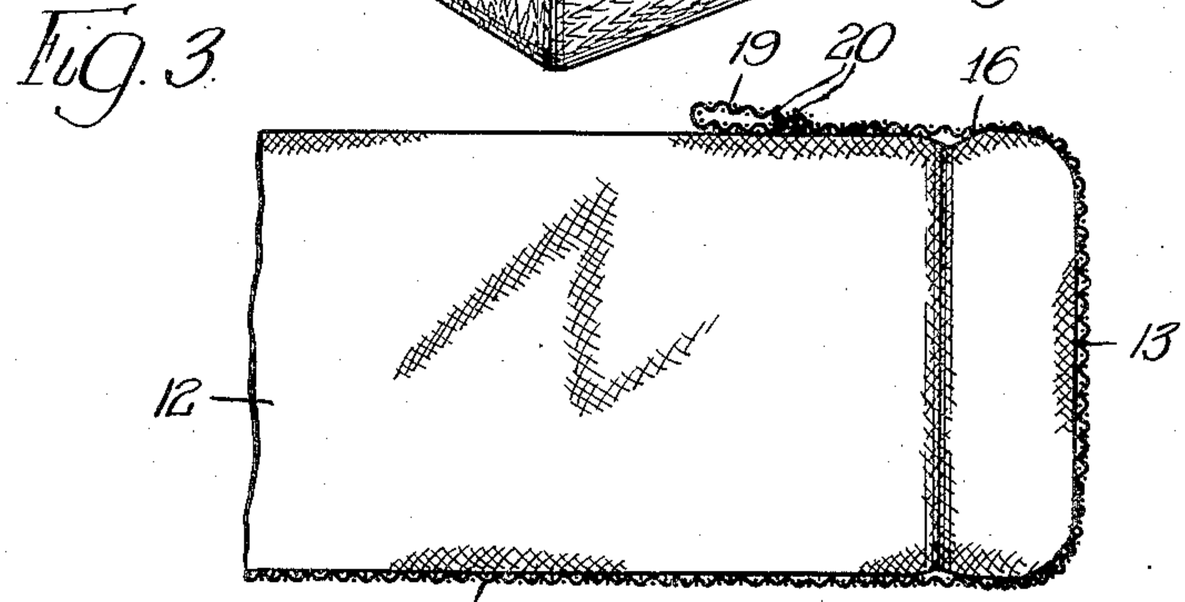


Fig. 3



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Patented Oct. 31, 1950 2,528,313

UNITED STATES PATENT OFFICE

2,528,313

MATTRESS COVERING SHEET

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Application January 21, 1949, Serial No. 71,976

4 Claims. (Cl. 5—354)

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This invention relates to a mattress covering sheet and is more particularly concerned with a sheet of this character formed of knitted fabric material which material is characterized by having substantially greater stretchability in one direction than the other.

It is a general object of this invention to provide a mattress sheet or cover member of knitted fabric material of the character described which is so constructed that the sheet may be quickly and easily applied to or removed from the mattress and when in use is snugly held in position on the mattress.

It is a more specific object of the invention to provide a mattress covering sheet of knitted material which is constructed to extend over the top surface of the mattress, around the side and end walls and for a short distance over the bottom surface of the same and which is provided with an improved edge construction which insures a snug yielding fit on the mattress.

It is a further object of the invention to provide in a mattress cover of the type described an edge binding which is formed of knitted fabric so arranged that a limited amount of stretch along the edge is permitted to facilitate assembly of the cover with the mattress while excessive stretch is prevented to thereby insure that the cover will remain on the mattress when subjected to pulling stresses resulting from movements of the occupant of the bed of which the mattress forms a part.

These and other objects of the invention will be apparent from a consideration of the mattress cover which is shown by way of illustration in the accompanying drawings, wherein:

Fig. 1 is a view of the bottom of a mattress having thereon a cover embodying the principles of the invention;

Fig. 2 is a perspective view to an enlarged scale of a bottom corner of the mattress shown; and

Fig. 3 is a section on the lines 3—3 of Fig. 2, to an enlarged scale.

Heretofore mattress covers have been provided of woven fabric materials, such as cotton or linen sheeting, which consisted of a single piece of the material cut to proper shape and having its corners united by stitching or otherwise so as to form a top overlying the upper surfaces of the mattress, depending walls that overlie the sides and ends of the mattress and also portions that extend a short distance inwardly on the underside of the mattress from the side and ends thereof. With this type of construction using material which is substantially non-elastic it is necessary to bend or fold the mattress in order to place the cover over the same. Thus it is difficult to use this type of cover with a relatively stiff mattress such as the inner spring type, while its use with other, more flexible types of mattress construction results in undesirable wear or damage to the mattress due to repeated bending of the same.

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It has been proposed to provide a mattress cover of this character which is formed of knitted fabric of the type commonly used in the manufacture of clothing, such as undergarments. Such material is characterized by being stretchable to a substantial degree in one direction and much less stretchable in the other direction. Such material has very little elasticity in the direction lengthwise of the wales and a considerable degree of elasticity or freedom to expand and contract in a direction crosswise of the wales. A cover formed of such material may be placed on the mattress without bending the latter, but the elastic character of the knitted fabric has made it difficult to obtain a cover which will have a snug fit on the mattress and which will remain in position on the mattress when subjected to pulling stresses resulting from movements of the occupant of the bed of which the mattress forms a part.

Referring to the drawings, there is illustrated a mattress cover incorporating the principles of this invention, which may be quickly and easily applied to or removed from the mattress without any appreciable bending or folding of the mattress and which when in use will remain thereon in snug fitting and substantially wrinkle-free condition.

As shown in Figs. 1 and 2, the mattress cover 10 comprises a top 11 and depending side and end walls 13 and 14 which are connected at their adjacent end edges at 15 by stitching or other fastening means. The top 11 and side and end walls 13 and 14 form a box-like member for covering the upper surface and the side and end walls of the mattress. The side and end walls 13 and 14 of the cover 10 are provided with extensions 16 and 17 which are directed inwardly in parallel relation to the top 11 and which are connected at their adjacent ends by stitching at 18 to form a continuous inwardly extending flange around the periphery of the bottom of the mattress 12.

The top 11, the side and end walls 13 and 14 and the extensions 16 and 17 are preferably formed from a single piece of knitted fabric material which is characterized by having substantial elasticity or stretchability in a direction transversely of the wales and only slight stretchability in the direction along the length of the wales. The material is cut at the corners and sewed to provide the corner construction indicated at 15 and 18 in Fig. 2.

A binding of reinforcement for the inner edges of the flange formed by members 16 and 17 is provided on the cover 10 as indicated at 19. The binding 19 is formed of a continuous piece of knitted fabric of the same general character

as the body of the cover, but being closer knit and having more spring, that is, the binding has slightly more stretch lengthwise than the stretch of the cover material and returns to its normal non-stretched condition more quickly than the cover material. The binding material 19 is folded over on itself as indicated in Fig. 3 and the edges are connected to the free edge of the flange member 16 by stitching 20 which permits stretching of the material without breaking the stitch.

The direction of greatest stretchability of the material is indicated by the double arrows in Fig. 2. It is crosswise of the material in the cover and the binding. It is crosswise of the length of the mattress except where the binding extends along the ends of the mattress where the direction of greatest stretch is lengthwise of the mattress. The stretch of the binding in the lengthwise direction where the binding extends along the ends of the cover and the mattress is substantially greater than the stretch of the cover material in the same direction.

With this arrangement of the materials the cover 10 has some stretchability in the direction lengthwise of the mattress and a substantially greater degree of stretchability in the direction crosswise of the mattress. The binding material 19 being arranged with its direction of least stretchability along its length tends to restrict the stretching of the material in the direction transversely of the mattress while permitting sufficient over-all stretch to place the cover on the mattress without bending or folding the latter. The binding 19 reinforces the edge of the cover and holds the cover to the mattress when in use, preventing the edges of the cover from stretching beyond a predetermined amount when subjected to pulling stretches by movements of the occupant of the bed.

While a specific embodiment of the invention has been described by way of example, it will be understood that other embodiments may be resorted to within the spirit of the invention.

I claim:

1. A mattress covering sheet of knitted fabric which fabric is characterized by having substantially greater stretch in one direction than the other, said sheet being formed into an inverted box-like member having a closed top for covering the upper surface of a mattress, the fabric being arranged to provide the greatest stretch in the direction transversely of the top, depending end and side walls for covering the ends and sides of said mattress and inwardly directed extensions on the edges of said end and side walls underlying marginal portions of the bottom of said mattress, said extensions being connected at their ends to provide a continuous rectangular flange and a binding of knitted fabric which is also characterized by having substantially greater stretch in one direction than the other, said binding secured to the inner edges of said flange, and said binding being arranged with the direction of least stretch lengthwise thereof whereby said covering sheet may be removably positioned on said mattress and held thereon in snug fitting relation.

2. A mattress cover comprising a body portion formed from a single sheet of knitted fabric which fabric is characterized by having a substantially greater elasticity in one direction than the other, said sheet being arranged to provide a top for

covering the upper surface of the mattress, depending side and end walls for covering the side and ends of said mattress and inwardly directed marginal portions on said side and end walls underlying marginal portions of the bottom of said mattress, said inwardly directed portions being connected at adjacent ends to provide a continuous rectangular flange member and a binder member secured on the inner edge of said flange member, said binder member being also formed of knitted fabric which is characterized by having substantially greater stretch in one direction than the other and said binder member having the direction of least elasticity extending along the length thereof whereby to hold the cover in removable snug fitting relation on the mattress.

3. A mattress cover formed from a sheet of knitted fabric which fabric is characterized by having a substantially greater elasticity in one direction than the other, said sheet being arranged to provide a top for covering the upper surface of the mattress, depending side and end walls for covering the side and ends of said mattress and inwardly directed extensions on said side and end walls underlying marginal portions of the bottom of said mattress, said inwardly directed extensions providing a continuous rectangular bottom flange member and a binder member secured to the inner edge of said bottom flange member, said binder member comprising a length of knitted fabric, which fabric is also characterized by having a substantially greater elasticity in one direction than the other, said binder member having the direction of least elasticity extending transversely of said bottom flange member whereby to hold the cover in removable snug fitting relation on the mattress.

4. A mattress cover formed from a sheet of knitted fabric which fabric is characterized by having a substantially greater elasticity in one direction than the other, said sheet being arranged to provide a top for covering the upper surface of the mattress, depending side and end walls for covering the side and ends of said mattress and inwardly directed portions on said side and end walls underlying marginal portions of the bottom of said mattress, said inwardly directed portions providing a continuous rectangular bottom flange member and binder member formed from a continuous strip of knitted fabric which is characterized by having a substantially greater elasticity in one direction than the other, said binder member having the direction of least elasticity extending along the length thereof, said binder strip being folded over upon itself about its longitudinal axis with the edges thereof secured to the inner edge of said bottom flange member whereby to hold the cover in removable snug fitting relation on the mattress.

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