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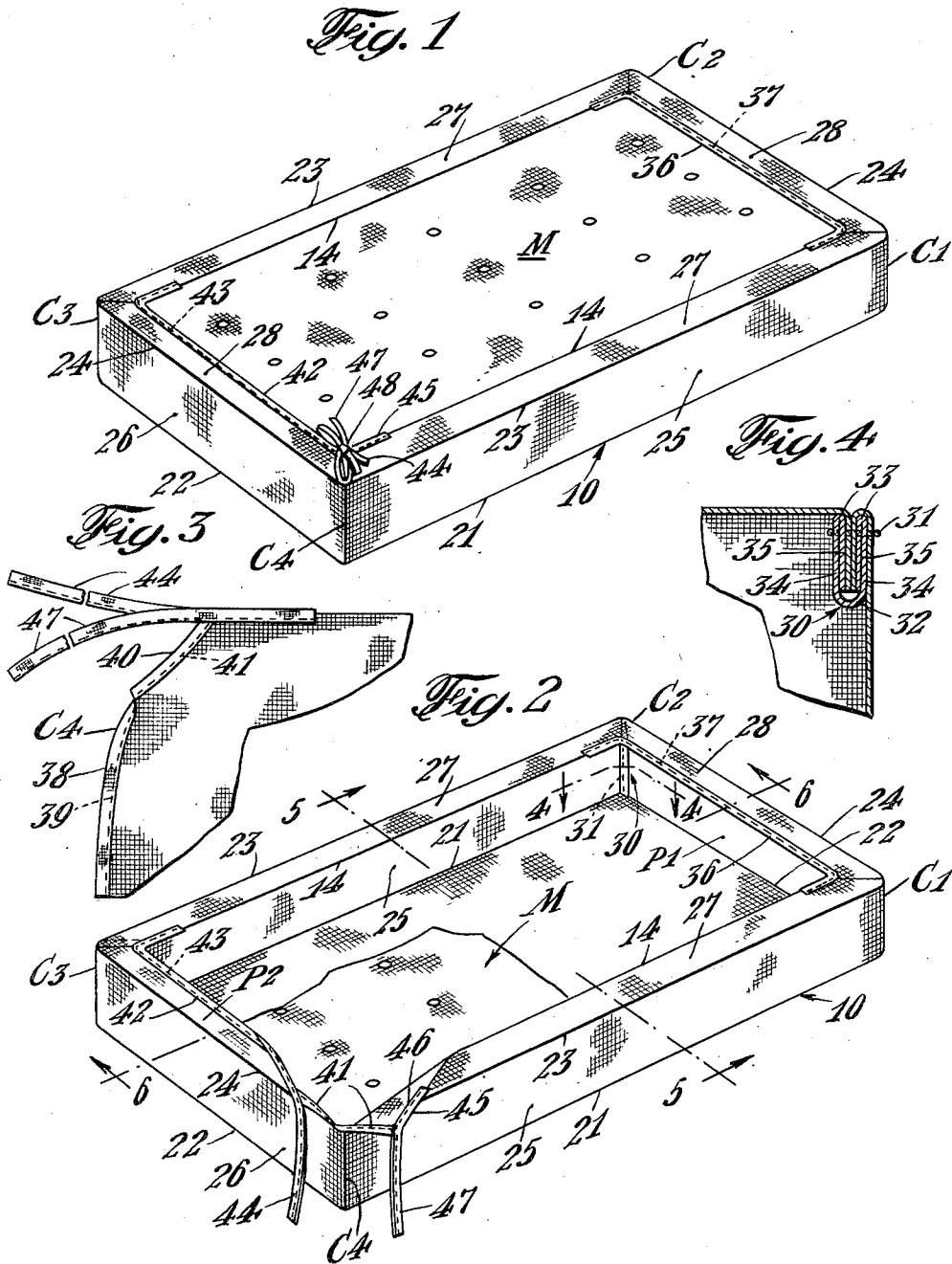
J. A. FORD

2,804,632

ARTICLE OF BEDDING

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2 Sheets-Sheet 1



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2,804,632

ARTICLE OF BEDDING

Jesse Alexander Ford, Basking Ridge, N. J., assignor to Pacific Mills, New York, N. Y., a corporation of Massachusetts

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This invention relates to articles of bedding and more specifically to such articles, particularly bed sheets, that are adapted to be placed on a mattress and form a snug retaining fit therewith.

While this invention is applicable to various items of bedding, such as mattress pads and mattress protectors, it is especially useful in respect to bed sheets of the type commonly known as "fitted" or "pocketed" bottom sheets. Accordingly, the ensuing discussion and detailed description are directed to bed sheets of this type.

Conventional fitted bed sheets are usually provided with end pockets for receiving corresponding ends of a mattress and in general, may be applied to or withdrawn from small and relatively flexible mattresses without much difficulty. On the other hand, considerable effort is frequently required in placing sheets of this type on, or removing the same from, larger and more rigid mattresses. While such a sheet may be readily placed on one end of the mattress, the difficulty arises in placing or removing the same on and from the other end of the mattress. Large mattresses, such as double bed mattresses and stiff mattresses of the orthopedic type, due to their size or construction, usually present a problem to the person handling the sheet. Considerable tugging is usually required. This creates stresses in the material of the sheet oftentimes causing the same to tear. The article of bedding of this invention eliminates the difficulties outlined above and provides a fitted bed sheet or related article of bedding that is adapted to be easily and quickly placed on or removed from a mattress and when in position on the mattress, to form a snug fit therewith.

A primary object of the invention is to provide a bed sheet or related article of bedding of improved design and construction whereby it may be easily and quickly fitted onto or removed from a mattress as desired.

Another object of the invention is to provide a fitted bed sheet which has its parts so configured and arranged that it may be readily applied to or removed from various types and sizes of mattresses, including large relatively stiff mattresses in the category of orthopedic mattresses.

Another object of the invention is to provide a fitted or pocketed bottom bed sheet possessing requisite strength to withstand repeated stresses to which it may normally be subjected in the course of being placed on or removed from a mattress and to withstand continuing stresses to which it is subjected during use.

The invention has for a still further object a provision of a fitted article of bedding that is sturdy in construction, reasonable in manufacturing cost and capable of performing its intended functions in a satisfactory and trouble-free manner.

The foregoing objects, as well as other objects, together with the advantages of this invention, will be readily understood by persons skilled in the art upon reference to the following detailed description taken in conjunction with the annexed drawings that respectively

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describe and illustrate a preferred embodiment of the invention.

In the drawings:

Fig. 1 is a perspective view of a fitted bed sheet made in accordance with this invention and applied to a mattress, both the sheet and the mattress being inverted;

Fig. 2 is a view similar to Fig. 1, parts of the mattress being omitted for better illustration of certain parts of the sheet, and parts of the sheet in one corner being shown in a different relative position from that shown in Fig. 1;

Fig. 3 is an enlarged fragmentary inside view of one corner of the sheet shown in Figs. 1 and 2 and illustrating in detail a strap means and associated parts at such corner of the sheet;

Fig. 4 is a view in enlargement taken along line 4—4 of Fig. 2;

Fig. 5 is an enlarged view taken along 5—5 of Fig. 2;

Fig. 6 is an enlarged view taken along line 6—6 of Fig. 2; and

Fig. 7 is a one-piece blank from which the sheet shown in the other views is made.

Referring now to the drawings wherein like reference characters denote corresponding parts throughout the several views, a bed bottom sheet constructed in accordance with this invention is generally indicated by numeral 10 and, as best shown in Fig. 1, is adapted to be placed on a mattress M and form a snug fit therewith. The sheet is formed from a blank B (Fig. 7) that is made from a substantially rectangular piece of a suitable thin, flexible material, such as cotton fabric or the like, which is cut out at each of its four corners to obtain corresponding identical notches 11. Each notch is defined by a pair of blank edges 12 that intersect at a point 13. One edge of each notch extends from corresponding point 13 to a side edge 14 of the blank while the other edge of that notch extends from point 13 to an end edge 15 of the blank. Each notch defining edge 12 consists of an inner rectilinear portion 16, an outer rectilinear portion 17 and an intermediate arcuate convex portion 18. Intersecting portions 16 of each notch form an acute angle α that is preferably slightly less than 90°.

The body of the sheet, that is the portion thereof which overlies the top of the mattress when in use, is identified by numeral 20. As is shown in Fig. 7, body part 20 consists of the portion of the blank defined by a pair of side fold lines 21 and a pair of end fold lines 22 which are respectively parallel to side edges 14 and end edges 15. Fold lines 21 and 22 meet with corresponding intersection points 13 of notch edges 12 as shown. Between each side edge 14 and fold line 21 and parallel thereto is a fold line 23. Similarly there is a fold line 24 between and parallel to each end edge 15 and fold line 22. Fold lines 23 and 24 extend between the merging junctures of portions 17 and 18 of corresponding notch edges 12.

The parts of blank B between fold lines 21 and 23 constitute side panels 25 of the sheet and, as shown in Fig. 1, are adapted to overlie the sides of the mattress. The parts of the blank between fold lines 22 and 24 constitute end panels 26 which overlie the ends of the mattress. The parts of the blank between fold lines 23 and side edges 14 constitute side bottom panels or extensions 27 which underlie the side portions of the mattress while the parts between fold lines 24 and end edges 15 constitute end bottom panels or extensions 28 which underlie the end portions of the mattress.

The parts of the blank are adapted to be brought together and joined in a manner to obtain sheet 10. The corners of the sheet are indicated by reference characters C1, C2, C3 and C4 in Figs. 1 and 2. Corners C1, C2 and C3 are preferably identical and are formed by bringing the marginal portions of the blank that define corresponding notches 11 together in abutting relation with

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corresponding edges 12 in substantial alignment. These marginal portions are provided with corresponding co-extensive reinforcing binding members such as strips of fabric tape 30 (Figs. 2 and 4) and are joined together and to the binding members by a corresponding row of stitches 31. Each binding member 30 is folded, as indicated at 32 and 33 in Fig. 4, to obtain a pair of outer plies 34 and a pair of inner plies 35 which bear against abutting marginal portions of the blank which form a corresponding notch. As is also shown in Fig. 4, stitches 31 extend through all plies of the binding member and through the portions of the blank positioned between the inner plies.

A reinforcing binding member 36 is provided along the end edge of the sheet that includes corners C1 and C2 and extends part way along each side edge 14. This binding member is secured to the sheet fabric by a row of stitches 37.

Corner C4 is made by bringing the marginal portions of corresponding edge parts 16 and 18 together and providing the same with a coextensive binding member 38 which is maintained in position by a row of stitches 39 (Fig. 3). A further binding member 40 is secured by stitches 41 to an end of binding member 38 and to the marginal portions of the blank that defined edge parts 17 of the notch at that corner. The various binding members referred to above may be made of the same or similar strips of fabric tapes or other suitable flexible material.

A strap 42 which also may be made of the same material as the various binding members, earlier described, is secured to the bottom edge of the blank adjacent corner C4 by stitches 43. This strap extends part way along side edge 14 immediately adjacent corner C3 and includes a free end part 44. A similar strap 45 is secured to the other side edge of the blank and to an end of binding member 40 by means of stitches 46. Strap 45 also has a free end part 47.

The completed sheet, shown in Fig. 2, defines end pockets P1 and P2 that are adapted to receive corresponding ends of the mattress.

In applying sheet 10 to mattress M, the end of the sheet containing corners C1 and C2 is placed on the mattress so that pocket P1 is brought into registry with an end of the mattress. The remainder of the sheet is next pulled down over the top of the mattress and the portion of pocket P2 at corner C3 is brought into registry with the corresponding corner of the mattress. With strap end parts 44 and 47 disconnected as shown in Fig. 2, corner C4 may be readily moved over the corresponding corner of the mattress after which strap parts 44 and 47 are knotted and tied to form a bow 48 thereby completing the fitting of the sheet to the mattress as shown in Fig. 1. It will be noted that binding member 40 and strap parts 44 and 47 are positioned beneath the mattress and are out of view.

To remove the sheet from the mattress, strap parts 44 and 47 are first disconnected. Corners C4 and C3 are then successively removed from the mattress thereby freeing pocket P2, after which corners C1 and C2 are removed, completing removal of the sheet.

It is to be understood that the form of my invention, herewith shown and described, is to be taken as a preferred example of the same, and that various changes in shape, size and arrangement of parts may be resorted to without departing from the spirit of my invention, or the scope of the subjoined claims.

I claim:

1. An article of bedding formed from a blank that is made from a substantially rectangular piece of flexible material which is cut out at each of its four corners to obtain corresponding notches, the marginal portions of the blank defining each of three of the notches being joined together, the fourth notch being defined by a pair of edges of the blank, each of said edges comprising a first end part and second end part, said first end parts intersecting, the marginal portions of the blank forming

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the parts of said edges other than said second end parts being joined together, a pair of flexible members secured to marginal portions of the blank adjacent said second end parts of said edges, each of said members including a free end part that extends beyond the parts of the blank that define the fourth notch, said free end parts being adapted to be detachably connected.

2. An article of bedding formed from a blank that is made from a substantially rectangular piece of flexible material which is cut out at each of its four corners to obtain corresponding notches, the marginal portions of the blank defining each of three of the notches being joined together, the fourth notch being defined by a pair of edges of the blank, each of said edges comprising a first end part and second end part, said first end parts intersecting and forming an acute angle, the marginal portions of the blank forming the parts of said edges other than said second end parts being joined together, a pair of flexible tie members secured to marginal portions of the blank adjacent said second end parts of said edges, each of said members including a free end part that extends beyond the parts of the blank that define the fourth notch, said free end parts being adapted to be detachably connected.

3. An article of bedding formed from a blank that is made from a substantially rectangular piece of flexible material which is cut out at each of its four corners to obtain corresponding notches, the marginal portions of the blank defining each of three of the notches being joined together, the fourth notch being defined by a pair of edges of the blank, each of said edges comprising a rectilinear first end part, a rectilinear second end part and a convex arcuate part intermediate and merging with the end parts, said first end parts intersecting, the marginal portions of the blank forming only said first end parts and said intermediate parts of said edges being joined together, a pair of members secured to marginal portions of the blank adjacent said second end parts of said edges, said members being adapted to be detachably connected.

4. An article of bedding formed from a blank that is made from a substantially rectangular piece of flexible material which is cut out at each of its four corners to obtain corresponding notches, the marginal portions of the blank defining each of three of the notches being joined together, the fourth notch being defined by a pair of edges of the blank, each of said edges comprising a first end part, a second end part and an arcuate part intermediate and merging with the end parts, said first end parts intersecting, the marginal portions of the blank forming only said first end parts and said intermediate parts of said edges being joined together, a reinforcing strip of flexible material secured to the marginal portions of the blank that form said second end parts of said edges, a pair of flexible tie members secured to and extending beyond marginal portions of the blank adjacent said second end parts of said edges, said members being adapted to be tied together.

5. An article of bedding formed from a blank that is made from a substantially rectangular piece of flexible material which is cut out at each of its four corners to obtain corresponding notches, the marginal portions of the blank defining each of three of the notches being joined together, the fourth notch being defined by a pair of edges of the blank, each of said edges comprising a first end part, a second end part and an arcuate part intermediate and merging with the end parts, said first end parts intersecting, the marginal portions of the blank forming only said first end parts and said intermediate parts of said edges being joined together, a first reinforcing strip of flexible material secured to and coextensive with said joined marginal portions of the blank, a second reinforcing strip of flexible material secured to the first reinforcing strip and to the marginal portions of the blank that form said second end parts of said edges, a pair

of flexible tie members secured to and extending beyond marginal portions of the blank adjacent said second end parts of said edges, said members being adapted to be tied together.

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