Aug. 6, 1935. J. KLEINER 2,010,728

BED BOTTOM

Filed July 3, 1934

Fig. 1.

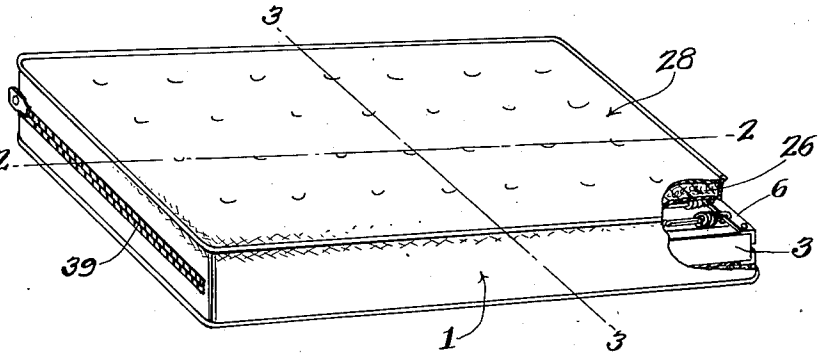


Fig. 2.

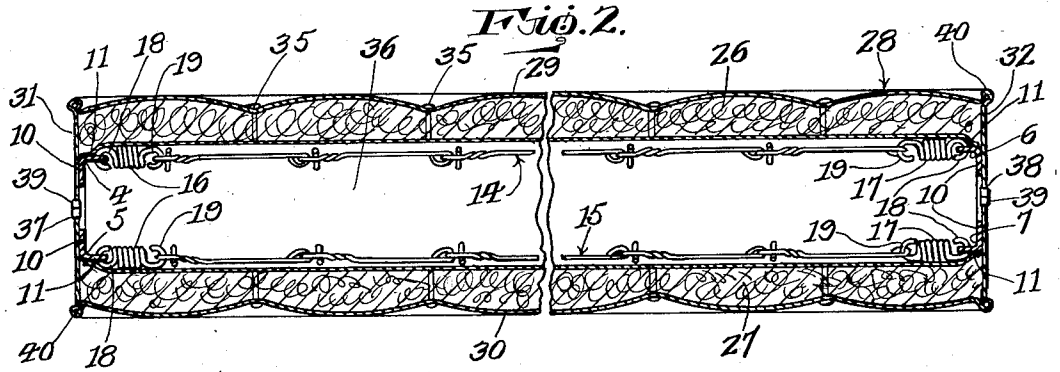


Fig. 3.

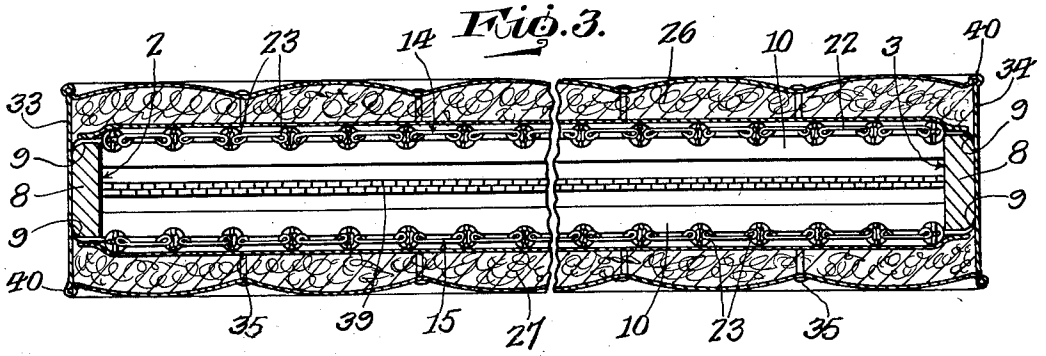
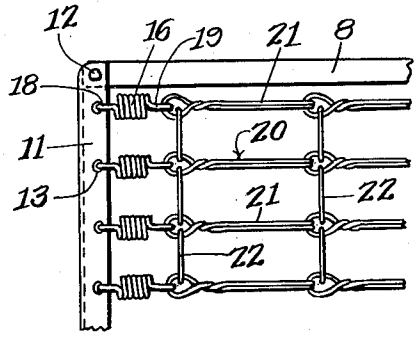


Fig. 4.



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BED BOTTOM

Joseph Kleiner, Phillipsburg, N. J.

Application July 3, 1934, Serial No. 733,645

1 Claim. (Cl. 5—351)

This invention relates to a bed bottom and has for its object to provide, in a manner as hereinafter set forth a hollow, closed, ventilatible, cushioned, reversible unit functioning not only as a bed spring, but also as a mattress whereby the employment of a separate bed spring and a separate mattress, in a bed structure is obviated.

A further object of the invention is to provide, in a manner as hereinafter set forth, a unit for the purpose referred to, including a pair of spaced oppositely disposed cushioned resilient selectable supports for use by a person when sleeping or resting, a normally closed air chamber arranged therebetween and whereby said chamber may be open at one or at both ends to the atmosphere when desired for ventilating the unit between the supports.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a unit for the purpose referred to which is strong, durable, compact, readily reversible, thoroughly efficient in use for the purpose intended thereby, functioning as a combined bed spring and mattress, and inexpensive to manufacture.

To the above ends essentially, and to others which may hereinafter appear the invention consists of such parts, and such combination of parts which fall within the scope of the invention as claimed.

In the drawing:—

Figure 1 is a perspective view, partly broken away of the bed bottom,

Figure 2 is a section on line 2—2, Figure 1,

Figure 3 is a section on line 3—3, Figure 1, and

Figure 4 is a fragmentary view in top plan.

The bed bottom generally indicated at 1 is formed of a single unit and includes a frame consisting of a pair of spaced parallel side members 2, 3 and two parallel pair of oppositely disposed end members. The end members of one pair are designated 4, 5 and those of the other pair at 6, 7. Each side member is in the form of an oblong bar 8 standing on its lower longitudinal edge. Each side member may be formed of any suitable material, preferably wood and is rounded throughout, as at 9 at its upper and lower corners. Each end member is in the form of an angle bar of metallic material formed with a vertical disposed leg 10 and a horizontal disposed leg 11. The end members 4 and 6 are arranged in parallel spaced relation and the horizontal legs 11 thereof extend inwardly from the top of and at right angles to the vertical legs 10 thereof. The end members 5 and 7 are arranged in parallel spaced relation and the horizontal legs 11 thereof extend inwardly from the top of and at right angles to the vertical legs thereof. The ends of the horizontal legs 11 of the end members 4 and 6 are seated upon the top edge of the side members 2, 3. The ends of the vertical legs 10 of the end members 4 and 6 abut the upper portion of the end edges of the side members 2, 3. The ends of the horizontal legs 11 of the end members 5 and 7 are positioned against the bottom edge of the side members 2, 3. The ends of the vertical legs 10 of the end members 5, 7 are positioned against the lower portion of the end edges of the side members 2, 3. The ends of the horizontal legs of the end members are anchored to the lengthwise edges of the side members, as at 12. The vertical legs 10 of the end members 4, 5 are spaced from each other. The vertical legs 10 of the end members 6, 7 are spaced from each other. Each of said horizontal legs is formed with a lengthwise extending row of spaced openings 13.

The unit includes a pair of spaced parallel resilient elements 14, 15 of like form and each includes two spaced parallel sets 16, 17 of spaced sidewise opposed coiled springs. Each spring is formed at its termini with split loops 18, 19. Each of said elements also includes a reticulated panel 20 formed of a series of spaced parallel sets of loosely interengaging parts 21 disposed lengthwise thereof; a series of spaced parallel sets of spaced parts 22 disposed transversely thereof; and with each part 22 having its ends coupled to the opposing ends of a pair of parts 21, as at 23. The split loops 18 of the springs 16 coact with the openings 13 of the flanges 11 of the end members 45 for connecting the springs 16 to the members 4, 5. The split loops 18 of the springs 17 coact with the openings 13 of the flanges 11 of the end members 6, 7 for connecting the springs 17 to the members 6, 7. The split loops 19 of the springs 16 are connected to the parts 21 at one end of the panels 20. The split loops 19 of the springs 17 are connected to the parts 21 at the other end of the panels 20. The springs 16 and 17 resiliently suspend the panels 20 from the horizontal flanges 11 of the end members 4, 5, 6 and 7.

Positioned against the outer face of element 14 and extending upon the top edge of the side members 2, 3 and upon the outer face of the flanges 11 of end members 4, 6 is a sheet of fabric 24 for a purpose to be referred to. The sheet 24 may be suitably secured to the members 2, 3. Positioned against the outer face of element 14 and extending against the bottom edge of the side members 2,

3 and against the outer face of the flanges 11 of the end members 5, 7 is a sheet of fabric 25 for a purpose to be referred to. The sheet 25 may be suitably secured to the members 2, 3.

Arranged against the outer faces of the sheets 24, 25 are supports 26, 27 of cushioning material. The sheets 24, 25 form backings for the material forming the supports 26, 27 respectively and prevent such material from passing through the elements 14, 15. The depth of the material which provides the supports 26, 27 may be as desired. The unit includes a fabric casing 28 formed of a top 29, a bottom 30, a pair of end walls 31, 32 and a pair of side walls 33, 34. The casing 28 is positioned upon the supports 26, 27 and against the side and end members of the frame. The top and bottom 29, 30 of the casing 28 provides a cover for the supports 26, 27 respectively and are secured to supports 26, 27 as at 35. The supports in connection with the casing provide a pair of oppositely disposed mattresses.

The sheets 24, 25 in connection with the side members 2, 3 and end walls 31, 32 of casing 28 provide an air chamber 36 which is normally closed. The end walls 31, 32 are slitted as at 37, 38 respectively to form each of said end walls with a combined intake and outlet for chamber 28. Each slit is normally closed by a closing structure 39 secured to an end wall of the casing. The structure 39 is of the well known type including a reciprocating opening and closing member. The combined intakes and outlets permit of chamber 36 being open to the atmosphere, and when opened provide for ventilating purposes between the supports 26, 27.

The elements 14, 15 resiliently carry the supports 26, 27 when the said supports are selectively used. The casing 28 is beaded throughout at its upper corners as at 40.

What I claim is:—

A reversible bed unit comprising a pair of spaced parallel bars of uniform width and thickness throughout and of the same length, said bars standing on their inner lengthwise edges and of rectangular cross section, two pair of angle bars of less length than and abutting the end and lengthwise edges of said oblong bars and being secured to the said lengthwise edges, the bars of each pair of angle bars being oppositely disposed and each consisting of an outer horizontal and an inner vertical leg, the vertical legs of each pair of angle bars being arranged in inner edgewise aligning spaced relation, a pair of spaced flexible rectangular members arranged between, spaced from and extending inwardly and outwardly with respect to the said lengthwise edges, means for resiliently connecting said members to said horizontal legs, a pair of oppositely disposed rectangular cushioned supports seated on the outer sides of said members, said horizontal legs and said lengthwise edges, said supports being flush with the outer side faces of the oblong bars and vertical legs, said supports and bars coacting to provide an air chamber, a rectangular casing completely enclosing said supports and bars, said casing being formed at the horizontal center of each of its ends with a slit extending from one oblong bar to the other and aligning with the space between a pair of superposed vertical legs, said slits forming combined air intakes and outlets for said chamber, and means carried by said casing and bordering each side of said slits thoughout for opening and closing the latter.

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