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2,662,235

HANDLE FOR INNER SPRING MATTRESSES AND THE LIKE

Filed Sept. 22, 1951

2 Sheets-Sheet 1

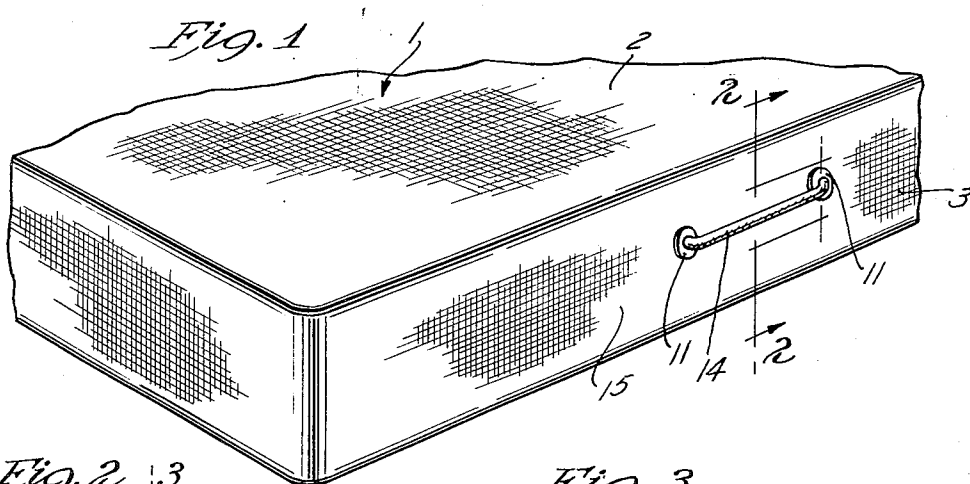


Fig. 2

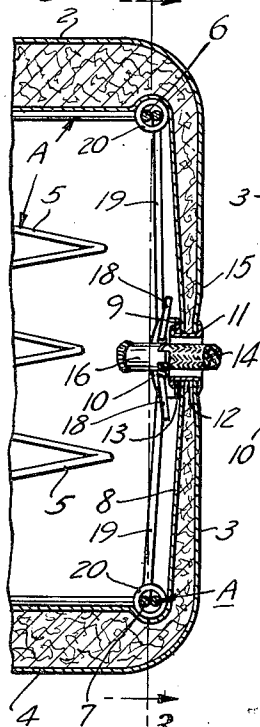


Fig. 3

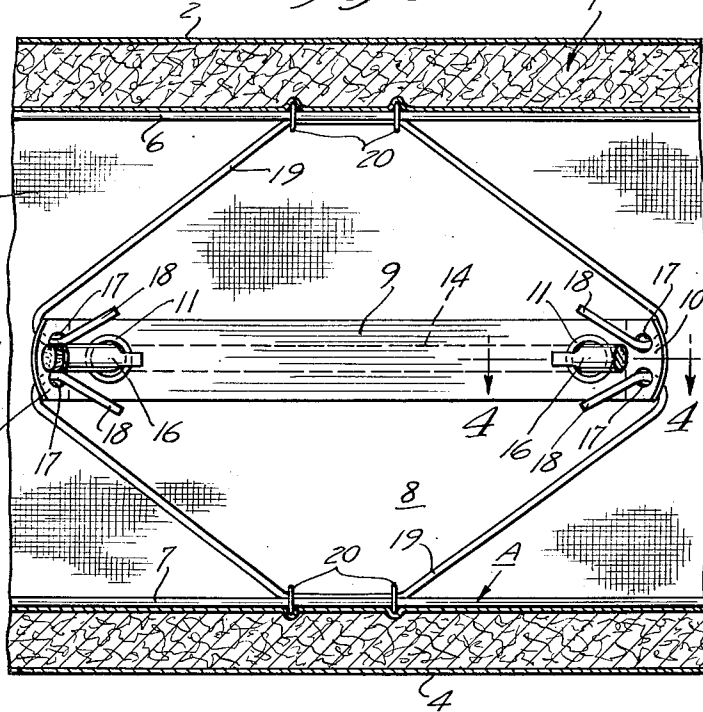
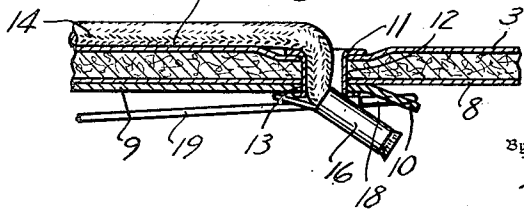


Fig. 4



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Fig. 5

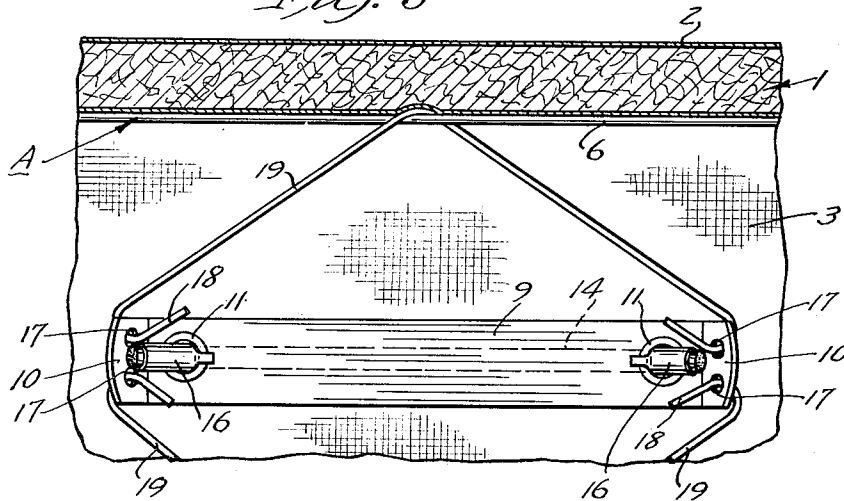
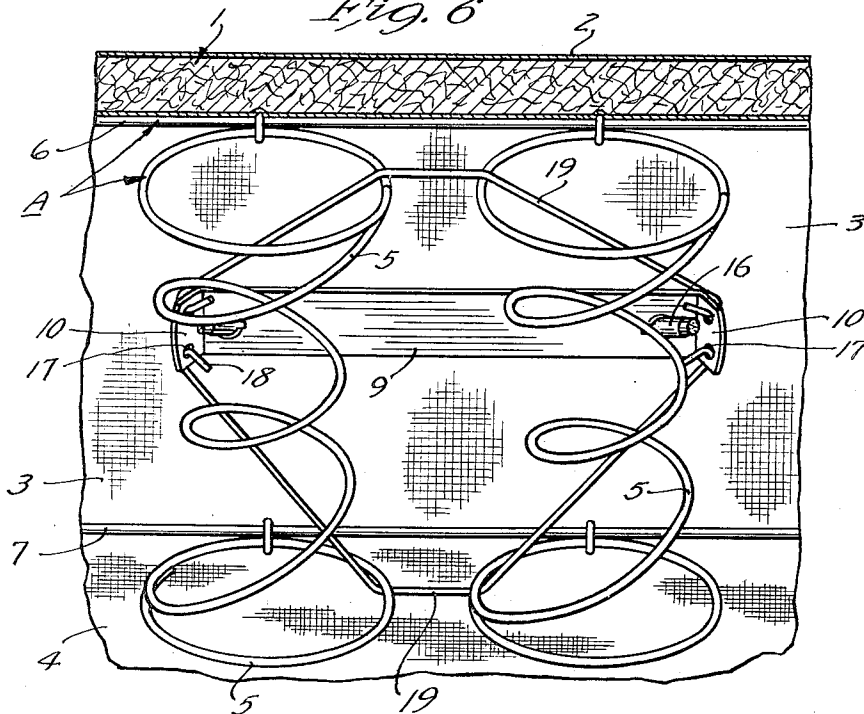


Fig. 6



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UNITED STATES PATENT OFFICE

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HANDLE FOR INNER SPRING MATTRESSES
AND THE LIKEJ Allen Ferguson, St. Paul, Minn., assignor, by
mesne assignments, to Bechik Products, Inc.,
St. Paul, Minn., a corporation of Minnesota

Application September 22, 1951, Serial No. 247,874

3 Claims. (Cl. 5—345)

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My invention relates to improvement in flexible handles for mattresses and the like and, more particularly, to handles for relatively heavy mattresses of the inner spring type.

The primary object of my invention is the provision of a flexible handle for inner spring mattresses, which does not place undue stress and/or strain upon the side wall of the mattress. To this end, I provide novel means for securing the handle to the inner spring unit of the mattress.

Still more specifically, my invention relates to improvements in handles of the type disclosed and claimed in Patent Re. 22,807, entitled "Flexible Mattress Handle," which improvements make handles of this type more adaptable for use on mattresses of heavy inner spring construction.

A still further object of my invention is the provision of novel link means which have pivotal connections both to the upper and lower border wires and to the flexible back bar and which may be readily attached to said back bar during installation of the handle to the mattress but which will not be accidentally detached therefrom while in use.

The above and still further objects of my invention will become apparent from the following detailed specification, appended claims, and attached drawings.

Referring to the drawings, wherein like characters indicate like parts throughout the several views:

Fig. 1 is a fragmentary perspective view of a mattress showing my novel handle secured to the side wall thereof;

Fig. 2 is an enlarged view in section taken substantially on the line 2—2 of Fig. 1;

Fig. 3 is a view in section taken substantially on the line 3—3 of Fig. 2;

Fig. 4 is an enlarged fragmentary view in section, taken substantially on the line 4—4 of Fig. 2;

Fig. 5 shows a slightly different manner of securing my novel handle to the inner spring unit; and

Fig. 6 shows a still different method of securing my handle to the inner spring unit.

Referring specifically to Figs. 1 to 4 inclusive of the drawings, the numeral 1 indicates, in its entirety, a conventional mattress, the upper wall thereof being identified by the numeral 2, the side wall by the numeral 3, and the bottom wall by the numeral 4. Mattress 1 is of the inner spring type, the springs thereof being identified by the numeral 5. Extending around the bor-

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der of the mattress 1 are upper and lower border wires 6 and 7 respectively. The springs 5 and the border wires 6 and 7 are identified as a unit by the letter A.

Secured to the inner surface 8 of the side wall 3, substantially midway between the border wires 6 and 7 and parallel thereto, is a flexible resilient bar 9, the extreme outer ends of which are bent inwardly from the plane thereof to provide ears 10. As shown, the securing is accomplished by means of grommets 11 which extend through spaced openings 12 in wall 3 and through aligned openings 13 in the back bar 9. Openings 13 are closely adjacent the ears 10. It will be noted that the opposite ends of the grommets 11 are outwardly flared or peaned to securely retain the mattress wall 3 and bar 9 therebetween.

An elongated flexible cord handle 14 overlies the outer surface 15 of wall 3, has its opposite ends projecting through the grommets 11, and is provided with elongated anchoring barbs 16 within the mattress. The barbs 16 are preferably of a type disclosed in Patent Re. 22,807, above referred-to. Also, handle 14 is preferably stretched taut along the outer surface 15 of the wall 3 by the resilience of the bar 9.

It will be observed that the ears 10 are provided with laterally-spaced openings 17 through which the opposite hooked ends 18 of opposed generally U-shaped resilient link members 19 extend. Preferably, the link members 19 are formed from flexible wire and have their opposite ends bent backwardly upon themselves to provide opposed open-ended hooks 18. These open-ended hooks 18 can be inserted into the openings 17 by flexing the resilient links 19 in a manner to cause the opposite hooked ends 18 to spread apart under spring tension. It should be obvious that the tendency of the hooked ends 18 to move toward each other under bias of the member 19 effectively prevents accidental removal of said members 19 from the bar 9 after insertion in the above manner.

It will be noted in Figs. 1 to 4 inclusive, that the intermediate portion of the opposed links 19 are secured one each to one of the upper and lower border wires. In Fig. 5, I have illustrated how the U-shaped link members 19 may be secured to the border wires 6 and 7 by merely looping them over the same. A still different manner of securing the links 19 to the inner spring unit is shown in Fig. 6, wherein said links 19 are looped around the outer convolutions of adjacent coils 5. In all of these alternate forms,

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it will be observed that, as lifting stress is placed upon the handle 14, the same is immediately distributed to the inner spring unit through the medium of the flexible resilient links 19. In this manner, tearing or bulging of the wall 3, due to placing too great stress thereupon, is avoided.

While I have shown a preferred embodiment of my invention, it should be obvious that the same is capable of modification without departure from the spirit and scope of the invention as defined by the appended claims.

What I claim is:

1. In combination, a flexible handle for and a mattress or the like having an inner spring unit and a side wall, said handle including a flexible resilient bar, said bar having its opposite ends bent laterally from the plane thereof to provide ears, a pair of grommets extending through spaced openings in said mattress wall and said bar whereby to secure said bar to the inner surface of said wall intermediate the upper and lower edges thereof and generally parallel thereto, a flexible handle stretched taut by the resilience of said bar overlying the outer surface of the mattress wall and having its opposite ends extending through said grommets, anchoring means on the ends of said flexible handle, a pair of opposed generally U-shaped resilient link members having detachable pivotal engagement with the ears on opposite ends of said bar, the intermediate portion of said link members being pivotally secured to said inner spring unit at vertically-spaced points.

2. The structure defined in claim 1 in which the detachable connection between said links and said ears comprise opposed open-ended hooks on opposite ends of said link members received

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in laterally-spaced openings in said ears, said hooks being receivable into the removable from said openings by flexing of said link members.

3. In combination, a flexible handle for and a mattress having an inner spring unit and a side wall, said handle including a flexible resilient bar having ears which project angularly outwardly from opposite ends thereof, said bar being provided with a pair of openings one each closely adjacent one of said ears, a pair of grommets extending one each through openings in said mattress wall and through one of the openings in said bar and securing said bar to the inner surface of said wall with said ears projecting inwardly therefrom, a flexible handle stretched taut along the outer surface of said wall by said bar with its opposite ends projecting through said grommets and detachably secured to said bar within said mattress, a flexible resilient generally U-shaped link member, said link member having its opposite ends bent backwardly upon themselves to provide opposed open-ended hooks, one each of which is loosely received within an opening in a different one of said ears, the intermediate portion of said link member being pivotally secured to said inner spring unit.

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