Jan. 21, 1941. E. S. MUNSON ET AL 2,229,385

MATTRESS

Original Filed July 15, 1935 2 Sheets-Sheet 1

Fig. 1.

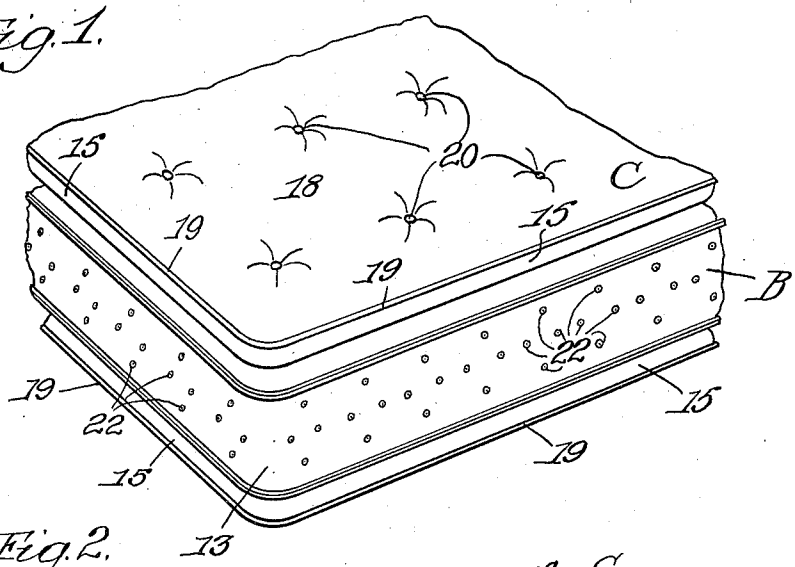
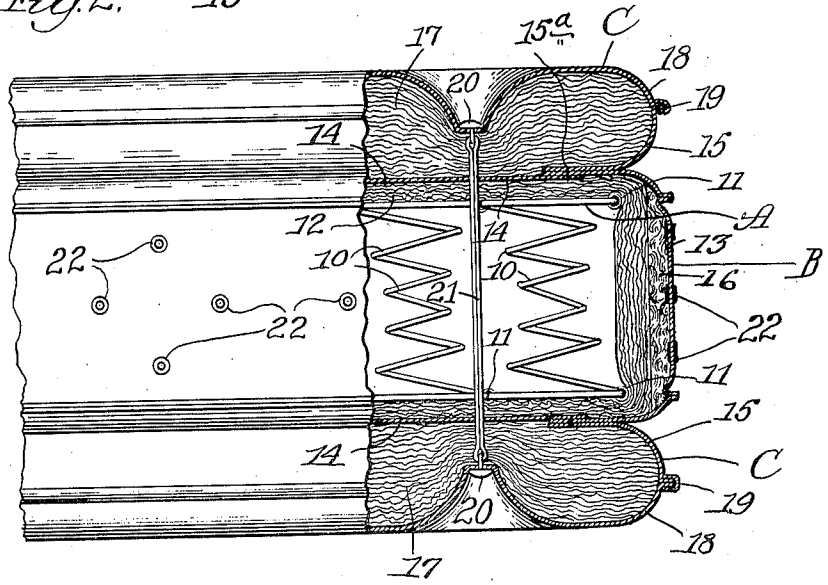


Fig. 2.



Inventors:
Elroy S. Munson,
Solomon L. Patlak and
John P. Riley,
By Britton, Wiles, Davies, Kirschbaum & Dawson,
Attys.

Jan. 21, 1941. E. S. MUNSON ET AL 2,229,385

MATTRESS

Original Filed July 15, 1935 2 Sheets-Sheet 2

Fig. 3.

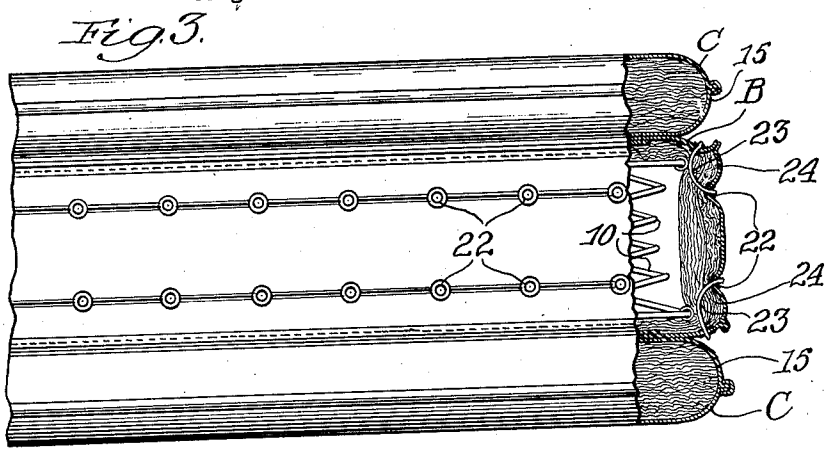


Fig. 4.

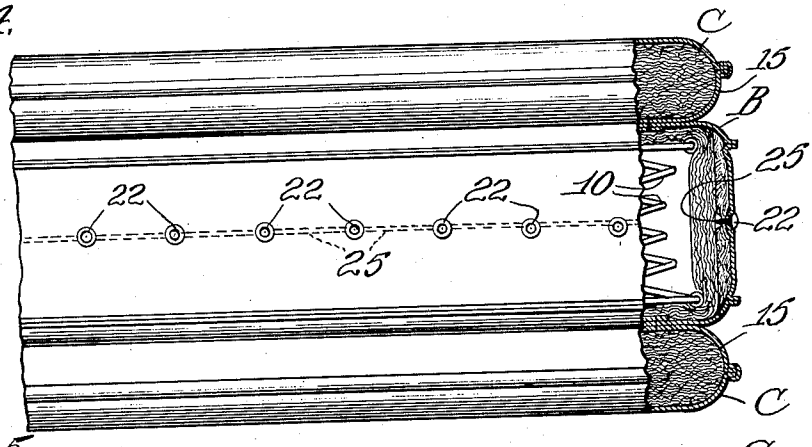
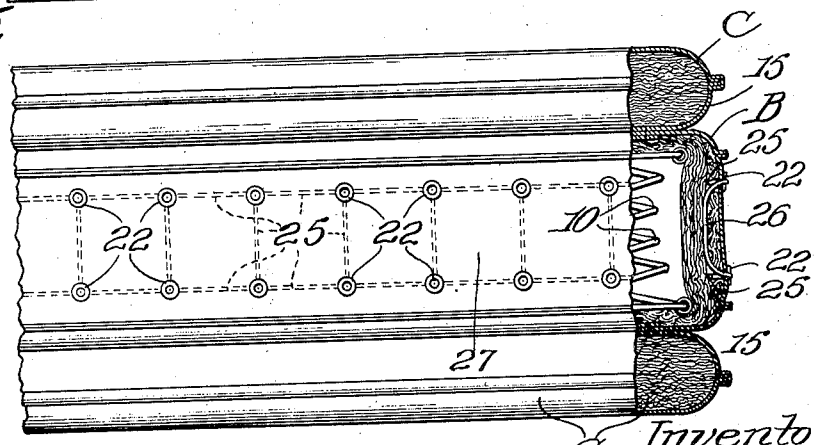


Fig. 5.



Inventors:
Elroy S. Munson,
Solomon L. Patlak 2nd
John P. Rifey,
By Chritton, Wiles, Davies, Kirschl & Dawson,
Attys.

Patented Jan. 21, 1941

2,229,385

UNITED STATES PATENT OFFICE

2,229,385

MATTRESS

Elroy S. Munson, Winnetka, and Solomon L. Patlak and John P. Riley, Chicago, Ill., assignors, by mesne assignments, to S. Karpen & Bros., Chicago, Ill., a corporation of Illinois

Original application July 15, 1935, Serial No. 31,490. Divided and this application December 30, 1938, Serial No. 248,606

4 Claims. (Cl. 5—351)

This invention relates to a mattress.

The present application constitutes a division of our co-pending application Serial No. 31,490 for Mattress, filed July 15, 1935, which has eventuated in Patent No. 2,147,348, issued February 14, 1939.

An object of the invention is to provide a mattress of improved construction and in which the spring core is enclosed within a main casing, and in which flexible cushion structures are attached to top and bottom sides of the main casing containing a spring core, the attachment being accomplished in a novel and efficient manner. A further object is to provide a mattress structure of sturdy and simple construction which may be assembled with few operations and at a minimum of expense. Other specific objects and advantages will appear as the specification proceeds.

The invention is illustrated, in a preferred embodiment, by the accompanying drawings, in which—

Figure 1 is a broken perspective view of a mattress embodying our invention; Fig. 2, a broken side elevation and part sectional view; Fig. 3, a view similar to Fig. 2 showing one modification; Fig. 4, another view similar to Fig. 2, but showing a second modification; and Fig. 5, another view similar to Fig. 2 showing a third modification.

In the construction shown in Figs. 1 and 2, A designates a spring structure; B, a main casing member enclosing the spring structure A and padding therein; and C, a cushion structure secured to the main casing B.

The spring structure A may be of any suitable construction. In the illustration given, it consists of rows of hour-glass springs 10 connected by helicals 11. If desired, the individual springs may be enclosed within fabric pockets.

About the spring structure A is folded a blanket 12 of cotton or any suitable filling material.

The main casing B consists of a border strip 13 having its ends stitched to the fabric sheets 14. Simultaneously with the stitching of the border fabric 13 to the sheets 14, we stitch the tie strips 15 forming a part of the cushion member C, as illustrated more clearly in Fig. 2, the stitching connecting the members 13, 14 and 15, being designated in the drawings by 15^a. The border strip 13 is provided with a padding 16 of cotton or other suitable material stitched to the strip 13.

In the process of forming the mattress, we first stitch the ends of border strip 13 together with the tie strips 15 of the cushion members C to the main casing sheets 14. Next we place the main casing upon a filling machine which inserts the spring structure A together with the filling blanket 12 thereon to the extent that the main casing is stretched taut. We next place a cushion filling material 17 of soft cotton or other suitable material about the sheets 14 and then draw fabric cover strips 18 about the filling material 17, stitching the ends of the cover 18 and the fabric strips 15 together and by means of a binding tape 19.

The structure resulting from the foregoing process affords a taut main casing which snugly houses the filling and spring core, while at the same time a soft and flexible cushion body C is supported about the corners of the main casing.

The mattress may be tufted in any suitable manner. In the illustration given in Fig. 2, the tufting buttons 20 engage the cushion covers 18, and the tie members 21 extend through the filling 17, main casing sheet 14, and the inner filling and spring structure.

If desired, the padded border fabric 13 may be provided with any suitable number of stitch eyelets 22.

The finished mattress will have a taut main casing snugly enclosing a spring structure, the terminal or end rings of which extend substantially to the border of the main casing. In contrast with the taut main casing, the flexible soft cushion members C lie on each side of the casing and may be handled very much as a pillow or soft cushion. It will be observed, however, that the tie strip 15, which is secured to the taut casing 14, confines the outer edge of the cushion member C so that it is held substantially over the end or terminal springs of the spring structure A. By this means, the cushion is supported in the position shown in Fig. 2.

The border of the main casing may also be quilted or provided with rolls whereby additional support is provided for the free edge portion of the cushion C. As shown in Fig. 3, the padded border may be provided with stitches 23 which form relatively rigid rolls 24 adjacent the end springs 10, and just below the free edge portion of the cushion C. The tightly drawn main casing B serves to hold the roll 24 closely against the end spring and thus provides a compact supporting structure below the edge of cushion C.

In the structure shown in Fig. 4, longitudinal stitches 25 are formed between the eyelets 22 and drawn so as to bring the eyelets 22 slightly toward each other, thus forming vertical ribs between the eyelets 22.

In the structure shown in Fig. 5, both longi-

tudinal stitches 25 and vertical stitches 26 are employed to form vertical ribs 27.

While in the illustrations given in Figs. 4 and 5, we have shown two methods of providing vertical fluting or ribs by which the padded border is stiffened to provide a support for the flexible cushion member C, it will be understood that many other means may be employed for this purpose. Instead of one or two rows of eyelets 22, there may be three or more rows, and the eyelets may be drawn together by stitches of any suitable type to provide reinforcing ribs.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible, in view of the prior art.

We claim:

1. In a method of forming a mattress, the steps of stitching the edges of a main casing sheet to one edge of a casing border strip and an edge of a cushion tie strip, stitching the edges of another main casing sheet to the other edge of the casing border strip and an edge of a cushion tie strip to form a casing open at one end, inserting a spring structure enclosed in a filling blanket between said casing sheets and said border strips, closing the open end of said main casing, applying filling material on one side of said main casing, stitching the edges of a cushion cover over said filling material to the edges of the adjacent tie strip, applying filling material on the other side of said main casing, and stitching the edges of the cushion cover thereover to the edges of the adjacent tie strip.

2. In a method of forming a mattress, the steps of stitching the edges of a main casing sheet to an edge of a casing border strip and an edge of a cushion tie member, stitching the edges of a second main casing sheet to the other edge of said casing border strip to provide a hollow casing open at least at one end, inserting a spring structure enclosed in a filling blanket within said hollow casing, applying cushion filling material over said main casing, and stitching the edges of a cover to the edges of said cushion tie strip.

3. In a method of assembling a mattress, the steps of stitching the edges of a main casing sheet to one edge of a casing border strip and an edge of a cushion tie strip, stitching the edges of another main casing sheet to the other edge of the casing border strip to provide a casing open at one end, inserting a spring structure enclosed in a filling blanket between said casing sheets, closing the open end of said main casing, applying filling material upon said first-mentioned casing and within said cushion tie strip, and stitching the edges of a cover to the edges of said cushion tie strip.

4. In a method of the character set forth for forming a mattress having a central spring structure, the steps of stitching the edges of a main casing sheet to one edge of a casing border strip and an edge of a cushion tie strip, stitching the edges of another main casing sheet to the other edge of the casing border strip and an edge of a cushion tie strip to form a casing open at one end, inserting a spring structure between said casing strips and said border strips, closing the open end of said main casing, applying filling material on the outer side of each of said main casings, and stitching the edges of cushion covers over said filling material to the edges of said tie strips.

ELROY S. MUNSON.
SOLOMON L. PATLAK.
JOHN P. RILEY.