J. J. CROWLEY & U. I. ROSENTHAL.

MATTRESS.

APPLICATION FILED AUG. 18, 1917.

1,271,672.

Patented July 9, 1918.

2 SHEETS—SHEET 1.

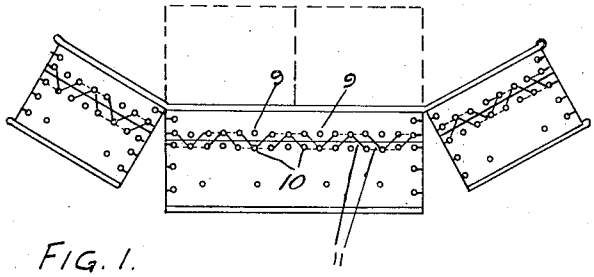


FIG. 1.

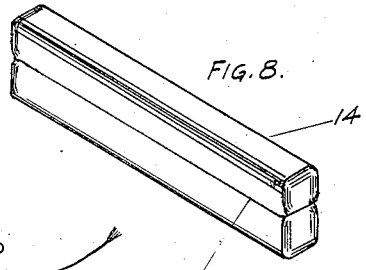
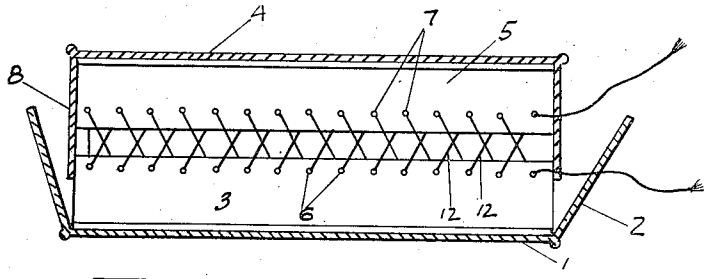


FIG. 8.

FIG. 3.



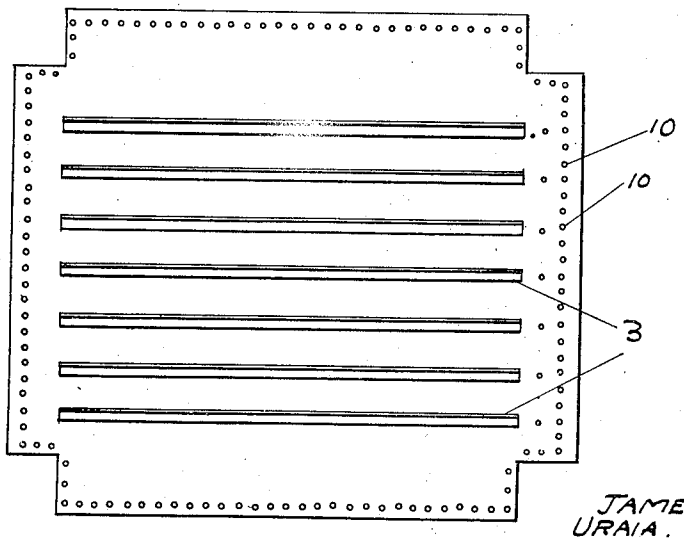


FIG. 7.

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2 SHEETS—SHEET 2.

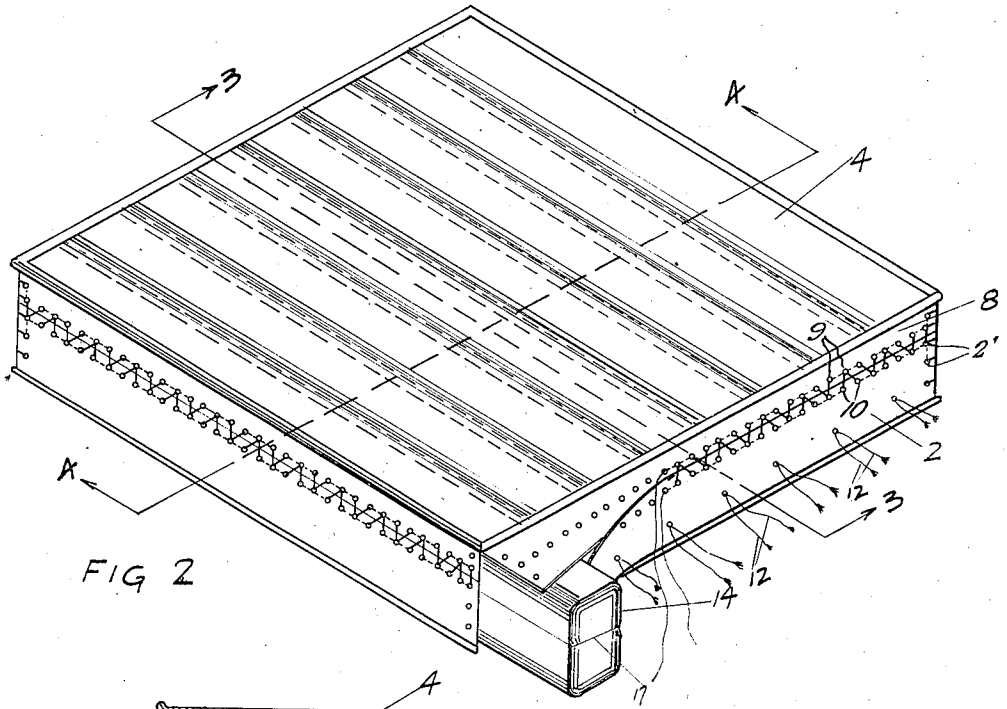


FIG 2

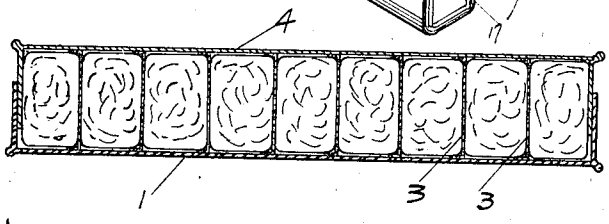


FIG 4

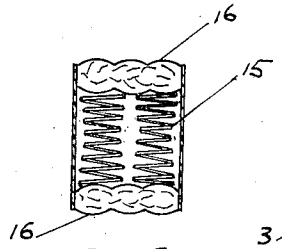


FIG. 5

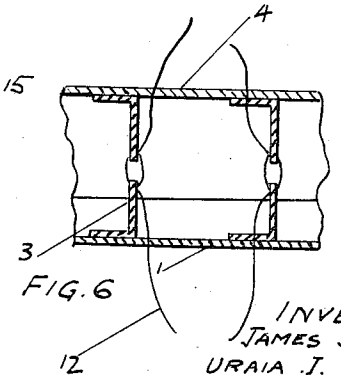


FIG. 6

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UNITED STATES PATENT OFFICE.

JAMES J. CROWLEY AND URAIA ISAAC ROSENTHAL, OF MONTREAL, QUEBEC, CANADA.

MATTRESS.

1,271,672. Specification of Letters Patent. Patented July 9, 1918.

Application filed August 18, 1917. Serial No. 186,871.

To all whom it may concern:

Be it known that we, JAMES J. CROWLEY and URAIA ISAAC ROSENTHAL, both subjects of the King of Great Britain, residing at Montreal, Quebec, Canada, have invented new and useful Improvements in Mattresses, of which the following is a specification.

The invention to be hereinafter described relates to mattresses.

In order to more clearly disclose the construction, operation, and use of the invention, reference should be had to the accompanying drawings forming part of the present application. Throughout the several figures of the drawings like reference characters designate the same parts in the different views.

In the drawings:—

Figure 1 is a side elevation of one form of the invention;

Fig. 2 is a perspective view of the preferred form;

Fig. 3 is a vertical cross section on line 3—3 of Fig. 2, through an empty compartment;

Fig. 4 is a vertical cross section on line 4—4 of Fig. 2;

Fig. 5 is an enlarged cross section through a second form of removable filler;

Fig. 6 is a lateral vertical, cross section through an empty compartment, enlarged;

Fig. 7 is a top plan view of the lower ticking and flaps of Fig. 2, and;

Fig. 8 is a perspective view of one of the fillers.

The main objects of the invention are to provide a simple, efficient, compact, durable, and economical mattress which will comprise a plurality of separate compartments independently refillable, in combination with top and bottom coverings, renewable at will independently of each other. Other and further objects will appear from the following description and claims.

Referring to the drawings in detail, 1 indicates the bottom tick or covering, to the edge of which is secured the lower flap 2. This flap, instead of being stitched at the corners or continuous, has its edges laced together, at the corners, by a suitable lacing passed through the eyelets 2′, for a purpose to be later disclosed. Extending either transversely or longitudinally of the lower covering are a plurality of similar parallel partition flaps 3, each stitched at one edge to tick 1. The free edge of each partition flap is provided with a plurality of lacing eyelets 6. The upper tick or covering 4 has a plurality of similar correspondingly arranged partition flaps 5 provided with eyelets 7. The upper flap 8 of the top tick 4 has its corner edges laced, as in the case of the corner edges of the lower flap. This upper edge, when the mattress is assembled, extends down a considerable distance within flap 2 and is overlapped thereby. Flap 8 and the upper edge of flap 2 are provided with lacing eyelets 9 and 10, respectively, to receive the lacing 11. When the top and bottom are assembled and the flaps 2 and 8 are laced together, the partition flaps 3 and 5 will extend toward each other for a distance of about one third the depth of the mattress, from each cover toward the center, leaving a distance of about one third between the edges. These flaps are connected by a lacing 12 passed through eyelets in the flaps and have their ends extended through suitable eyelets in the flaps 3 and 8. Thus, the mattress covers and partition flaps make a plurality of parallel compartments. For filling these compartments, a filler sleeve 14 is used. It is simply a cloth casing of a size and shape to fit into any one of the compartments, and is filled with mattress filling material of any suitable kind. Cotton wadding, shoddy, or any suitable material may be used. Cotton fiber filling is shown in Fig. 4. Or a spring filling may be used, as in Fig. 5. In that case, rows of springs 15 are used, with quilted pads 16 above and below. Each sleeve is provided with a stout cord 17 extending completely around it, by which it may be quickly and easily pulled into or out of its compartment. To insert a filling sleeve, it is only necessary to unlace the flaps 2 and 8 enough to allow one to take hold of a damaged sleeve, then pull the sleeve out as in Fig. 2. Then a cord is tied to cord 17 of the new sleeve and thrown through that compartment and pulled from the opposite side, drawing the new sleeve into place. By

tightening the lacings 12, it is obvious that the filling sleeves of any one or more compartments may be considerably compressed, as desired.

Should it be desired to renew either the upper or the lower coverings, it is only necessary to unlace the flaps 2 and 8 and the flaps 3 and 5, and substitute the new cover.

In one respect, the form shown in Fig. 1 is the preferred form. It is especially suitable for easy compact shipping. The middle section is twice the width of the end sections. Consequently, the two end sections which are connected to the middle section only by the material of the upper cover, may be folded over so as to be completely upon the center section, making a compact, easily handled shipping package of three sections flexibly connected. Furthermore, in this construction, when one of the three sections is damaged or worn out, it may be removed and renewed independently of the other sections. In this form, one of the sections, or more, may have the covers and flaps stitched together, instead of laced.

While eyelets and lacings have been shown as the connecting means, it is to be clearly understood that the main idea is to detachably connect the parts. Consequently any equivalent means may be used, such as hooks and eyes, buttons and button holes, snap fasteners, etc. It is obvious also, that a number of other filling materials may be used, only one or two being mentioned as illustrative.

By this compartment arrangement, no tufting is required, as will be obvious, nor will it be possible for the material to shift.

By means of the sleeve filling, it is possible for the user to refill a compartment quickly and inexpensively, without sending the mattress to a factory for repair, and at a considerable economy.

The lacing of the partition flaps permits a considerable range of compression of the filling sleeve in each compartment, so that the individual compartments may be adjusted to different degrees of compactness, as desired, to suit circumstances.

With a sleeve in each compartment, the partition flaps all laced, and the covers tightly laced, a complete substantial mattress is provided, in which either the top or bottom may be quickly removed and renewed, or any one or more compartments emptied and refilled.

It is clear of course, that the compartments in either form, may be filled with the loose material without the sleeves. The tightening of the partition flaps will give the desired compression. This adjustable feature of the partition flaps is of particular value in taking up any looseness or slackness in sections that become packed or padded down.

It is also clear that in the form shown in Figs. 2 and 7, the flap may be stitched to the top covering, instead of laced, and that loose filling may be used in one or more of the compartments, instead of the removable casings, with filling.

It is thought that the construction, operation, and use of the invention, will be clear from the preceding detailed description. Changes may be made in the construction, arrangement and disposition of the several parts of the invention without in any way departing from the field and scope of the same, and it is meant to include all such within this application, wherein only preferred forms have been disclosed, by way of illustration.

Having thus described our invention, what we claim and desire to protect by Letters Patent is:—

1. In combination in a mattress, upper and lower mattress coverings and a flap, means for detachably connecting one of said coverings to said flap to permit complete removal of said covering, a plurality of partition flaps carried by each covering, means for connecting the partition flaps of one covering to those of the other to form compartments, and a filling.

2. In combination in a mattress, upper and lower mattress coverings and a flap, means for detachably connecting one of said coverings to said flap to permit complete removal of said covering, a plurality of partition flaps carried by each covering, means for connecting the partition flaps of one covering to those of the other to form compartments, means for adjusting the partition flaps of one covering toward or from those of the other, and a filling.

3. In combination in a mattress, upper and lower mattress coverings and a flap, means for lacing one of said coverings to said flap, partition flaps carried by said coverings, and means for lacing the partition flaps of one covering to those of the other.

4. In combination in a mattress, a plurality of mattress sections flexibly connected together and comprising a continuous upper covering with separate lower coverings and flaps, means for removably connecting the flaps to the upper coverings, partition flaps carried by said coverings, and means for drawing the partition flaps of one covering toward or from those of the other or others.

5. In combination in a mattress, a plurality of mattress sections flexibly connected and each having an upper and a lower cov-

ering and a flap, means for detachably connecting one of the coverings of one or more sections to the flap thereof, and adjustable partitions connecting the coverings of said sections.

6. In combination in a mattress, a plurality of mattress sections flexibly connected and each having an upper and a lower covering and a flap, and adjustable partitions connecting said coverings.

Signed at Montreal, Quebec, Canada.

JAMES J. CROWLEY.
URAIA ISAAC ROSENTHAL.