June 20, 1933. C. F. BURKE 1,914,661

MATTRESS

Filed March 7, 1931 2 Sheets-Sheet 1

Fig. 1

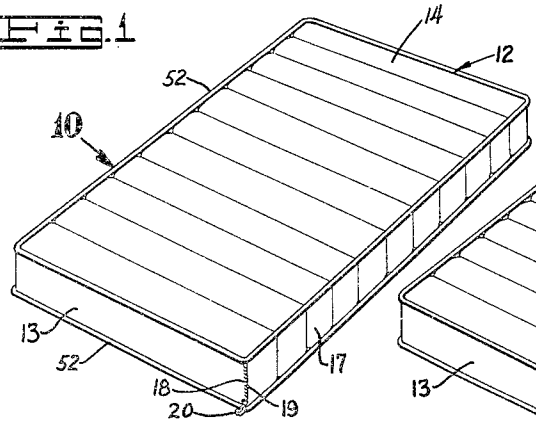


Fig. 2

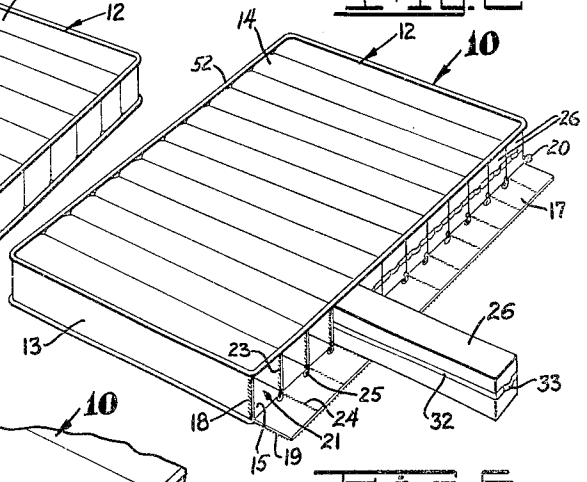


Fig. 3

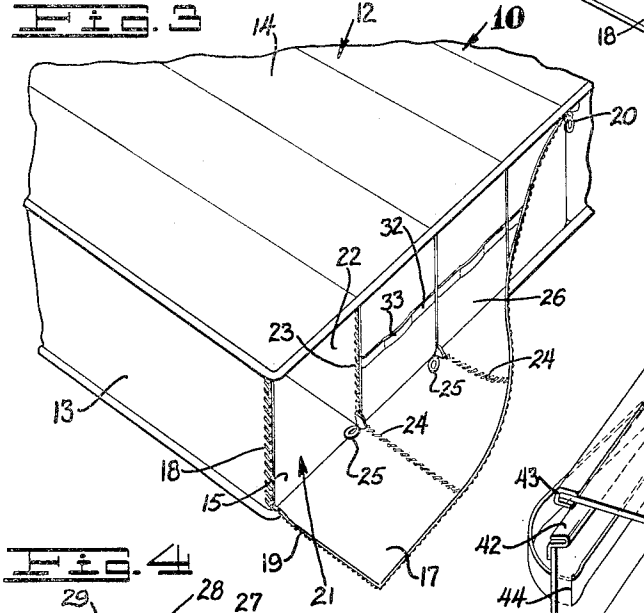


Fig. 5

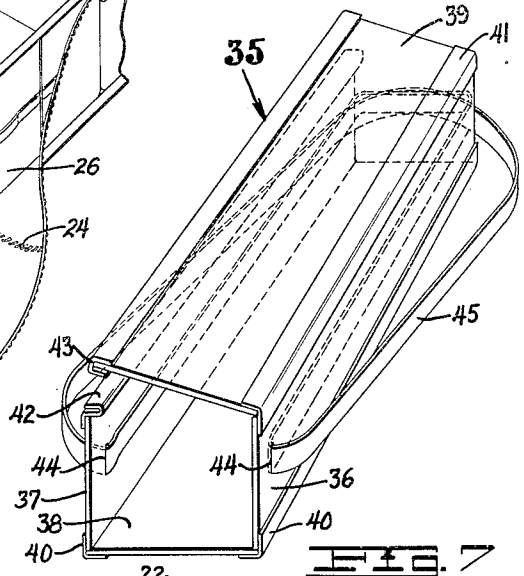


Fig. 4

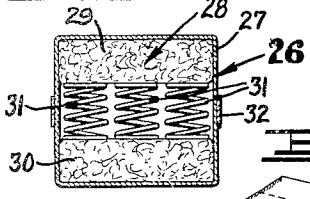


Fig. 12

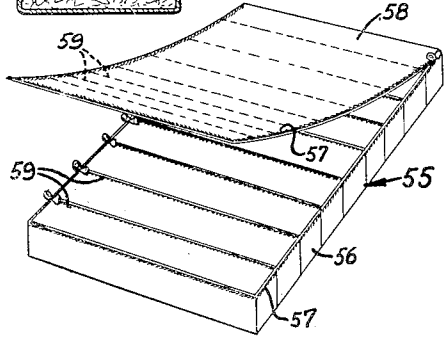
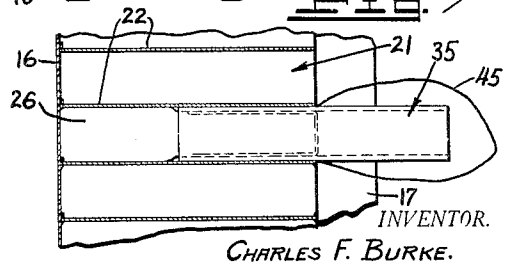


Fig. 7



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FIG. 8

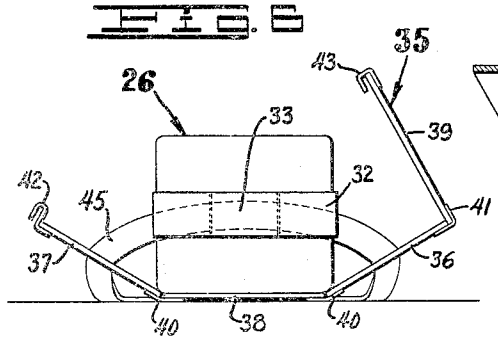
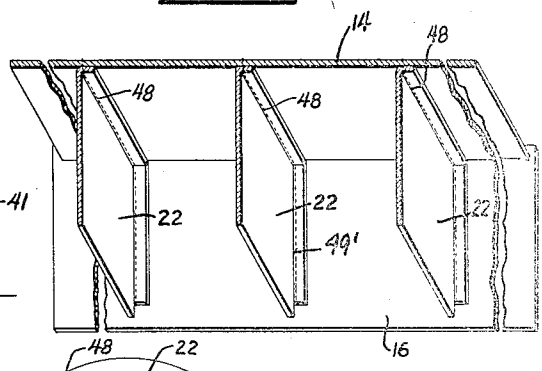


FIG. 8



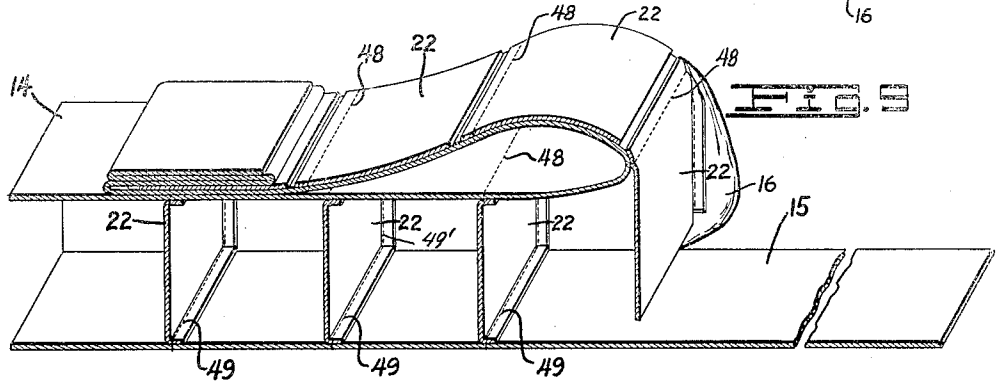
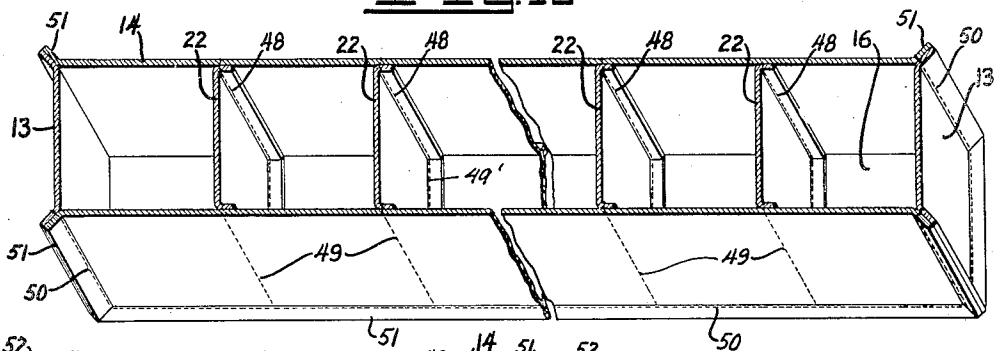


FIG. 9

FIG. 10



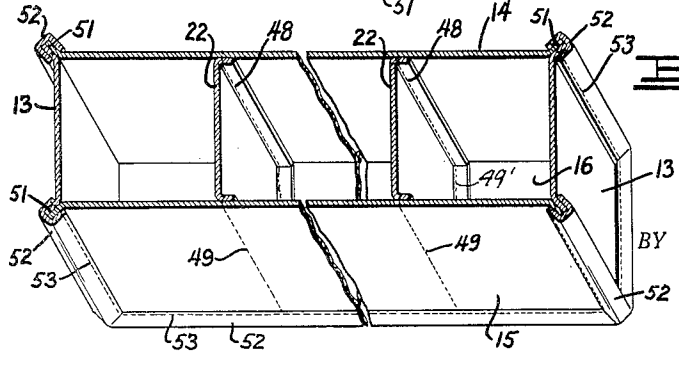


FIG. 11

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Patented June 20, 1933 1,914,661

UNITED STATES PATENT OFFICE

CHARLES F. BURKE, OF MONTEREY PARK, CALIFORNIA

MATTRESS

Application filed March 7, 1931. Serial No. 520,868.

This invention relates to improvements in mattresses.

The general object of the invention is to provide an improved mattress including a plurality of individual removable fillers.

A further object of the invention is to provide a mattress of the class described having openings to allow removal of the fillers and closure members for the openings with hookless fastening means to retain the closure in a closed position.

A further object of the invention is to provide novel means for inserting the fillers in the mattress.

Other objects and advantages of this invention will be apparent from the following description taken in connection with the accompanying drawings wherein:

Fig. 1 is a perspective view of my improved mattress.

Fig. 2 is a similar view showing the closure flap open.

Fig. 3 is an enlarged fragmentary perspective view of the mattress.

Fig. 4 is an enlarged cross section through one of the fillers.

Fig. 5 is an enlarged perspective view of the filler inserter.

Fig. 6 is an end view of the filler inserter in an open position.

Fig. 7 is a fragmentary top plan section of the mattress showing a filler being positioned therein by means of the inserter.

Figs. 8 to 11 inclusive are fragmentary perspective views showing the various steps in the construction of my mattress casing or ticking and

Fig. 12 is a perspective view of a modified form of my invention.

Referring to the drawings by reference characters I have indicated my improved mattress generally at 10. As shown this mattress comprises a casing or ticking 12 which preferably is made of cloth and includes end portions 13, a top 14, a bottom 15 and a back 16 all integrally secured together. The ticking 12 is open on the front side and is provided with a closure flap 17 which may be a continuation of the bottom member 15 or it may be a separate piece secured thereto as by stitching.

For retaining the closure flap 17 in a closed position I provide an interlocking hookless fastening device which may be of any standard make and includes a portion 18 which is secured to the mattress ticking, a portion 19 which is secured to the closure flap and an operating member 20.

The portion 18 of the fastening device extends from the lower front edge of one side member 13 up to the top member 14 along the top member to the opposite end member 13 and then down to the bottom 15. The portion 19 of the fastening device is positioned on all three free edges of the closure flap 17.

Thus when the operating member 20 is moved in one direction it unlocks the interlocking fastening device thereby allowing the closure flap 17 to be moved to an open position as shown in Figs. 2 and 3, and when it is moved in an opposite direction it locks the interlocking fastening device and moves the closure flap 17 to a closed position as shown in Fig. 1.

The interior of the ticking 12 is divided into a plurality of cells or compartments 21 by a plurality of cloth partitions 22 which are secured to the top member 14, the bottom member 15 and the back member 16.

Adjacent the front edge of each of the partitions 22 I provide a portion 23 of an interlocking hookless fastener and on the closure flap 17 I provide an associated portion 24 and for interlocking each two portions 23 and 24 I provide an operating member 25. Thus when the operating members 25 are actuated to interlock the portions 23 and 24 the closure flap 17 is secured to the ends of each of the partitions 22.

Positioned in each of the cells 21 I provide a unit filler member 26. Each of the filler members 26 includes an outer cloth housing 27 which is closed on all sides and includes a resilient filling 28. The filling 28 may be a material similar to cotton, hair or it may include several elements as shown in Fig. 4. As shown the filler 28 includes a layer of cotton or hair 29 positioned adjacent the top of the casing and a similar layer

30 positioned adjacent the bottom of the casing with a plurality of coiled springs 31 positioned between the layers 29 and 30.

Positioned on two sides and ends of each of the filler members 26 I provide a cloth strap 32 which is firmly secured to the casing 27 as by stitching all the way around except at each end where a loose portion 33 is provided which acts as a handle portion for the filler. This strap 32 is arranged between the filling members 29—30 so that these filling members are not compacted by the strap.

These straps 32 enable the filler members or units 26 to be very readily handled during packing and shipping and also allow means for readily withdrawing the units from the ticking. In handling the units the filling material is not compacted since the straps 32 do not press upon the filling material but are arranged so that all the tension is taken up by the springs.

For positioning the unit filler member 26 in the chambers 21 I provide an inserting member 35 which is shown in perspective in Fig. 5. As shown this inserter 35 includes sides members 36 and 37, a bottom member 38 and a top member 39, all of which may be made of any suitable rigid material but I prefer to make them of a composition material known as wall board. The side members 36 and 37 are secured to the bottom member 38 by flexible cloth hinges 40 and the side member 36 is secured to the top member 38 by a similar hinge 41. Along the upper portion of the side 37 I provide a hook shaped metal member 42 and on the edge of the top member 39 opposite the hinge 41 I provide a similarly shaped metal member 43 which is adapted to be interlocked with the member 42 to secure the top member to the side member 37. Adjacent one end of the side members 36 and 37 I provide opposed apertures 44 in which is positioned an endless cloth strap 45.

To position a unit 26 in a compartment 21 by means of the inserter 35 the top member 39 thereof is freed from the side member 37 and the device is opened out as shown in Fig. 6. The filler 28 is then positioned in the device 35 with the strap 45 extending along the sides of the filler and across one end thereof in a position similar to that shown in Fig. 5. The cover 39 is then secured to the side member 37 by interlocking members 42 and 43 and the device is ready to insert the filler in a compartment.

The cross sectional area of the filler 28 is greater than the cross sectional area of the device 35 so that when the device 35 is closed around the filler 28 the filler is compressed and the device 35 is sufficiently smaller than the cross sectional area of the compartments 21 to allow free insertion thereinto of the device 35.

The inserting member 35 is then positioned in one of the compartments 21 of the ticking with the end thereof across which the strap 45 extends facing outward and with the portion of the strap 45 outside of the device laying along the sides 36 and 37 as shown in Figs. 5 and 7. The operator then grasps the strap 45 and pulls it outward thereby forcing the filler 26 out of the device 35 into the compartment and the device 35 out of the compartment as shown in Fig. 7. The inserter device 35 preferably is wider at the inner end and tapers so that the device is readily slipped from the filler units.

After the units 26 have been positioned in the compartments 21 the operator actuates the operating member 25 to interlock the portions 23 and 24 of the interlocking hookless fastening devices at the ends of the partitions and then the operator actuates the operating member 20 to interlock the portions 18 and 19 of the interlocking hookless fastening device on the ticking and the flap thereby securing the flap 17 in a closed position.

To open the closure flap 17 to remove one or more of the fillers 26 the operator actuates the operating member 20 to unfasten the portions 18 and 19 on the ticking and the closure flap and after which the operator actuates the operating device 25 to unfasten the interlocking members 23 and 24 on the ends of the portion and on the flap whereupon the closure flap is free to be moved to an open position as shown in Fig. 2.

In Figs. 8 to 11 inclusive I have shown the manner in which I prefer to construct the casing or ticking 12 of my mattress 10. As shown in Fig. 8 the partitions 22 are all secured to the top 14 as by stitching them thereto as indicated at 48 and then the opposite edges of the partitions are secured to the bottom 15 as by stitching them thereto as indicated at 49 and clearly shown in Fig. 9. The ends 13 and the back 16 are then secured to the top 14 and the bottom 15 by stitching them thereto as indicated at 50 in Fig. 10. The stitching 50 is spaced from the edges to provide peripheral flanges 51 around the mattress and then U shaped binding strips 52 are positioned over the ends of the flanges 51 and secured to the flanges 51 as by stitching them thereto as indicated at 53 and clearly shown in Fig. 11. The partitions 22 may be secured to the back 16 by stitching as indicated at 49′, this stitching 49′ may be done at any suitable time during the process of manufacturing the ticking.

In Fig. 12 I have indicated generally at 55 a modification of my invention wherein an interlocking hookless fastening device is provided around three upper edges of a ticking 56 as indicated at 57 so that the entire top portion 58 of the ticking may be freed from the side portions on three edges. When the mattress is constructed as shown

in Fig. 12 interlocking hookless fastening devices are positioned at the upper edge of the compartment partitions and on the underside of the top member as indicated at 59. The compartments in this modification have open tops and the units are inserted through these open tops.

From the foregoing description it will be apparent that I have provided a novel mattress which is simple in construction and highly efficient in use.

Having thus described my invention, I claim:

A mattress comprising a casing including a top member, a bottom member and end members connected to the top and bottom members, a back member connected to the top and bottom members and to the end members and continuous partition members, said partition members being united to the top, bottom and back members to provide a plurality of cells each having an open front portion, a closure for said front portions of said cells, fastening means for securing said closure to the top member and to the end members, means to detachably secure each partition member throughout the length of one of its ends to an adjacent portion of the closure member and an independent, removable, filler member in each of said cells.

In testimony whereof, I hereunto affix my signature.

CHARLES F. BURKE.