Feb. 25, 1930. B. HARRISON ET AL 1,748,477

MATTRESS

Filed June 17, 1926

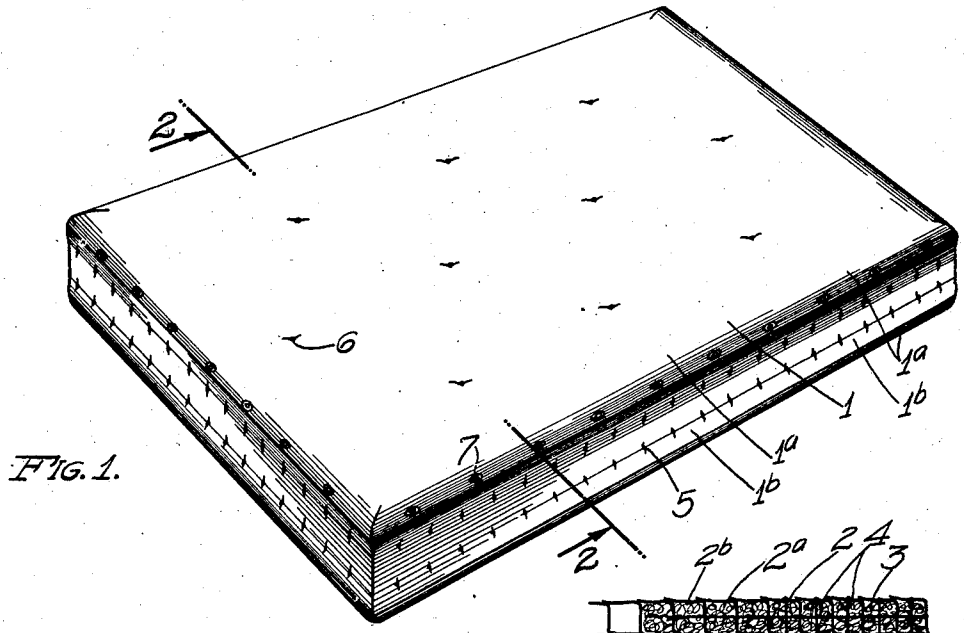


FIG. 1.

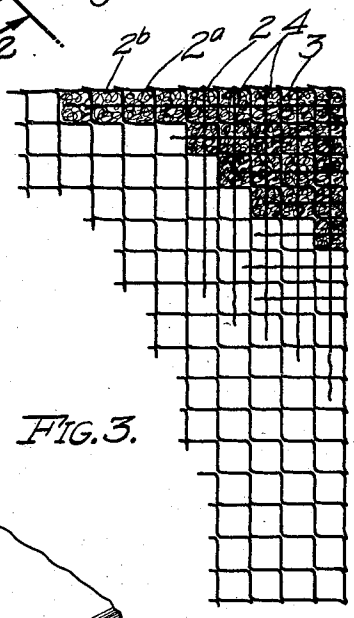


FIG. 3.

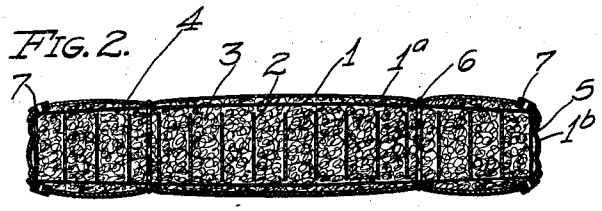


FIG. 2.

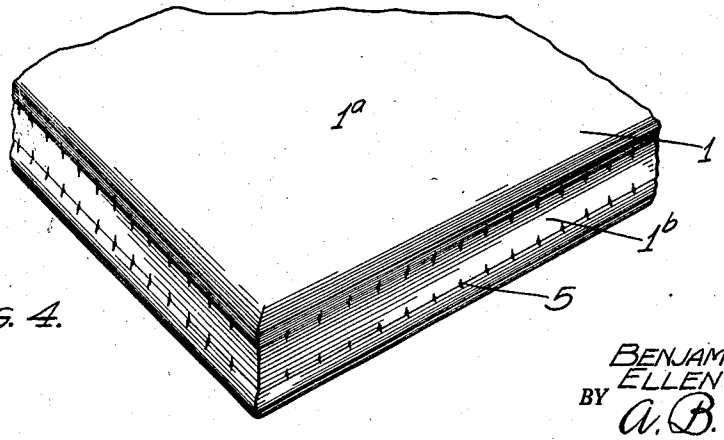


FIG. 4.

INVENTOR.
BENJAMIN HARRISON
ELLEN HARRISON
BY A. B. Bowman
ATTORNEY

Patented Feb. 25, 1930 1,748,477

UNITED STATES PATENT OFFICE

BENJAMIN HARRISON AND ELLEN HARRISON, OF SAN DIEGO, CALIFORNIA

MATTRESS

Application filed June 17, 1926. Serial No. 116,569.

Our invention relates to mattresses, and the objects of our invention are: first, to provide a mattress which will not get out of shape when lying on the same or when handling the same; second, to provide a mattress, the stuffing of which will not pack to any extent and even though packed slightly will readily come apart or can be readily fluffed without effort, making the mattress soft and fluffy as new; third, to provide a mattress of this class which may be made as soft or as hard as desired without getting out of shape; fourth, to provide a mattress of this class which has no inherent means for producing vertical pressure, but only means exerting horizontal pressure for retaining the stuffing or filler in place; fifth, to provide a mattress of this class having an inner stuffing or filler retaining case for retaining the stuffing or filler in position horizontally and for forcing said stuffing or filler vertically beyond the case resulting in the mattress always being fluffed and soft dependent upon the amount and kind of stuffing or filler; sixth, to provide a mattress of this class in which the tick or outer covering will outlast that of other mattresses by reason of no material strains being exerted on the same; seventh, to provide a mattress of this class which may be effectively ventilated at the upper and lower sides within the outer covering or tick; eighth, to provide a mattress of this class which, when slightly packed, may be easily placed on edge and slightly tapped for bringing the mattress back to its original shape, resiliency and softness; ninth, to provide as a whole a novelly constructed mattress of this class, and tenth, to provide a mattress of this class which is particularly simple and economical to make, which is durable, and which will not readily deteriorate or get out of order.

With these and other objects in view, as will appear hereinafter, our invention consists of certain novel features of construction, combination and arrangement of parts and portions, as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon, which form a part of this application, in which:

Figure 1 is a perspective view of our mattress in one form of construction; Fig. 2 is a sectional view thereof, taken through 2—2 of Fig. 1; Fig. 3 is a plan view of a fragmentary portion of one end of the stuffing or filler retaining case, showing the method of constructing the same, and Fig. 4 is a fragmentary perspective view of a slightly different form of construction.

Like characters of reference refer to similar parts and portions throughout the several views of the drawings.

The tick or outer covering 1, the stuffing or filler retaining case 2, the stuffing or filler 3, and the stuffing or filler retaining cords 4, constitute the essential parts of our mattress in its preferred form.

The case 2 is preferably made as a complete unit and of substantially the length and width of the finished mattress. Said case is made as a checkerboard having vertically positioned pockets or recesses 2^a open at their upper and lower ends and preferably arranged in longitudinal and transverse rows, as shown in Fig. 3. This case is made from strips 2^b of strong fabric of a width slightly less than the depth or thickness of the mattress. These strips extend substantially in one diagonal direction and are sewed together at intervals, each strip being sewed at alternate intervals and in staggered relation to similar strips positioned at opposite sides thereof forming, when the case is extended, zigzag portions, which form two adjacent sides of square-shaped pockets 2^a, which pockets, when the case is extended, are arranged in longitudinal and transverse rows. Said case forms substantially continuous, longitudinal and transverse strips, which positively limit the longitudinal and transverse extension or stretching of the mattress.

The pockets 2^a of the case 2 are filled in any suitable manner by a suitable stuffing or filler, such as cotton, kapok, hair and the like, the stuffing or filler extending preferably beyond the upper and lower ends of the pockets, as shown in Fig. 2, and forming substantially a continuous layer of such

stuffing or filler at the upper and lower sides of the case 2.

Said stuffing is positively retained in said pockets by cords 4 which extend longitudinally and transversely over the upper and lower sides of the case and cross over at the central portions at the ends of each of the pockets. The ends of said cords are secured to the edges of the portions of the strips forming the outer sides of the outer longitudinal and transverse pockets of the case, as shown best in Fig. 3. Said cords are adapted to permanently retain the stuffing within the pockets, but do not interfere in any way with providing a soft and fluffy mattress.

The outer cover or tick 1 is made of any suitable strong mattress covering fabric. The tick, as shown in the drawings, consists of upper and lower sheets 1^a secured at their edges by a box strip 1^b, as shown. The strip 1^b is sewed at regular intervals by stitching 5 to the outer edge of the case, as shown in Figs. 1, 2 and 4.

No other stitching or means is required to form a completed and practical mattress, as is shown in Fig. 4. The upper and lower sides or sheets of the tick will not bag or sag, but will be held taut against the upper and lower sides of the stuffed case or against the stuffing therein. However, if desired, the outer sides or sheets of the tick may be sewed together at staggered intervals by stitching 6 forming tufts, which stitching 6, however, is loose and will not interfere with the proper functioning of the mattress.

At the edges of the upper and lower sides or sheets of the tick 1 of the mattress, shown in Figs. 1 and 2, are provided vent holes reinforced by eyelets 7 to provide ventilation of the mattress, particularly at the upper and lower sides thereof.

It is obvious from the above that although we have shown and described a particular construction, combination and arrangement of parts and portions of a mattress structure and a slightly modified form of construction thereof and have referred to the same as a mattress only, we do not wish to be limited to this particular construction, combination and arrangement nor to the modification, nor to the particular adaptation, but desire to include in the scope of our invention the construction, combination and arrangement of the mattress, seats, seat backs and similar structures substantially as set forth in the appended claims, the several adaptations or applications being referred to as mattresses.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a mattress of the class described, a case having a plurality of vertical pockets, stuffing in said pockets, cords extending from one side of the mattress to the other at the outer portions of said pockets for retaining stuffing therein and for reinforcing the mattress and a covering for said case and said cords.

2. In a mattress of the class described, a case having vertical pockets open at their upper and lower ends, stuffing positioned in said pockets, and cords extending across the upper and lower ends of said pockets for retaining said stuffing therein.

3. In a mattress of the class described, a case having vertical pockets, stuffing positioned in said pockets, and cords extending across the ends of said pockets for retaining said stuffing therein, said stuffing extending beyond said cords.

4. In a mattress of the class described, a stuffing retaining case made of strips of fabric sewed together forming vertical pockets and substantially continuous and straight reinforcing means extending from one side of the case to another, and cords extending over the open ends of said pockets and secured to the edges of said case for retaining stuffing therein.

In testimony whereof, we have hereunto set our hands at San Diego, California, this 5th day of June, 1926.

BENJAMIN HARRISON.
ELLEN HARRISON.