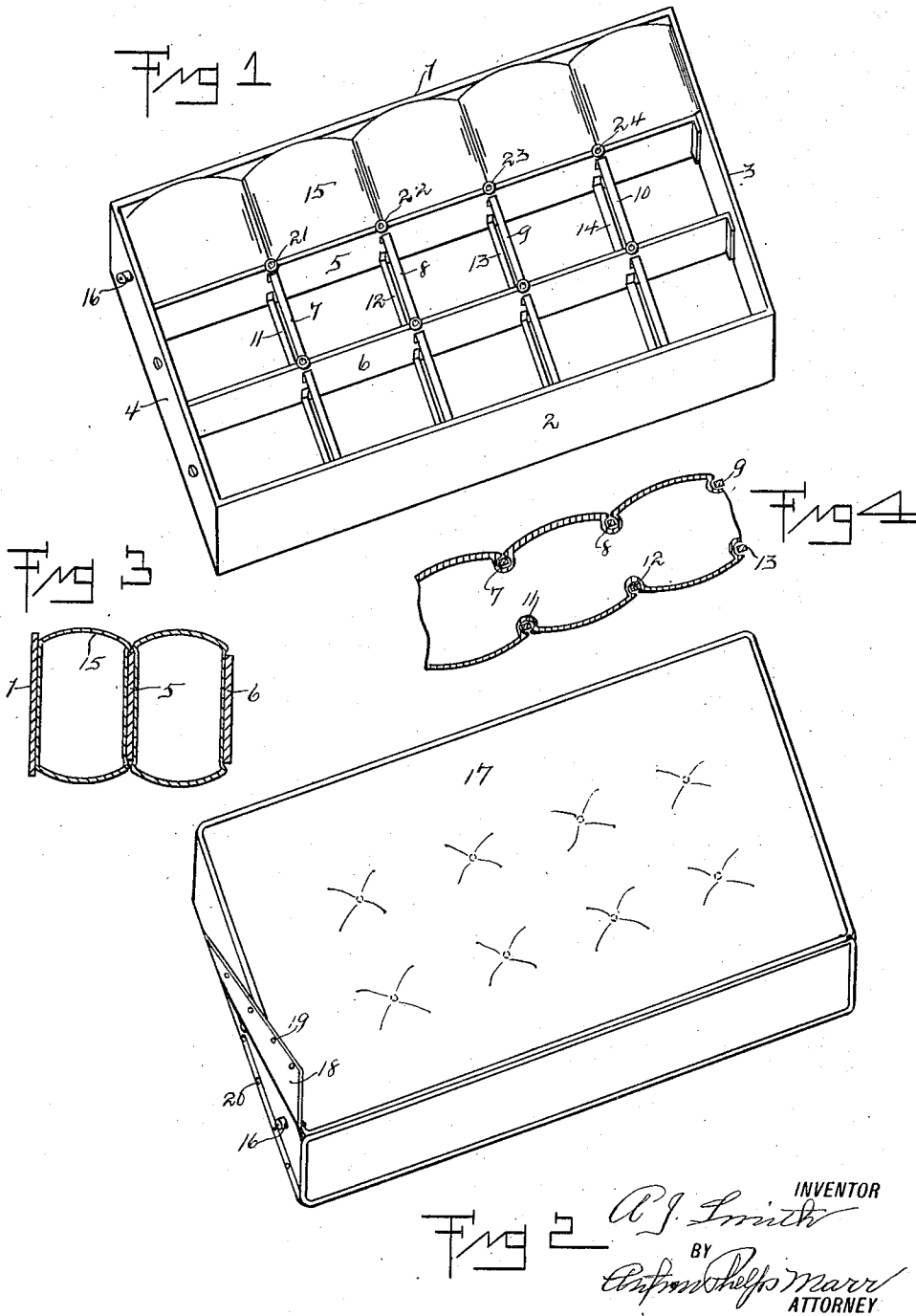


A. J. SMITH.
MATTRESS.

APPLICATION FILED SEPT. 27, 1917.

1,279,467.

Patented Sept. 17, 1918.



UNITED STATES PATENT OFFICE.

ALBERT J. SMITH, OF NEW YORK, N. Y.

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Specification of Letters Patent. Patented Sept. 17, 1918.

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To all whom it may concern:

Be it known that I, ALBERT JOSEPH SMITH, a citizen of the United States, and resident of the borough of Manhattan, county of New York, city and State of New York, have invented certain new and useful Improvements in Mattresses, of which the following is a specification.

The mattress herein referred to is a pneumatic mattress for beds, cribs, cots and the like and has for its special objects the production of a mattress having elongated air containing members and means for depressing certain portions of the members and for separating them one from another so that the complete mattress will have the appearance of a mattress of ordinary construction.

The appearance is not all the important factor however, as the construction as to be later described will give to the mattress all of the features found in mattresses of the long approved type.

The construction and operation of my device will be fully set forth as the specification progresses.

The following is what I consider a good means of carrying out this invention and,

The accompanying drawings should be referred to for a complete understanding of the case.

Figure 1 is a perspective view of the interior casing with one of the pneumatic members in position.

Fig. 2 is a view in perspective of a completed mattress.

Fig. 3 is a sectional view of a portion, this section is viewed lengthwise of the mattress.

Fig. 4 is a sectional view of a portion, this view being taken at right angles to the view shown in Fig. 3.

Similar reference numerals indicate like parts in all the figures where they appear.

My mattress should have an inner casing and an exterior casing or cover, and while the exterior casing should be made of ticking, duck, or other comparatively fine or decorative material, the interior may be made of coarser material.

The interior casing is oblong in shape and may be considered as formed with sides 1 and 2, and ends 3 and 4. Through the end 4, I produce a plurality of perforations for a purpose that shall appear later.

Secured to the ends 3 and 4 and subdividing the interior casing into three longitudinal chambers are barriers 5 and 6, which

may be of the same material as the exterior walls of the casing.

High up on the barrier 5, I secure a plurality of straps 7, 8, 9 and 10 and the other end of each of these straps is connected to the barrier 6.

A second series of straps 11, 12, 13 and 14 are similarly secured and directly under the straps 7, 8, 9 and 10. These straps serve to sub-divide the longitudinal chamber between the barriers 5 and 6 into a plurality of compartments and the other longitudinal chambers before referred to are also similarly divided, the straps being secured to the barriers and to the outer walls at a point slightly lower than the exposed edge of the barriers or walls.

When the interior casing is completed as described I place a rubber tube such as the tube 15 longitudinally in each of the longitudinal compartments passing this tube between the opposed straps 7 and 11 and between each pair of opposed straps in its longitudinal compartment. The tube 15 is provided with a valve 16 and when all of the tubes are in place with their valves projecting through the perforations in the end wall 4 I insert the interior casing just described into the exterior casing 17 shown in Fig. 2 and I then inflate each of the rubber tubes. When properly inflated the flap 18 of the casing 17 is secured by means of the buttons 19 and 20 of which there is a relative series upon the flap and upon the edge of the casing 17 and now my mattress is ready for use.

I desire to call particular attention to certain most important features found in my mattress.

Each rubber tube is larger in diameter and longer than the compartment into which it is to be introduced, and therefor when inflated the upper and lower portions of the tube will overlap the straps as shown in Fig. 4 and will also overlap the barriers as shown in Fig. 3.

Upon the barriers 5 and 6 or upon all intermediate barriers and approximately adjacent to the point where the straps are secured I arrange one portion of a snap button as shown at 21, 22, 23, and 24, and upon the interior of the outer casing 17 I secure the other portion of the snap button in such a position that when the outer casing is in position the buttons may be snapped together

and will impart to the outer casing the tufted appearance of an ordinary mattress.

Should a tube become punctured or deflated it may be removed for repairs or inflated independently of the other tubes.

The outer cover may be removed, washed and returned as often as desired and the entire mattress may be disassembled for cleaning and re-assembled without difficulty and without the requirement of mechanical skill or ingenuity.

The size and shape of my device may be varied at will, I may use a greater or less number of tubes, or a greater or less number of barriers and straps. Other modifications may be made within the scope of the appended claims without departing from the principle or sacrificing the advantages of this invention.

Having carefully and fully described my invention what I claim and desire to secure by Letters Patent is:—

1. A mattress having a casing, a plurality of barriers extending longitudinally thereof and a plurality of straps arranged transversely of said casing and a pneumatic member for each said longitudinal portion and received under said straps.

2. A mattress having a longitudinal casing formed of four complete walls, one of

said walls being provided with a plurality of perforations, a plurality of barriers secured in said casing and extending longitudinally thereof and a plurality of straps transverse said barriers and secured to said barriers and to said casing.

3. A mattress comprising an oblong casing having four confining walls one of said walls being provided with a plurality of perforations, barriers extending longitudinally of and secured within said casing and subdividing said casing into a plurality of compartments, a plurality of straps arranged in opposed pairs in each said compartment and a pneumatic member larger than said compartment and arranged one in each said compartment and between the straps therein and an inclosing casing for said first mentioned casing and means upon said inclosing casing and said first mentioned casing for securing said casings in operative relation, and means by which said pneumatic members may be inflated.

Signed at New York city, in the county and State of New York, this 17th day of Sept., 1917.

ALBERT J. SMITH.

Witness:

G. E. S. MARR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."