(No Model.)

E. BLOCHMAN & G. R. EVANS.

ATMOSPHERIC BED.

No. 272,116. Patented Feb. 13, 1883.

Fig. 1

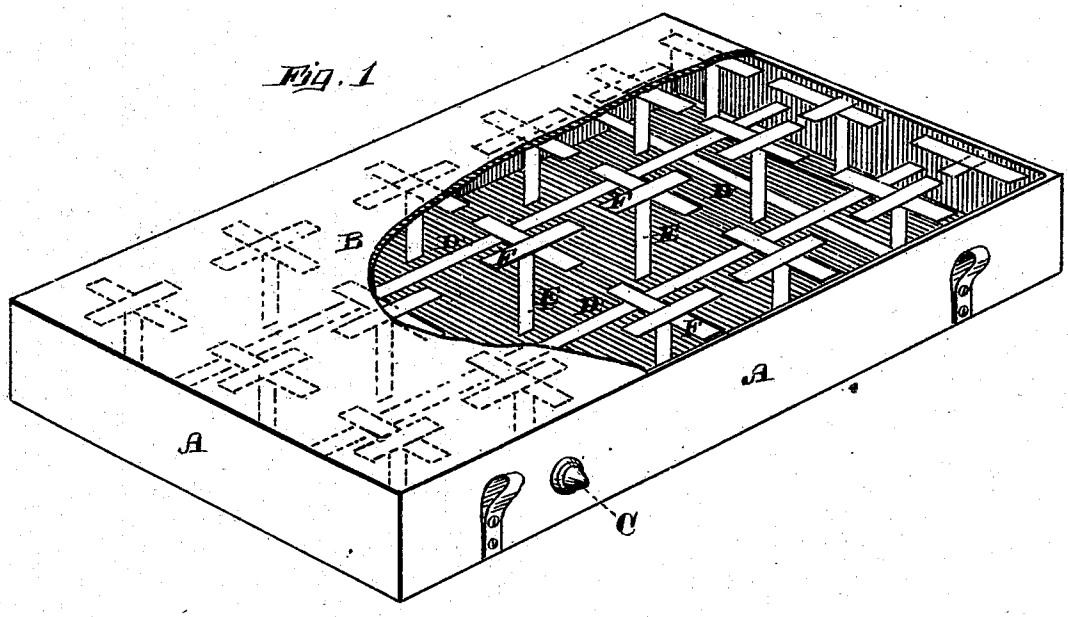


Fig. 2.

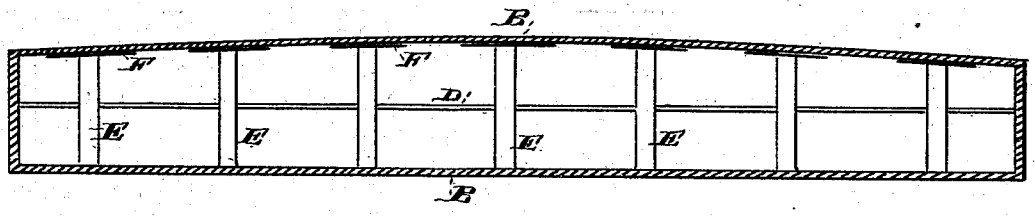
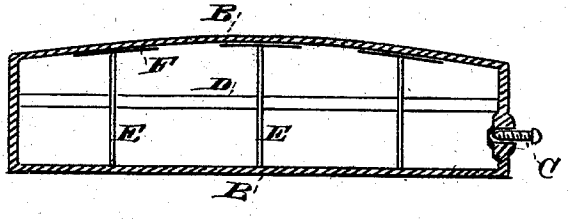


Fig. 3.



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UNITED STATES PATENT OFFICE.

EMANUEL BLOCHMAN AND GEORGE R. EVANS, OF SAN FRANCISCO, CAL.

ATMOSPHERIC BED.

SPECIFICATION forming part of Letters Patent No. 272,116, dated February 13, 1883.

Application filed September 2, 1882. (No model.)

To all whom it may concern:

Be it known that we, EMANUEL BLOCHMAN and GEO. R. EVANS, of the city and county of San Francisco, State of California, have invented an Improved Atmospheric Bed; and we hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to an improved bed; and it consists of a mattress or bed-bottom made of any suitable air-tight flexible material, so that it may be inflated, and in combination with it a series of elastic flexible braces, which unite the top and bottom, and also the sides, so as to prevent their spreading out of shape when inflated, and by which the expansion and contraction are equalized.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a perspective view of our invention. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section.

A A are the sides and ends, and B B the top and bottom, of our bed. These are made of any suitable impervious material, united so as to form vertical sides and flat tops and bottoms, as shown. At one side, or at any other suitable points, are fitted locking tubes or nozzles C, through which the bed may be inflated with air and the openings tightly closed.

In order to preserve the shape of the bed and to equalize its sides and surface under the strains of varying pressure, elastic springs D D extend from side to side and also from end to end at intervals. Similar springs, E, extend from the top to the bottom, as shown. The ends of these springs are connected with transverse pieces or strips F, which are either formed with them or afterward united to them, so as to extend a considerable distance upon each side of the point of union upon the bottom and top of the bed. These transverse strips may be secured to the top and bottom, B, either from the inside, or they may pass through and be secured upon the outside, as is found most convenient or best.

The springs E are made of such a length that they will have a certain amount of tension before the bed is entirely inflated, this tension increasing as the inflation is increased until the mattress is fully inflated. They will thus retain the sides and top and bottom in their normal position and hold the bed in its proper shape. The connecting-springs equalize the pressure of the expansion and contraction at different points, due to unequal loads, thus making the bed very easy and comfortable. This construction is also applicable to pillows and other similar articles.

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

1. In a bed, the sides A and top and bottom B, of impervious flexible material, in combination with the vertical and transverse elastic equalizing-springs E D, substantially as herein described.

2. In a bed consisting of the impervious flexible sides and top A B, the vertical and transverse elastic equalizing-springs E D, in combination with the transverse end strips, F, substantially as and for the purpose herein described.

In witness whereof we hereunto set our hands.

EMANUEL BLOCHMAN.
GEORGE R. EVANS.

Witnesses:
S. H. NOURSE,
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