

J. R. HAMILTON.
AIR BED.

No. 66,706.

Patented July 16, 1867.

Fig. 1

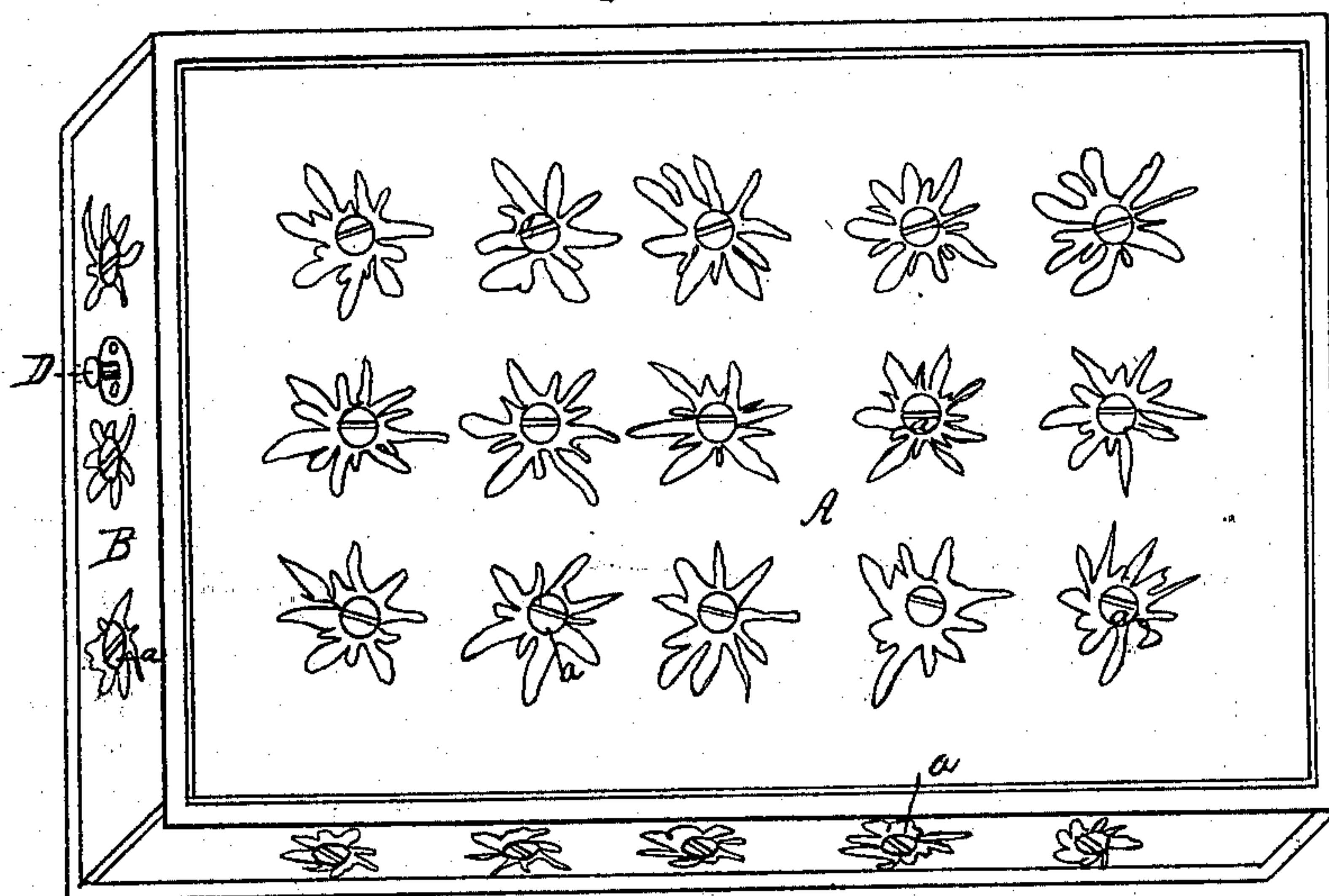


Fig. 2

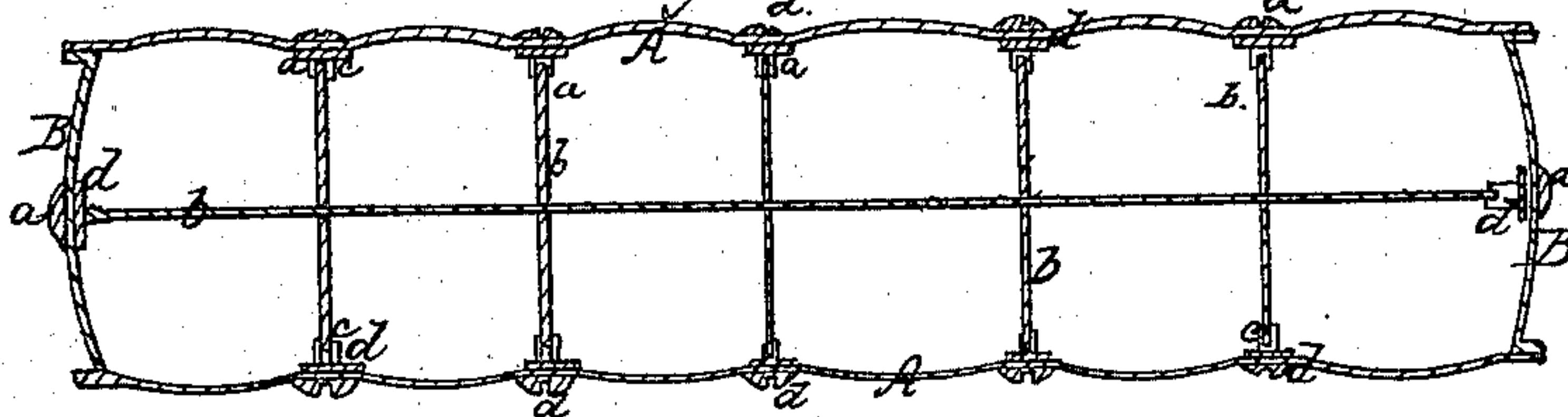


Fig. 3

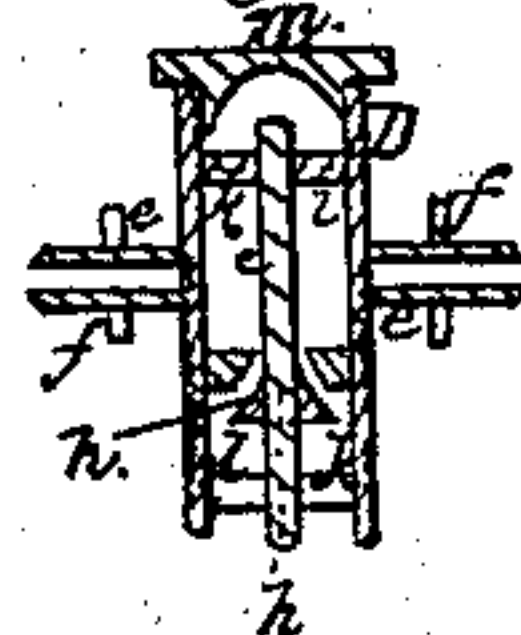


Fig. 4



Witnesses:

Sam. Lloyd

Abyah Taylor

Inventor

Jonathan R. Hamilton
By Attorney J. B. Woodruff

United States Patent Office.

JONATHAN R. HAMILTON, OF PORTLAND, OREGON.

Letters Patent No. 66,706, dated July 16, 1867.

IMPROVED AIR BED.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JONATHAN R. HAMILTON, of Portland, in the county of Multnomah, and State of Oregon, have invented certain new and useful Improvements in Air Beds; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents an outside view of the bed in perspective.

Figure 2 represents a longitudinal section, showing the internal arrangement and mode of securing the stays.

Figure 3 shows a section of the valve-tube for inflating the bed, and mode of securing it air-tight to the tick.

Figure 4 is a detached view of one of the screw-stay fastenings.

The object of my invention is to make air beds, of any suitable size or dimensions, that will keep level and in proper form whether partially or fully inflated.

My invention consists in the construction, arrangement, and combination of the screw and cap-nut stay-fastenings with the stay-cords and air-tight, water-proof bed-tick.

My invention further consists in the self-closing puppet-valve tubes for inflating the bed, and the manner of securing the same to the tick air-tight.

That others skilled in the art may make and use my invention, I will describe it more fully, referring to the drawings, and to the letters marked thereon.

The cloth or ticking for making my improved air beds is coated on one side with India rubber, or other elastic cement, so as to make it impervious to water, or so as to prevent the air, when compressed, from passing through it. The large surfaces, top and bottom, A A, being cut to the desired size, and also that portion which forms the ends B B and sides being prepared suitable width and length, the screw and cap-nut stay-fastenings *a a* are inserted in any desired number, in both top and bottom, so that they will come opposite to each other, leaving the spaces between them equidistant. The stay-fastenings *a* may also be inserted in the ends B and sides in the same manner. Into the eyes *c c c* in the inner ends of the stay-fastenings *a a* the twine or cords *b b b* are made secure, they all being the required length to give the bed the proper form when inflated, and are cross-tied together, so that each stay forms a brace each way for other stays and the ticking outside, so as to prevent the bed from sagging or swaying off when the weight of a person rests upon one side of it. The button-headed screws *a' a'* and cap-nuts *d d* effectually close the aperture through which the stem of the screw passes, so that no air can escape. The stays *b b* being properly secured to them, the edges of the ticking being cemented and fastened together, the bed is formed and complete, all but the valve-tube D for inflating, which I construct in the manner shown in fig. 3. The tube D having a screw-thread on the outside, about one-half of its length, on to which are fitted two plates, *e e'*, between which the ticking is clamped by turning the plates, by means of the projecting pins *f f*, so that no air can escape where the inflating-tube D is inserted. The interior arrangement of the tube, for admitting the air from without and holding it in, is composed of a cone-seat puppet-valve, *h*, with a stem, *j*, to guide it, the stem sliding in two heads, *k k*, which have a series of small holes, *i i*, through them to admit the air when forced in from the outside, which easily passes the valve *h*, which is closed instantly, and held firmly in its seat by the air inside when the pressure is withdrawn from without, thus making a complete self-acting and closing stopper, which is prevented from being opened from without by the screw-cap *m* being turned into the outer end of the tube D, so that all is secure, and when partly or wholly inflated, is an easy and most desirable spring-bed for all, and especially in the summer season.

It has heretofore been found very difficult to attach stays or braces for keeping air beds in a uniform position and have them air-tight, which may be done with certainty with my screw and cap-nut, as above described.

I am well aware that air beds have been constructed in various ways, and air pillows are used for the twofold purpose of pillows and life-preservers; and it is not my purpose to claim anything with regard to water-proof or air-tight fabrics, or the manner of cementing the joints of the fabric together.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The button-headed screw and cap-nut stay-fastening, as constructed and combined with air-tight or water-proof fabrics, for the purposes herein specified.
2. I claim the self-closing puppet-valve and tube with the screw and plates, when constructed as described, and used in combination with air beds, substantially as and for the purpose herein set forth.

J. R. HAMILTON.

Witnesses:

B. A. LAVENDER, Jr.,

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