

No. 679,680.

Patented July 30, 1901.

G. F. H. LANGER.
MATTRESS OR CUSHION.

(No Model.)

(Application filed Aug. 29, 1899. Renewed Nov. 9, 1900.)

2 Sheets—Sheet 1.

FIG. 1.

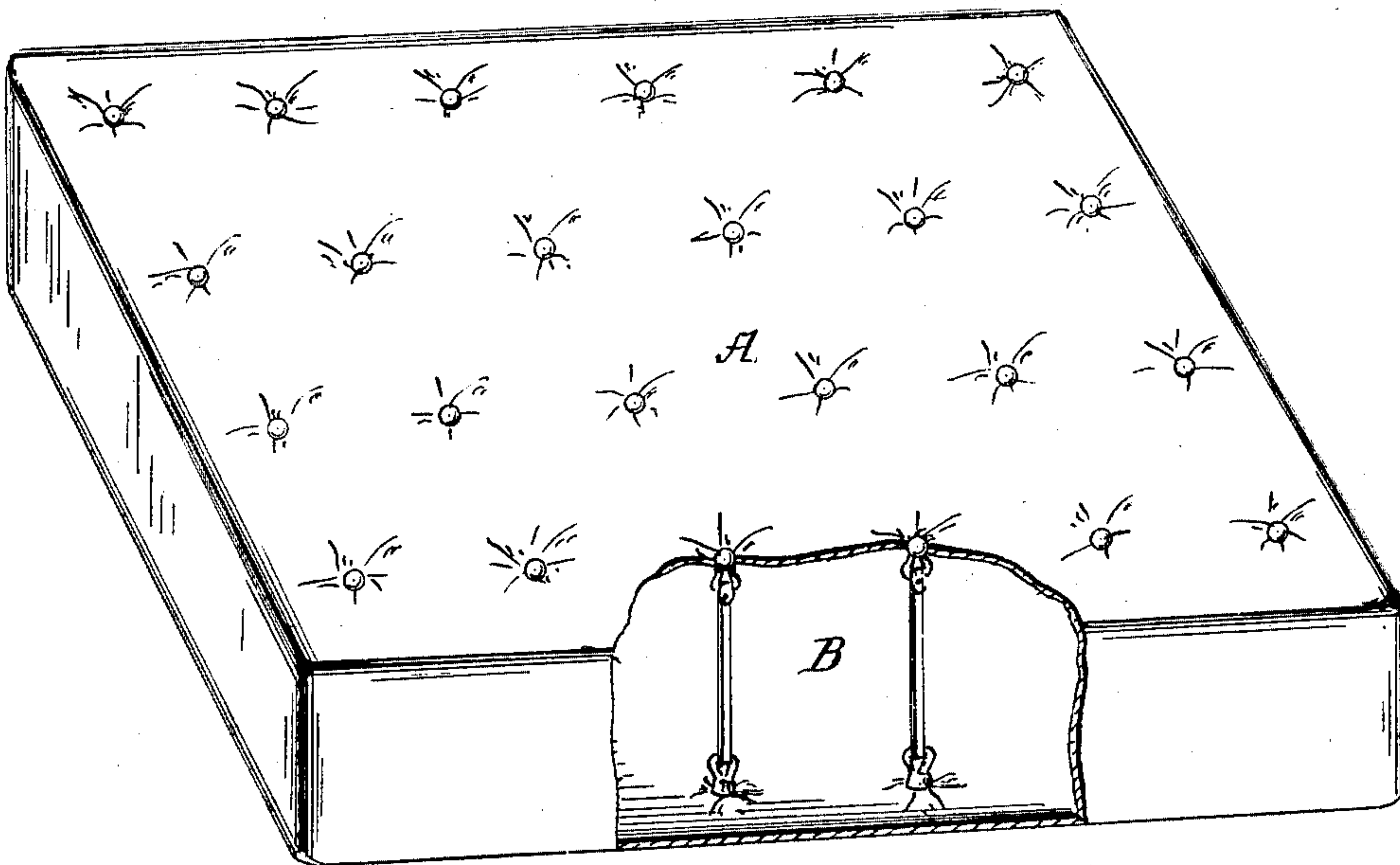
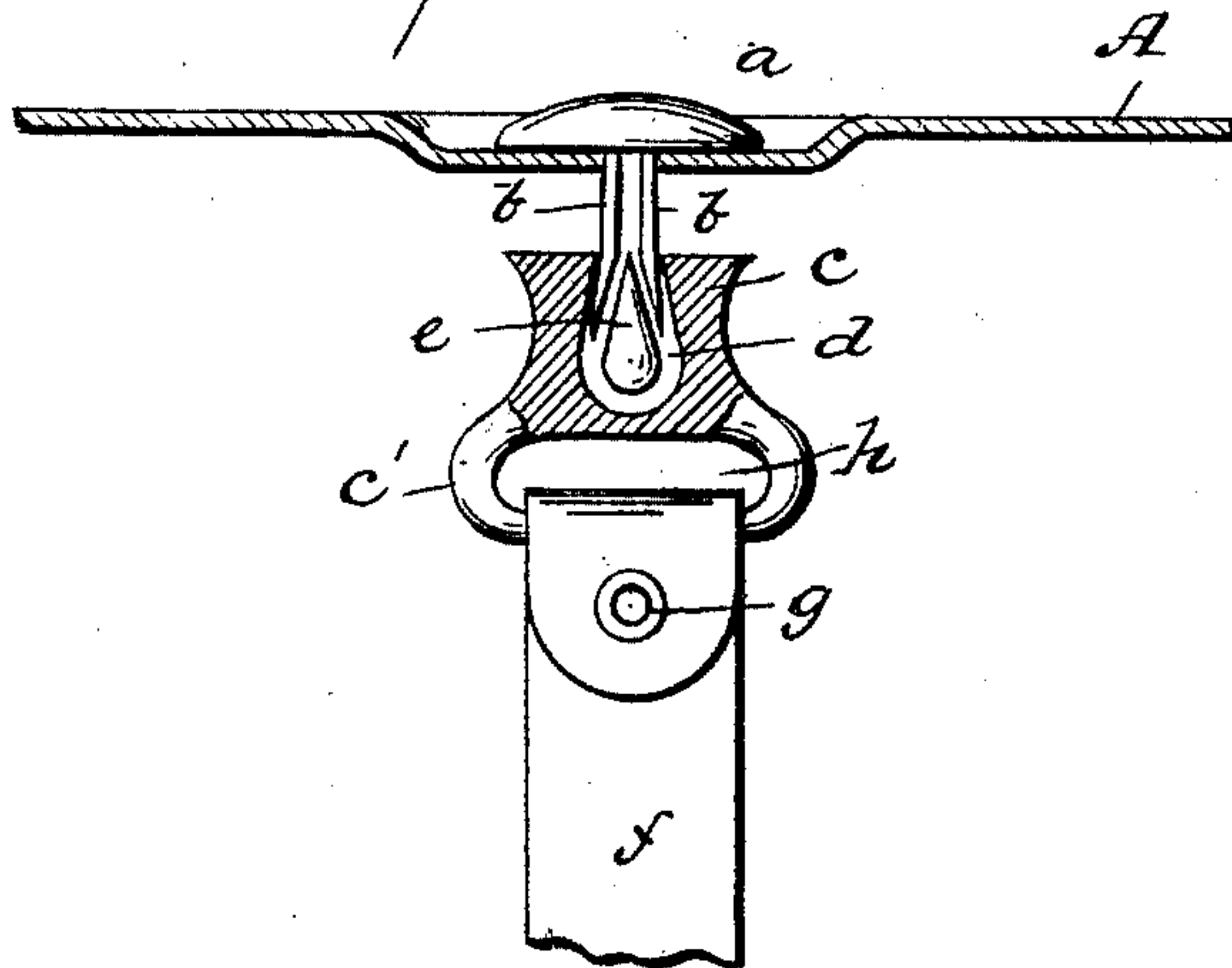


FIG. 2.



Witnesses

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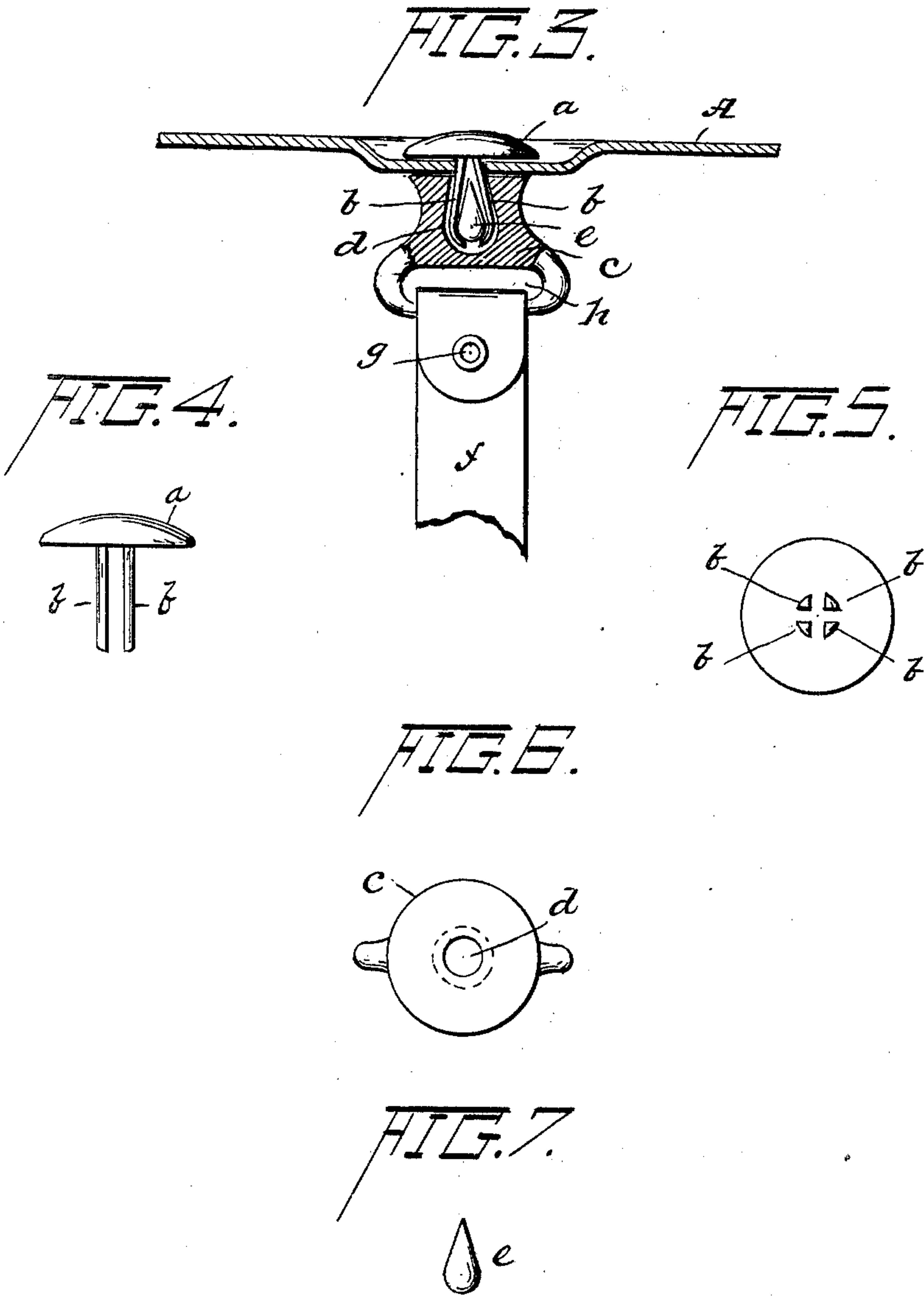
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Witnesses

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UNITED STATES PATENT OFFICE.

GUSTAVE F. H. LANGER, OF CHICAGO, ILLINOIS.

MATTRESS OR CUSHION.

SPECIFICATION forming part of Letters Patent No. 679,680, dated July 30, 1901.

Application filed August 29, 1899. Renewed November 9, 1900. Serial No. 35,963. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE F. H. LANGER, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tufting Devices for Mattresses or Cushions, of which the following is a specification.

My invention relates particularly to means employed for tufting mattresses and cushions, and is especially adapted for use with articles of this kind which are filled with air and in which it is important to effect a perfectly air-tight joint between the tufting-button and the fabric of which the mattress-cover is composed.

The object of my improvement is to provide a tufting device which while effecting a perfectly air-tight joint where employed can be cheaply produced and quickly and easily applied.

Referring to the accompanying drawings, which form a part of this application, I have shown the preferred form of my invention in several views, as follows:

Figure 1 is a perspective view of a cushion having my improved tufting device applied thereto, a portion of the mattress being broken away to show the arrangement and position of the device on opposite sides of the mattress. Fig. 2 is a detail on a larger scale than Fig. 1, in which the tufting-button is shown as just entering the shank. Fig. 3 is a similar view, the button and shank being shown secured together with a portion of the mattress fabric therebetween. Fig. 4 is an elevation of the button, showing its bifurcated neck. Fig. 5 is a bottom plan view of the shank of the tufting device. Fig. 6 is a top plan view of the shank. Fig. 7 is an elevation of the conical-shaped plug, which also serves as a washer.

In the drawings, A represents a pneumatic cushion, to which are applied my improved tufting devices B, the latter being formed as follows: The button portion has a round convex head *a*, with which is formed a neck, which is divided or split to form four parts *b* of equal size and similar shape. The shank portion is round and corresponds in size to the head of the button and is provided with an extension *c'*, in which there is an opening

h for the straps or tapes *f*, which are used to connect oppositely-placed tufting-buttons. Within the body portion of the shank is a recess or chamber *d*, the mouth of which is of less diameter than the lower portion, the sides being curved and inclined outwardly from the mouth until near the bottom of the recess, where they incline inwardly. The mouth of the recess is circular and of proper size to admit the shank portion *b* of the button and also to receive the conical plug *e*, which is placed loosely in said recess in the position shown in the drawings, so that its point or apex will come between the four prongs *b* of the neck of the button, as clearly shown in Fig. 2, when the latter is forced into the shank. When the upper face of the shank is brought up close to the under side of the fabric, the prongs *b* will have turned under the plug *e* at their ends, while their upper part will be spread, so as to completely fill the space between the sides of the plug and the walls of the recess, thus effecting a complete closure of such opening and at the same time securing the button firmly to its shank.

It will be observed that any strain on the tufting device would have the tendency of forcing the conical plug up against the walls of the recess or against the portions of said prongs between said walls and the plug, so that the latter serves as a washer to prevent the separation of the button from its shank.

It will be apparent that the ends of the prongs may be pointed instead of square, as shown, thus enabling them to be forced through the fabric without making a hole in the latter, and it will be also understood that the upper face of the shank may be counter-sunk to form a seat for the head of the button, these being modifications within the scope of my invention which I wish to include in this application. For securing the ends of the straps *f* I have shown an ordinary rivet or eyelet *g*; but other suitable means may be employed, or a cord or chain may be substituted for the strap.

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

1. In a tufting device for mattresses and the like, a button having a divided neck, a shank having a recessed portion, adapted to

receive the neck of the button, and means for spreading the divided portions of the neck within the recess and then clenching the ends of the neck upon the shank and the button being pressed together.

2. In a tufting device for mattresses and the like, a button having a neck divided into prongs, a shank having a recess therein of greater diameter at the bottom than at the mouth, and means for spreading the prongs and clenching their ends within the recess, substantially as set forth.

3. In a tufting device for mattresses and the like, a button having a neck divided into four prongs, a shank having a recessed portion adapted to receive said prongs, and means separable from the shank adapted to fit said recess and to spread said prongs and then clench same therein, upon the button and shank being pressed together.

4. In a tufting device for mattresses and the like, a button having a neck divided into prongs, a shank having a recess therein adapted to receive said prongs, and a conical plug fitting loosely in said recess and adapted to clench the ends of the prongs upon the button and shank being pressed together.

5. In a tufting device for mattresses and the like, a button having a neck divided into four prongs, a shank having a recess therein adapted to receive said prongs, and a plug fitting said recess and adapted to spread said prongs within the recess and clench their ends under the plug, when the button and the shank are pressed together.

6. In a tufting device for mattresses and

the like, a button having a neck divided into four prongs, a shank having a recess therein adapted to receive said prongs, means within said recess adapted to spread said prongs and then clench same when the button and shank are pressed together, and means for connecting two shanks placed on opposite sides of a mattress, substantially as set forth.

7. In a tufting device for mattresses and the like, a button having a neck divided into four prongs, a shank having a recess therein adapted to receive said prongs, said recess having its lower part of greater diameter than its mouth, and said shank having an opening to receive a connecting strap or cord, a conical plug adapted to fit loosely within the recess in the shank, and adapted to clench the ends of the prongs thereunder when the shank and button are pressed together, for the purpose described.

8. In a tufting device of the character described, a button having a neck divided into four prongs, a shank having a recess therein of greater diameter at its lower part than at its mouth, and having a rounded bottom, and a tapering plug having a rounded bottom adapted to rest loosely within the recess in the shank, in the manner and for the purpose described.

In testimony whereof I have hereunto set my hand, this 24th day of August, 1899, in the presence of two witnesses.

GUSTAVE F. H. LANGER.

Witnesses:

A. E. KLUNDER,
LOUIS CHASE.