W. R. DONEGAN.

MANUFACTURE OF CUSHIONS.

APPLICATION FILED JULY 22, 1908.

1.062,564. Patented May 20, 1913

Fig. 1.

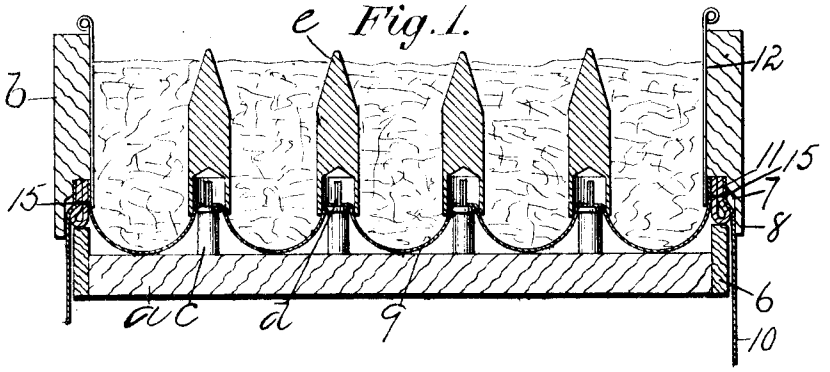


Fig. 2.

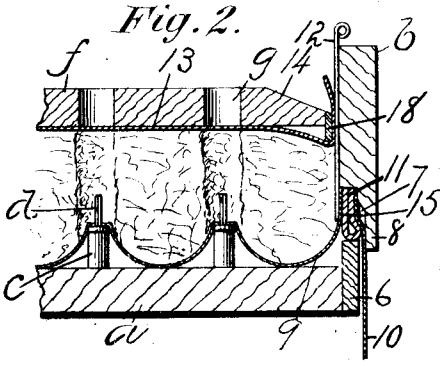


Fig. 3.

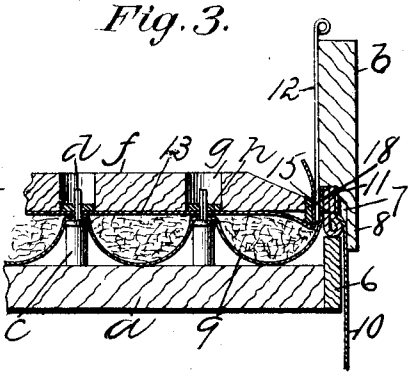


Fig. 4.

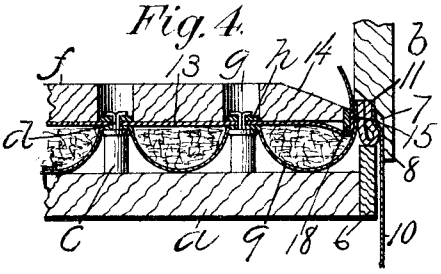


Fig. 5.

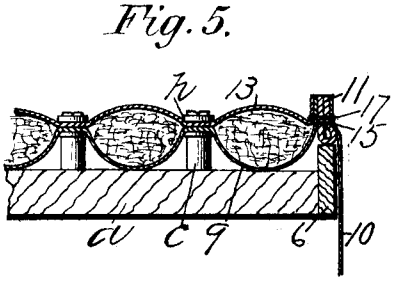
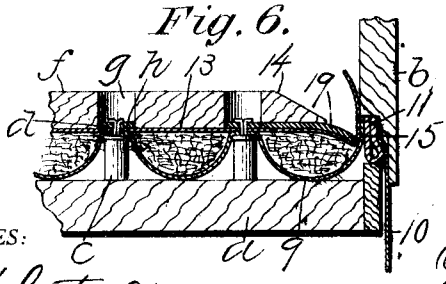


Fig. 6.



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MANUFACTURE OF CUSHIONS.

1,062,564. Specification of Letters Patent. Patented May 20, 1913.

Application filed July 22, 1908. Serial No. 444,757.

To all whom it may concern:

Be it known that I, WILLIAM R. DONEGAN, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented a new Improvement in the Manufacture of Cushions, of which the following is a specification.

My invention relates more especially to the construction of the general class of cushions which are stuffed with hair or similar material, and more especially to the manufacture of cushions known as "tufted cushions, with mattress springs."

The object of my invention is to provide a means and process of constructing such cushions that shall enable a cushion to be quickly made and the seams in which shall be strong and durable.

A form of apparatus in which my invention may be practised is illustrated in the accompanying drawings, in which—

Figure 1 is a view in section through a box embodying my invention and showing a preliminary step in the construction of a cushion. Fig. 2 is a like view of a portion of the box showing a succeeding step in the construction of a cushion. Fig. 3 is a similar view showing a still further step in the construction of the cushion. Fig. 4 is a like view showing a still further step in the process. Fig. 5 is another view showing the last step. Fig. 6 is a detail view showing a modified form of the invention.

Prior to my invention it has been customary to place the top of a cushion, frequently constituted of leather, within the bottom of a box, this top being raised at intervals upon supports bearing clench buttons. Plaiting pins are then inserted over the support and inclosing the clench buttons, hair is then placed in the box, and the plaiting pins are removed. A backing of canvas or like material is then placed upon the hair and a follower placed within the box is pressed downward, forcing the clench buttons through the backing or lining, into spaces provided in the follower. The box being then removed tacks are driven through the top and lining and clenched against a metal plate on the edge of the follower. A facing, with a welt already sewed to it and turned inside out, is then placed in position, and enough tacks driven through the facing, welt, top and lining to hold the latter in position. The facing is then sewed in place by hand after the cushion has been removed from the baseboard. This sewing by hand is a long operation and the expense of the cushion is therefore increased to a considerable extent owing to the length of time required in construction.

In constructing a cushion after the above described means, the top, which is commonly formed of leather, as in the construction of automobile cushions, must be cut of a size much larger than is finally required, the edges being trimmed off in the final operation, thus producing a great waste of leather and further increasing the expense of manufacture.

A device for making a cushion as above described is illustrated in the accompanying drawings, in which the letter *a* denotes the baseboard, *b* the box, *c* the supporting socket pins, *d* the clench buttons, *e* the plaiting pins, and *f* the follower.

In carrying out my invention in addition to the old devices above set out I provide the bottom board *a* with a bottom iron 6 secured about the edge of the board and extending to a considerable distance above it, as plainly shown in the drawings. The lower edge of the box *b* has a recess 7 forming a lip 8 which is located outside of the bottom iron 6.

In the construction of a cushion in accordance with my invention the top 9 of the cushion, commonly constructed of leather, is cut to the exact size finally required. The facing 10 and a welt 11 is secured to the top as by machine sewing as at 15, the attachment of the facing at this preliminary step in the construction enabling the facing to be thus machine sewed in place, which operation is quickly accomplished. The facing is turned inside out, as shown in the drawings, and the whole placed upon the bottom or base *a* with the top resting upon the supporting socket pins *c* as plainly shown in Fig. 1 of the drawings. In this position the outer or top edge of the welt 11 rests upon the upper edge of the bottom iron 6 and is supported thereby, to give the required thickness to the finished cushion. The box *b* is now placed in position, as plainly shown in the drawings, the welt 11 being located to fit in the recess 7 and the facing 10 and top 9 projecting downward along opposite sides of the bottom iron 6. Guides 12 are now placed in position, these guides being pref-

erably constructed of thin sheet metal, a separate guide being supplied to each side of the box. The lower edge of each guide projects downward below the top of the recess 7 and consequently below the joined edge of the facing, welt, and top, which are completely inclosed within the recess. The clench buttons having been inserted through holes in the top, as the latter was placed in position, the plaiting pins *e* are now placed and the hair distributed throughout the box, following which the plaiting pins *e* are removed. The lining 13, of suitable material, as canvas, is now placed upon the hair and the follower placed in position upon the lining and pressure applied to the follower, compressing the hair and forcing the clench buttons *d* through the openings *g* in the follower. Washers *h* are placed upon the clench buttons and the latter bent or clenched over, as shown in Figs. 4 and 5 of the drawings, this holding the lining securely in place and retaining the hair compressed to final form. A follow iron 18 is secured to the edge of the follower *f* extending thereabout and projecting below its under face, and this follow iron serves to hold the backing 13 in proper position and to accurately place it for the subsequent operations. The guides 12 and box *b* are now removed. The lining is secured in position as by means of stitches 17 extending through the facing, welt, top and lining, the beveled edge 14 on the follower allowing access to the parts for the purpose of effecting such stitching.

If desired tacks may be driven through the facing, welt, top and lining against the follow iron 18, strips of leather, acting as clenchers, having been placed on the outer surface of the lining through which the points of the tacks project and against which the points clench. As no great strain is placed upon the lining this method of securing it in place by means of the tacks will be found sufficient to hold the parts in place, although the stitching is preferred, as then there are no heads of tacks to wear the contacting parts, or to leave impressions to show through on the outer face of the cushion. It will be noted that the final stitching is effected while the follower is still in place thus holding the parts securely in position.

I claim—

1. A base having a welt supporting edge projecting upward therefrom, a box having a recess in its edge so formed that the sewed edge of the welt and cover will project above the lining when depressed for final fastening, a follower for packing the material within the box, and a guide to close said recess and prevent contact of the follower with the edges of the welt and cover.

2. A base having a welt supporting edge projecting upward therefrom, a box having a recess so formed with respect to said welt supporting edge as to support the sewed edge of the welt and cover above the lining when depressed, and a follower to depress the stuffed cushion and lining and having means to permit sewing of the lining to the cover while so depressed.

3. A base having a welt supporting edge projecting upward therefrom, a box having a recess so formed with respect to said welt supporting edge as to support the sewed edge of the welt and cover above the lining when depressed, and a follower to depress the stuffed cushion and lining, the edge of the follower being beveled to permit the sewing of the lining to the welt and cover while in its depressed condition.

4. A base having a welt supporting edge projecting upward therefrom, a box, and a follower located within the box to depress the stuffed cushion and lining, the edge of the follower being beveled to permit sewing of the lining to the cover while in its depressed condition.

WILLIAM R. DONEGAN.

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