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R. O. WALDMAN
METHOD OF FORMING PADDING
Filed June 11, 1923

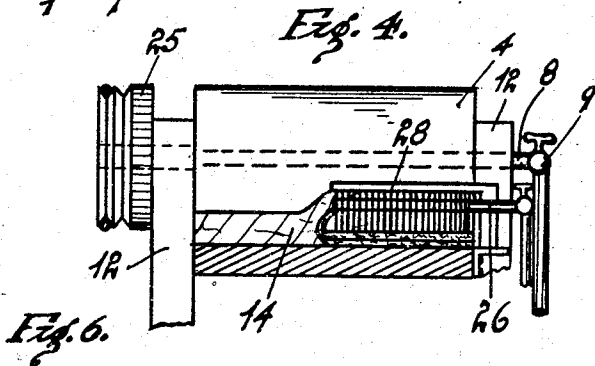
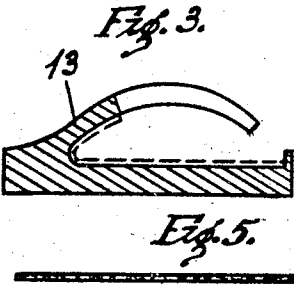
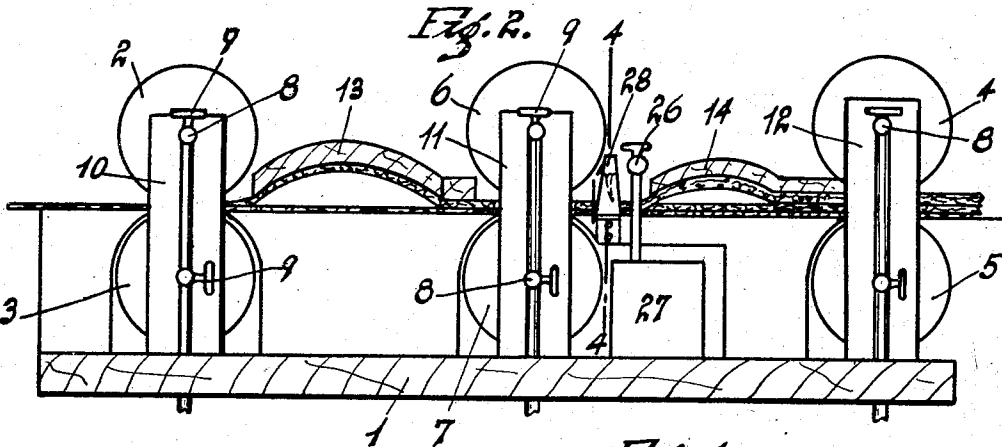
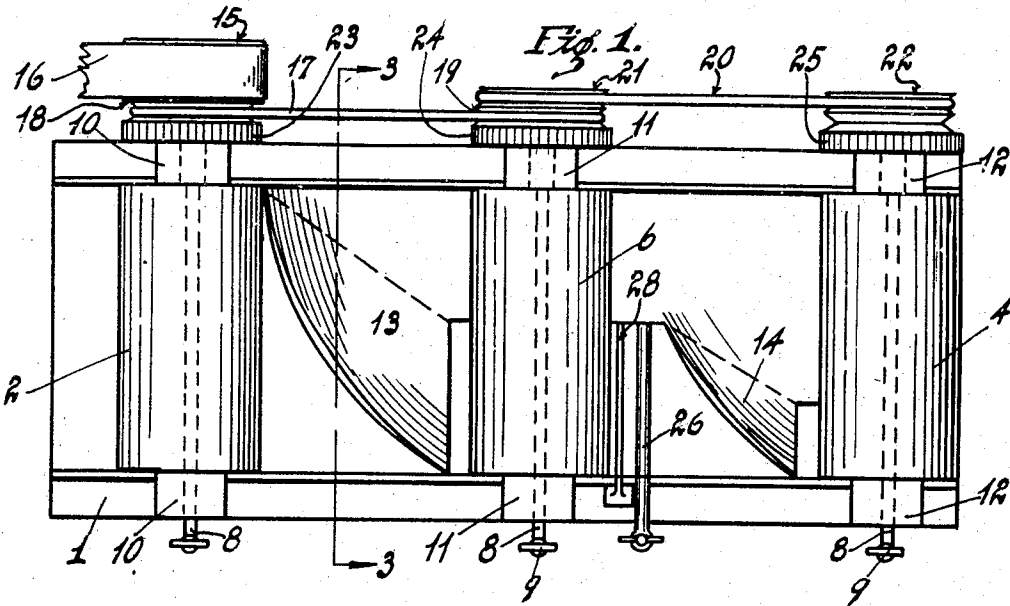


Fig. 6.

Fig. 7.

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METHOD OF FORMING PADDING.

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To all whom it may concern:

Be it known that I, ROBERT O. WALDMAN, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Methods of Forming Padding, of which the following is a specification.

My invention is an improved method of forming a padding, which is particularly applicable in upholstering automobile seat backs, and similar articles.

The object of my invention is to provide a method for forming seat padding which is inexpensive, rapid, and which is efficient in operation.

In my method I place an adhesive substance between the folds of a fibrous packing strip thus binding the fibers around the adhesive closely together, and giving to the strip the necessary tensile strength for its insertion into the pockets formed in the seat back. By this method I detract very little from the natural resiliency of the fiber, since the adhesive layer is very thin, and there is no annoying noise when the padding is compressed. In the annexed drawing in which my invention is illustrated I have shown the preferred form, but it may also be embodied in other forms, and in this application I desire to cover my invention in whatever form it may be embodied.

Fig. 1 is a plan view of a padding machine, embodying my method.

Fig. 2 is a side elevation of the same.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is an end view of the fibrous strip before folding.

Fig. 6 is an end view of the fibrous strip after the first fold.

Fig. 7 is an end view of the strip after the final fold is made.

Referring more particularly to the drawing, the machine comprises a base 1, on the forward end of which are mounted a pair of superimposed intake rollers 2 and 3. A pair of outfeed rollers 4 and 5 are mounted on the rear end of base 1, and rollers 6, 7 are mounted between the rollers 2—3 and 4, 5. These rollers are each journaled upon a perforated pipe 8, the inlets of which are controlled by cocks 9. The pipes 8 which support the rollers 2, 3—6, 7 and 4, 5, are secured in pairs

of standards 10, 11 and 12 respectively. The purpose of the perforated pipes 8 is to admit gas therein, and thereby heat the rollers for a purpose which will be further described.

A forming die 13 is positioned between the rollers 2, 3 and 6, 7, and a second die 14 is positioned between the rollers 6, 7 and 4, 5.

A pulley 15 is formed on the end of the roller 2, and a belt 16 encircles said pulley and a suitable source of rotative power thereby driving my machine. A belt 17 extends over a sheave 18 on the roller 2, and over a sheave 19 on the roller 6. A belt 20 extends over the sheave 21 on the roller 6, and over a sheave 22 on the roller 4. The rollers 2, 3, 6, 7 and 4, 5 are geared together by means of pairs of gears 23, 24 and 25, respectively, thus all of the rollers are caused to rotate by the belt 16.

A spray nozzle 26 is positioned forwardly of the die 14 and slightly above the level of the padding going through the machine. This nozzle extends from a suitable pressure tank 27 in which the adhesive substance is kept under a suitable pressure to force it through the nozzle. The adhesive may be any desired substance such as glue, liquid rubber, pitch, tar, etc.

A comb 28 is positioned forwardly of the nozzle 26 and the teeth thereof engage the surface of the padding, thereby pulling the fibers lengthwise of said padding and thereby increasing its tensile strength.

The padding is fed between the rollers 2, 3 in a strip as shown in Fig. 5, in passing through the die 13 it is folded over upon itself as shown in Fig. 6, and passes into the rollers 6, 7. The comb 28, now engages the upper surface of the padding and pulls the fibers lengthwise. A substantially narrow spray of adhesive from the nozzle 26, plays upon the top of the padding and the die 14 again folds the padding as shown in Fig. 7. Finally the rollers 4, 5 press the padding firmly together and eject it from the machine. The rollers are all heated by the pipes 8 and the padding in passing between them is warmed which assists in the rapid drying of the adhesive, and facilitates the handling of the finished padding.

Thus a narrow strip of reinforcing adhesive is placed within the padding, the outer surface being entirely free of said adhesive.

Having described my invention I claim:

1. The method of forming a seat padding strip which consists in combing a layer of fibers lengthwise in said strip, placing an adhesive upon said combed fibers, and folding said strip upon the adhesive. 5
2. The method of forming a seat padding strip which consists in passing the padding between heated rolls, placing an adhesive on one surface of said padding, and folding said padding upon said adhesive so that the adhesive is within the strip, and none in the outside thereof. 10
3. The method of forming a seat padding which consists in passing the padding between rollers, thence under a comb, placing an adhesive upon said padding on combed area, and folding the padding upon the adhesive. 15
4. The method of forming a seat padding which consists in passing a padding strip between heated rollers, and under a comb, spraying an adhesive upon said strip and folding said strip upon the adhesive, substantially as described. 20

In testimony whereof I affix my signature.

ROBERT O. WALDMAN.