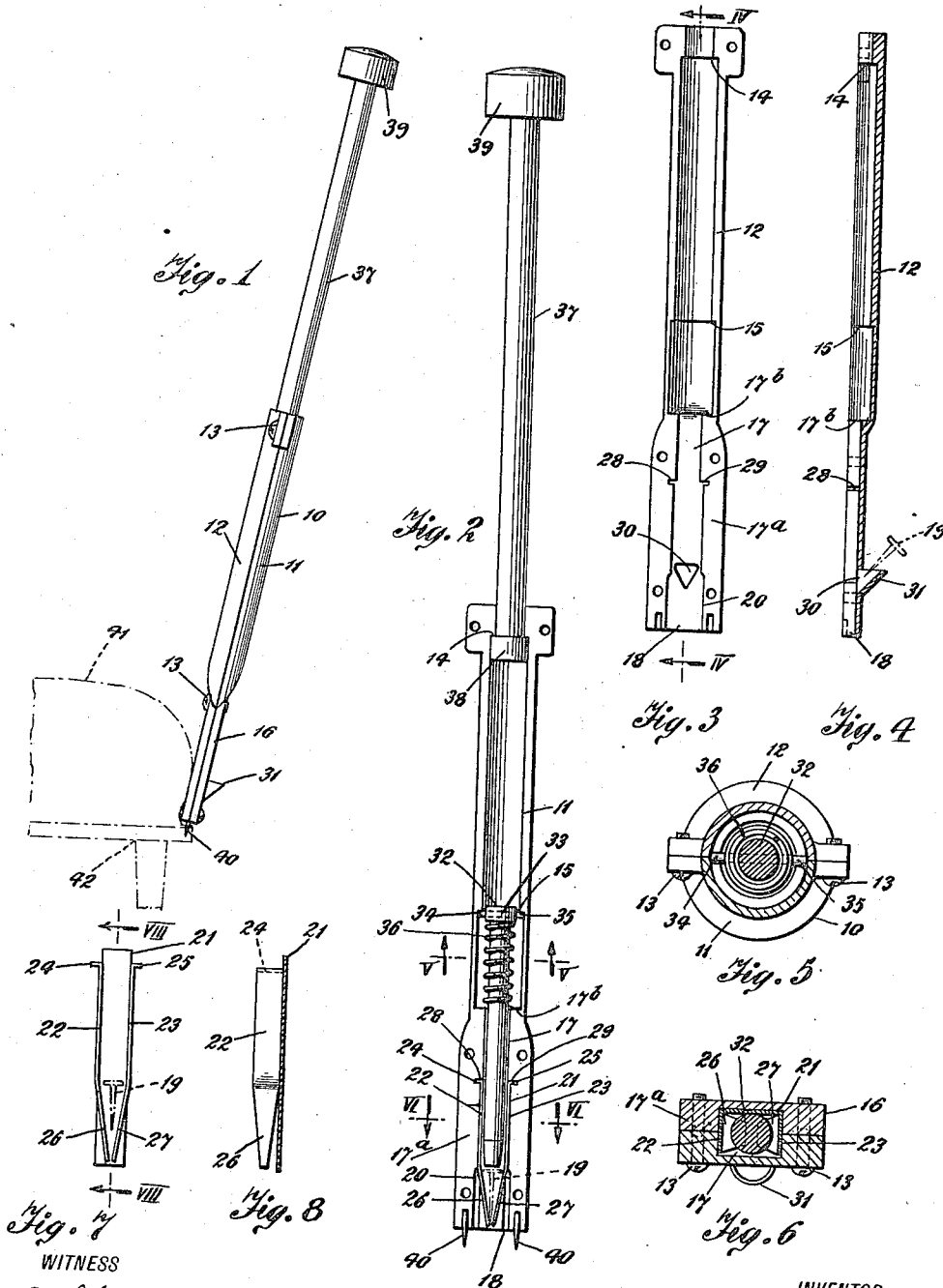


J. POLKOWSKI.
UPHOLSTERING TOOL.
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Patented Apr. 10, 1917.



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UPHOLSTERING-TOOL.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN POLKOWSKI, a citizen of the United States, and a resident of New York, county and State of New York, have invented a certain new and useful Improvement in Upholstering-Tools, of which the following is a full, clear, and exact specification.

This invention relates more particularly to a class of devices adapted to be used in the work of upholstering.

My invention has for its object primarily to provide a device or tool designed to be employed for facilitating the work of upholstering furniture and like articles as well as being adapted for use elsewhere especially in instances where the coverings of upholstering are fashioned so that parts thereof are required to be turned under portions of the filling and then secured by the use of tacks, it being generally very difficult to accomplish the work properly by the use of ordinary tools owing to the inaccessibility of these parts. The invention consists essentially of a tubular casing with one of its open ends serving as an outlet for the passage of a tack, and in the wall of the casing adjacent to the outlet is an inlet for admitting the tack. Interiorly of the casing, and communicating with both the inlet and outlet, is a trough, or receiver for the tack admitted through the inlet, and which is adapted to yieldingly hold the tack for being forced through the outlet. Movable in the casing is a spring actuated plunger having one of its ends disposed in the receiver normally above the tack to serve for driving the tack from the receiver and through the outlet of the casing, and also in the casing is a manually movable hammer element for driving the plunger.

Another object of the invention is to provide on the casing adjacent to its outlet one or a number of grippers for engaging the covering of the upholstery as well as to permit the tool to be guided in the required direction and held until the tack is driven therethrough; and a further object of the invention is to provide a simple and efficient upholstering tool which may be made so as to combine great strength and durability.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, the said

invention being more fully described hereinafter, and then pointed out in the claims at the end of the description.

In the drawing, Figure 1 is a perspective view of one form of tool embodying my invention, showing the manner of its use for securing the edges of the covering of upholstery.

Fig. 2 is an enlarged elevation of the tool with one of the members of its casing removed therefrom.

Fig. 3 is an elevation of the second member of the casing of the tool showing the interior thereof.

Fig. 4 is a sectional view taken on the line IV—IV of Fig. 3.

Fig. 5 is an enlarged sectional view taken on the line V—V of Fig. 2.

Fig. 6 is an enlarged sectional view taken on the line VI—VI of Fig. 2.

Fig. 7 is a front elevation of the receiver used in the tool, and

Fig. 8 is a sectional view taken on the line VIII—VIII of Fig. 7.

The device or tool has a tubular casing 10 of a length so that its upper part may be conveniently held in the hand of a person, and this casing is preferably composed of two similarly formed parts, or members 11 and 12 both of which are substantially semi-circular in cross-section, these members being connected together in any suitable manner, for instance, by bolts, or screws, as 13, passed through threaded openings provided in the upper and lower parts of the members of the casing. Projecting interiorly of the casing 10 adjacent to its top is an annular shoulder, or stop 14 formed by reducing the inner circumference of the upper parts of the walls of the members of the casing, and projecting interiorly of the casing approximately midway thereof is another annular shoulder, or stop 15 provided by enlarging parts of the inner circumference of the members of the casing. The lower portion of the tubular casing 10, as viewed transversely, is substantially rectangular in shape, as at 16, formed by angularly shaping the lower ends of the members of the casing accordingly. The passage through the rectangular end portion of the tubular casing is reduced in size as well as being substantially square in shape, as at 17, and this square-shaped part of the passage may be provided by enlarging the thickness of the walls of the rectangular portion 16

interiorly thereof, as at 17^a, or by providing in the angular ends of each member of the casing a strip, or plate, the upper end of this enlarged part projecting interiorly of the casing to serve as a stop 17^b. The lower extremity of the square part 17 of the passage of the casing serves as an outlet 18 for permitting a tack, as 19, to be freely driven therethrough, and opposed parts of the walls of this square part of the passage adjacent to the outlet 18 is cut-out, or recessed, to form an enlarged portion, as 20, of this square part.

In the square part 17 of the passage of the casing 10 is mounted a trough, or receiver 21 for allowing the tack to be yieldingly retained therein prior to being driven through the outlet 18, as will be hereinafter more fully explained. The receiver 21 is preferably formed from a substantially rectangular sheet of spring metal having in the central part of one of its ends spaced slits disposed toward the other end of the plate, and the lengthwise edges of the plate on alinement with these slits are bent right-angulantly from the plate to provide two spaced flanges, as 22 and 23, thus forming a receiver substantially U-shaped in cross section having one side thereof entirely open throughout its entire length. The upper ends of the flanges 22 and 23 are separated from the plate proper, and these ends are struck outwardly in opposite lateral directions to provide ears 24 and 25, while the lower free ends of the flanges are bent toward the median line of the plate in substantially a V-shape to provide two yielding fingers 26 and 27. The receiver 21 is disposed in the square part 17 of the passage of the casing so that the yielding fingers 26 and 27 will freely move in the enlarged portion 20 of the passage when expanded and contracted and so that the ears 24 and 25 will be seated in recesses 28 and 29 provided in the enlarged part 17^a of the wall of the casing for holding the receiver against movement in the casing. Through the rectangular end portion 16 of the casing 10 is an opening, or inlet 30 leading into the interior of the receiver through the space between the flanges 22 and 23 of the receiver 21, and projecting from the exterior of the casing at the inlet 30 is a feed cup 31 into which the tack is placed for passage through the inlet into the receiver 21 so as to be forced through the outlet 18 of the tubular casing.

Movable in the casing 10 is a cushioned plunger 32 which is preferably in the form of a bolt with a head 33 having two laterally projecting lugs 34 and 35. The plunger 17 is preferably tapered at its lower end. The plunger 32 is of a length so that its tapered lower end is disposed in the receiver 21 slightly above the inlet 30 and so that the lugs 34 and 35 of the head 33 will nor-

mally abut against the stop 15 interiorly of the casing. Encircling the plunger 32 is a spiral spring 36 having one of its ends contacting with the head of the plunger while the other end of the spring rests against the stop 17^b of the casing, and this spring normally serves to force the plunger upwardly in the casing and outwardly of the upper end of the receiver for permitting the plunger to be yieldingly forced downwardly in the casing to drive the tack in the receiver 21 through the outlet 18 of the casing.

In order to cause the plunger 32 to be operated in the casing 10 above the plunger is a hammer element, as 37, adapted to be manually moved downwardly and upwardly in the casing. The hammer element is preferably in the form of a bar the lower end of which may be enlarged to provide a head 38, while on the upper end of the bar may also be a knob 39 so as to be grasped by a person as well as adding sufficient weight to the hammer element, and this hammer element is of a length to extend some distance beyond the upper end of the casing when the head 38 rests upon the head of the plunger 32.

Serving to permit parts of the covering of upholstery and the like to be engaged by the tool to be guided in a suitable direction, I provide one, or a number of grippers, as 40. The grippers 40 are preferably in the forms of two spaced sharpened pins provided on the free end of the rectangular part of the casing 10 so that the pointed ends will extend some distance downwardly from the casing adjacent to opposite parts of the wall of the outlet 18 for being forced into the covering when the tool is accordingly directed.

To use the tool for applying a covering, as 41, on the upholstered top of an article in furniture or the like, as shown at 42 Fig. 1, the tool is guided for causing the grippers, or pins 40 to puncture a suitable part of for instance the edge of the covering, and the casing 10 with the hammer 37 is moved so that the edge of the covering will be inturnd upon the top, or upholstered part of the article. A tack is then passed into the feed cup 31 of the casing, as shown in Fig. 4, from which it will pass through the inlet 30 into the receiver 21, the tack being so positioned that its pointed end will be disposed between the spring fingers 26 and 27 of the receiver. The head of the tack will thereby be in the path of movement of the plunger 32, and when the hammer element 37 is forced downwardly in the casing 10 against the head of the plunger it will be likewise directed to drive the tack from between the spring fingers of the receiver and through the outlet 18 of the casing, through the covering, and into the top of the upholstered article for securing the covering thereto. As the upholstery of many articles

especially in furniture are fashioned with inturned edges these parts are difficult to secure by the use of ordinary tools, and the employment of this device in the manner described will greatly facilitate accomplishing the work.

In the foregoing description, I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto as I am aware that modifications may be made therein without departing from the principle, or sacrificing any of the advantages of this invention, therefore I reserve to myself the right to make such changes as fairly fall within the scope thereof.

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

1. In an upholstering tool, a casing having an inlet and an outlet for tacks, a receiver of U-shaped cross-section seated within said casing with its open side adjacent the tack inlet, means for yieldingly holding a tack within said receiver, and means for ejecting said tack from said receiver and out of the casing outlet.

2. In an upholstering tool, a casing having an inlet and an outlet for tacks, a receiver of U-shaped cross-section seated within said casing with its open side adjacent the tack inlet, said receiver being provided with two oppositely disposed resilient fingers adapted to yieldingly hold a tack therein, and means for ejecting said tack from said receiver and out of the casing outlet.

3. In an upholstering tool, a casing having an inlet and an outlet for tacks, a receiver of U-shaped cross-section seated within said casing with its open side adjacent the tack inlet, said receiver having the lower portion of each side wall cut away from the rear wall and bent toward each other thereby providing two oppositely disposed resilient fingers adapted to yieldingly hold a tack within said receiver, and means for ejecting said tack from said receiver and out of the casing outlet.

This specification signed and witnessed this 15th day of January A. D. 1916.

JOHN POLKOWSKI.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."