No. 742,284. PATENTED OCT. 27, 1903.

W. G. BROWNE.

TACK CLAW.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.

Fig. 1.

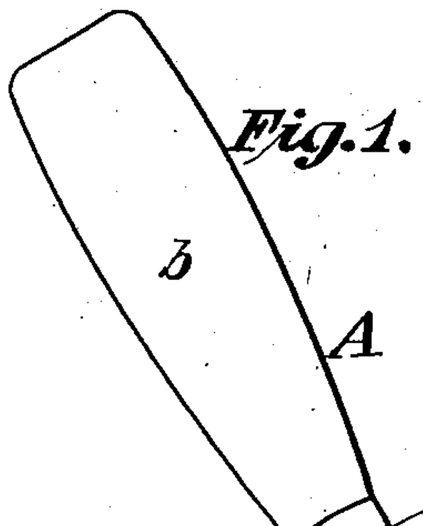


Fig. 2.

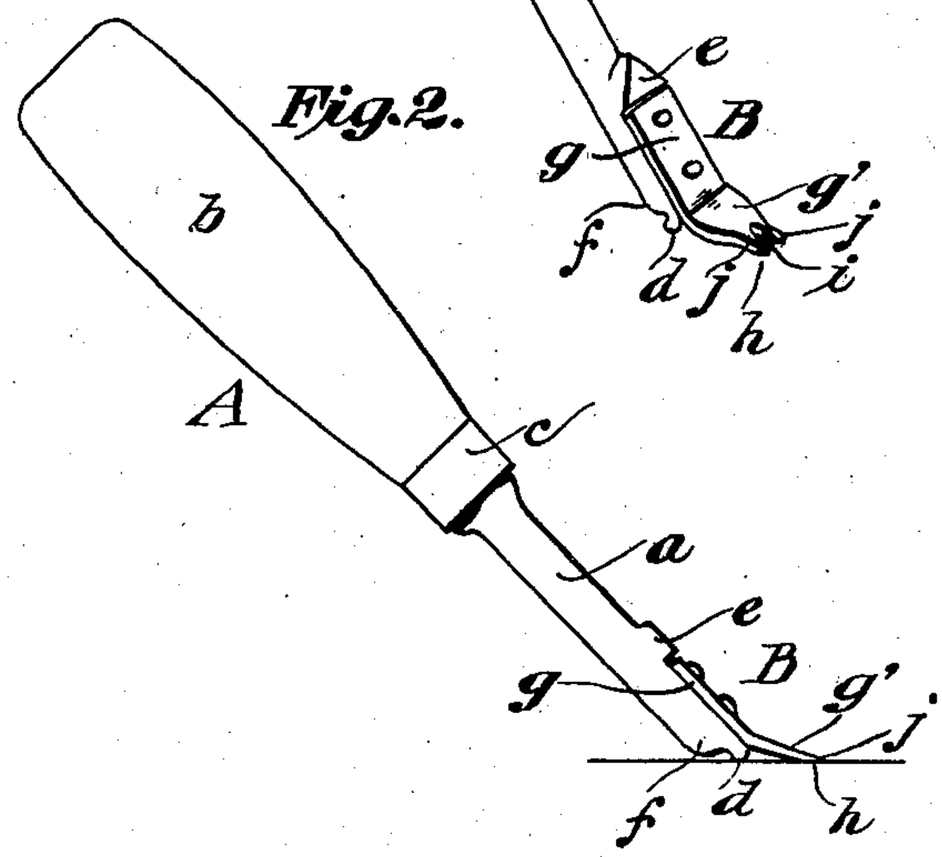


Fig. 3.

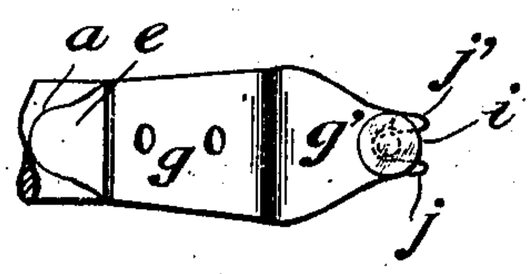


Fig. 4.

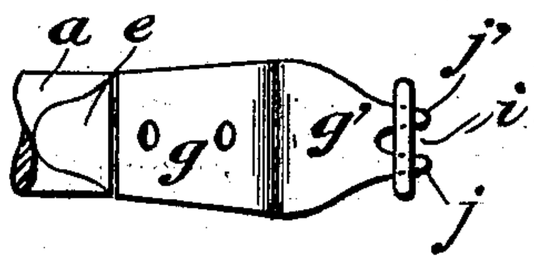
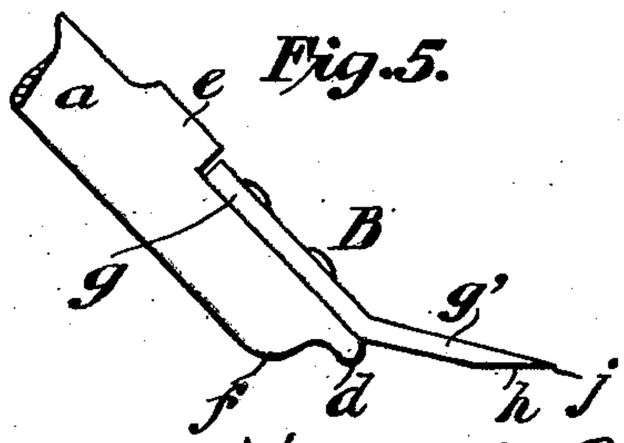


Fig. 5.



Witnesses
E. Mitchell,
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By his Attorney
N. L. Frothingham

No. 742,284. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM G. BROWNE, OF KINGSTON, NEW YORK, ASSIGNOR TO THE W. G. BROWNE MANUFACTURING COMPANY, OF KINGSTON, NEW YORK, A CORPORATION OF NEW YORK.

TACK-CLAW.

SPECIFICATION forming part of Letters Patent No. 742,284, dated October 27, 1903.

Application filed March 4, 1903. Serial No. 146,064. (No model)

To all whom it may concern:

Be it known that I, WILLIAM G. BROWNE, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Tack-Claws, of which the following is a specification, reference being had therein to the accompanying drawings, which form a part thereof.

My invention relates to tack-claws especially adapted for drawing carpet and matting tacks.

The object of my invention is to provide a tack-claw which is capable of drawing both the ordinary headed carpet-tack and the double-pointed matting-tack, which when first applied to a tack of either description will present no sharp edges downwardly to cut into the carpet or matting, which when the lever-handle is forced downward will act to thrust the claw proper slightly forward in a manner to firmly engage the tack and prevent the bending thereof, and which will be comparatively inexpensive to manufacture and durable and efficient in use.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a perspective view of a tack-claw embodying my invention. Fig. 2 is a side elevation thereof. Fig. 3 is an enlarged view of the lower portion thereof, illustrating the application of the claw to the ordinary headed carpet-tack. Fig. 4 is a similar view showing the application of the claw to the ordinary double-pointed matting-tack; and Fig. 5 is an enlarged side elevation of the said lower portion, illustrating the mode of operation of the claw which prevents the cutting into the carpet or matting.

Like letters refer to like parts throughout the several views.

My tack-claw comprises, broadly, a lever-handle A and a claw-plate B, secured to the lower end of said handle A—a general arrangement well known in this art—the invention residing in that particular construction and arrangement of these elements which imparts to the device its adaptability for and capability of performing the functions hereinafter set forth.

The handle A consists of a metal shank *a*, a wooden grip *b*, and a ferrule *c*, reinforcing the end of the latter. The shank *a* at its lower end is provided with a downwardly-projected fulcrum *d*, the bearing-surface of which extends transversely of the said shank. On the upper face of said shank I form an abutment or shoulder *e*, the portion of the shank below the said shoulder presenting a plane surface to facilitate the attachment of the claw-plate. Directly above the said fulcrum *d* I provide a rolling fulcrum *f*, the arc of which is of a radius to contact with the floor and vary the leverage slightly when the tack is partly withdrawn, and thus thrust the claw slightly forward toward the end of this operation and also avoid the bending of the tack.

Mounted on the shank *a* below the shoulder *e* is an angular plate comprising the sides *g* and *g'*, extending at an obtuse angle to each other of a degree to cause the lower edge of the side *g'* to terminate on substantially the same plane as the bearing-surface of the fulcrum *d*. This plate is of hardened material, as steel, to give it the required rigidity and strength. The lower face of the side *g'* is beveled away, as at *h*, to present downwardly a flat horizontal surface when it and the fulcrum *d* are simultaneously pressed against a flooring or covering thereof, and to form a thin edge on the plate to facilitate its insertion beneath the head of a tack. The outer end of the side *g'* is reduced laterally in width and the reduced portion is slotted centrally, a slot *i* of gradually-decreased width preferably being made to form the claws *j j'*. The outer sides of these claws are parallel, or substantially so, to a point approximately conterminous with the slot *i*, and above this point the width of the claw-plate is gradually increased, so as to impart thereto the requisite weight and strength to withstand the strain occurring at a point adjacent to the fulcrum-points *d* and *f*.

The parts of the tack-claw are assembled in the following manner, the various elements having been finished separately: The

shank *a* is first affixed to the grip *b*, or, if desired, these parts may be made entirely of metal and in a single casting. The claw-plate *b* is then attached to the shank *a*, preferably by rivets, the shoulder *e* serving as a guide to regulate the adjustment of this plate, and thereafter by preventing movement thereof, either vertical or rotary, to prevent a shearing strain on the bolts and an instability while in use.

The operation of the tack-claw is substantially the same whether it is used in drawing a headed tack, as shown in Fig. 3, or a double-pointed tack, as shown in Fig. 4. In either case the fulcrum *d* and claws *j j'* are simultaneously brought to bear upon the flooring or the covering therefor close to the head or cross-head of the tack, and the thin edge of the said claws is inserted beneath the same and forced thereunder, the slight wedging effect produced by the pitch of inclination of the side *g'* serving merely to start the tack sufficiently to insure a firm grip thereon by the claws. The lever-handle A is then pressed downward, oscillating upon the fulcrum *d*. The initial movement of the claws *j j'* is insufficiently diverted from the vertical to bend the tack, and as the lever-handle descends the rolling fulcrum *f* contacts with the floor, and subsequent movement is with this as a center. This varies the leverage to an extent to ease up the latter portion of the operation and also has a tendency to thrust the claw forward sufficiently to compensate for the slight rotary movement of the said claws. Hence the movement of the claws will be substantially vertical throughout the operation. When the claw is used to draw the ordinary headed tack, the point passes into the slot *i* and the claws *j j'* engage the head of the tack. When the claw is used to draw a double-pointed tack, both claws *j j'* pass directly beneath the cross-head which they engage. In either case the mode of operation of the claw will be seen to be substantially the same.

It will be observed that by reason of the horizontal surface presented by the beveled portion *h* and the horizontal alinement of this surface with the bearing-face of the fulcrum *d* the depression of the claws to admit of the insertion thereof beneath the tack does not result in the presentation downwardly of a sharp edge against the flooring, carpet, or matting and that therefore the tack-claw cannot cut these in withdrawing tacks therefrom. It will also be observed that the adaptability of the claw to use for both headed and double-pointed tacks, as above described, is accomplished without rendering the device cumbersome or sacrificing its appearance or strength, sufficient metal being employed at those points where the greatest strains occur to withstand such.

It is not my intention to limit the invention to the precise details of construction heretofore described, as it is apparent that these details may be varied without departing from the spirit and scope of the invention.

Having described the invention, what I claim as new, and desire to have protected by Letters Patent, is—

1. As a new article of manufacture, a tack-claw comprising a lever-handle having a downwardly-projected fulcrum at its lower end and a claw-plate consisting of an angular plate the sides of which are respectively secured to said handle and projected downwardly and forwardly, said last-mentioned side being laterally reduced toward its outer end and slotted centrally of this reduced portion and beveled on the under side thereof on substantially the same plane as the bearing-face of said fulcrum.

2. As a new article of manufacture, a tack-claw comprising a lever-handle having a downwardly-projected fulcrum at its lower end and a rolling fulcrum above said first-mentioned fulcrum, and a claw-plate consisting of an angular plate the sides of which respectively are secured to said lever-handle and projected downwardly and forwardly, said last-mentioned side being laterally reduced toward its outer end and slotted centrally of this reduced portion and beveled on the under side thereof on substantially the same plane as the bearing-face of said fulcrum.

3. As a new article of manufacture, a tack-claw comprising a lever-handle having a transverse shoulder near its lower end, a downwardly-projected fulcrum at its lower end, a rolling fulcrum above said first-mentioned fulcrum, and a claw-plate consisting of an angular plate, the sides of which respectively are secured to said lever-handle adjacent to said shoulder, and projected downwardly and forwardly, said last-mentioned side being laterally reduced toward its outer end and slotted centrally of this reduced portion and beveled on the under side thereof on substantially the same plane as the bearing-face of said first-mentioned fulcrum.

In witness whereof I have hereunto affixed my signature, this 25th day of February, 1903, in the presence of two witnesses.

WILLIAM G. BROWNE.

Witnesses:
V. B. VAN WAGONEN,
GEORGICE SNYDER.