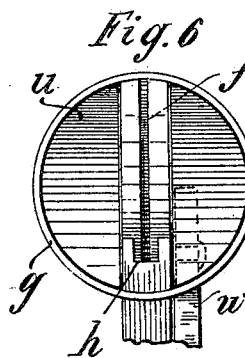
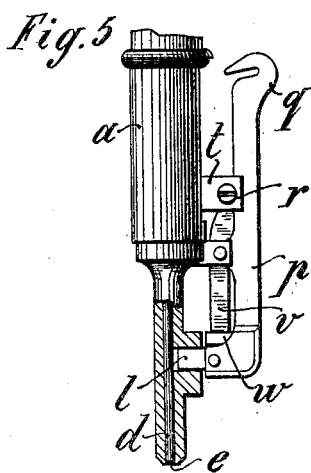
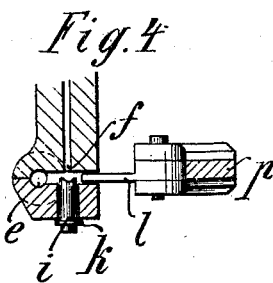
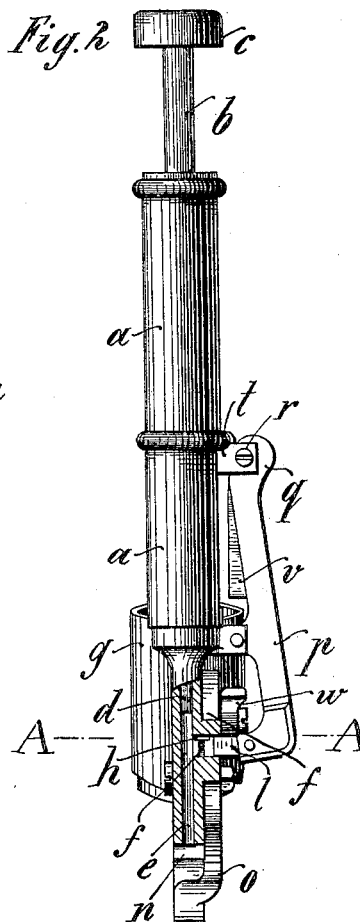
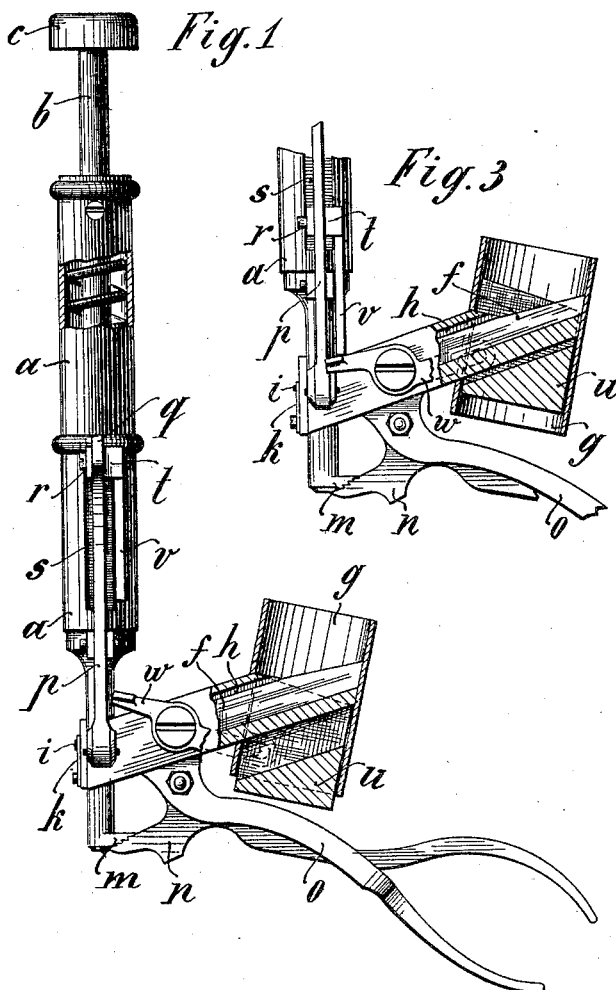


R. EDER.
TACKER.

(Application filed Feb. 23, 1901.)

(No Model.)



Witnesses:
Ellas L. Gabe
Otto Rummel

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UNITED STATES PATENT OFFICE.

REINHOLD EDER, OF BERLIN, GERMANY, ASSIGNOR TO ERNST SCHUSTER, OF
SAME PLACE.

TACKER.

SPECIFICATION forming part of Letters Patent No. 676,879, dated June 25, 1901.

Application filed February 23, 1901. Serial No. 48,427. (No model.)

To all whom it may concern:

Be it known that I, REINHOLD EDER, manufacturer, a citizen of the Kingdom of Prussia, and a resident of Greipwalderstrasse 13, Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Tackers, of which the following is a specification.

The present invention relates to a device for fastening the upper leather to the last. The device differs from those hitherto used for the same purpose by a particularly convenient connection between the nailing mechanism and the nippers which hold the upper leather against the last and by the manner in which the nails are placed under the punch which drives them into the sole.

In the annexed drawings, Figure 1 represents a side view of the device in partial section; Fig. 2, a front view of same, partially in longitudinal section. Fig. 3 represents a longitudinal section of the mechanism for placing the nails in position, and Fig. 4 represents a plan view of a cross-section on the line A A of Fig. 2. Fig. 5 is a side view, in section, of the mechanism shown in Figs. 3 and 4. Fig. 6 is a top view of the box containing the tacks.

In the cylinder *a* is arranged a movable stamp or punch *b*, which is normally pressed outward by a helical spring inside the said cylinder. By striking or depressing the disk *c* at the upper end of the said punch *b* the latter is driven farther into the cylinder *a* and its extension *d* passes downward into the tube *e* at the bottom of the cylinder *a*. From the side a tube or conduit *f* leads into the said tube *e* and nails contained in the box *g* enter the wider slot-like upper part *h* of the conduit *f* and slide one behind the other down to the lower end of the latter. On arriving there the foremost nail is stopped by a pin *i*, which has a crescent-shaped groove at its end. The said pin *i* is pressed inward by a spring *k*. From the position in which it is thus held the nail is displaced and forced into the tube *e* by a slide *l*, which passes between the pin *i* and the end of the conduit *f*. The nail is thus passed under the extension *d* of the punch *b*, which in descending forces it out of the tube *e* into the last.

The bottom *m* of one side of the tube *e* is so shaped as to form one cheek of a pair of nippers *o*, opposed to which cheek is the other cheek *n* of the said nippers, fastened to the conduit *f*. The said nippers may be operated by hand or by the foot if suitable means are provided.

The slide *l* referred to hereinbefore is represented in Figs. 2 and 4 in its resting position and in Fig. 5 in its working position and is operated by means of a double-armed lever *p*, pivoted to it. The free end of the said lever *p* forms a hook *q* with a slanting opening. The said hook normally engages a pin *r* on a fork *t*, fastened to the punch *b* and projecting through a slot *s* in the cylinder *a*. On the punch *b* and with it the fork *t* being moved downward in the cylinder *a* the pin *r*, sliding off the inclined surface of the hook *q*, forces the latter outward, and thus moves the other arm of the lever *p* toward the tube *e*, so that the slide *l* is moved into the latter. When the helical spring inside the cylinder *a* forces the punch *b* upward again, the pin *r* engages the upper inclined surface of the hook *q*, so that the hook is moved inward and the slide *l* is withdrawn from the tube *e*.

For the purpose of automatically placing the nails contained in the box *g* into the slide-way or conduit *f* the space left free in the box by the conduit is occupied by a block or piston *u*, which is cut away in the opposite direction to the conduit *f* and also slantingly toward the latter. Upon the said piston or block *u* rest the nails. Each time the punch *b* descends an arm *v*, fixed to the fork *t*, already referred to, strikes a double-armed lever *w*, pivoted to the conduit *f*. The said lever *w* is pivotally connected with the block *u*, a slot being provided in the box *g*. On the punch descending the block *u* is therefore jerked upward and at least one of the nails lying upon it falls into the conduit *f*.

The manner of using the implement described is as follows: The upper-leather is pressed to the last by means of the nippers *m* and *n*. The punch *b* is then forced downward by a blow on the plate *c*, and the fork *t* on the said punch moves the slide *l* inward by means of the lever *p*, and a nail is thus placed in the tube *e*. Into the former posi-

tion of the said nail in the conduit *f* another nail is caused to move by the block *u*, which is jerked upward by the arm *v* of the punch striking the lever *w*. After these actions
5 have taken place the extension *d* of the punch *a* reaches the end of the tube *e*, out of which it forces the nail into the sole of the boot, shoe, or the like which is being treated.

Having now particularly described and as-
10 certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In combination, the cylinder having a contracted nail-driving passage at its lower end,
15 a lateral extension from the contracted lower end of the cylinder having a nail-passage, a hopper at the outer end of said extension,

nail-agitating means within the hopper, a driving member reciprocating in said cylinder, a lever pivoted upon said extension having one end engaging the nail-agitating means and the other end adapted to be operated by the driving member, a handle extending downward from said transverse extension, and a lever pivoted to said handle
25 and having a gripping-jaw cooperating with the lower end of the cylinder, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

REINHOLD EDER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.