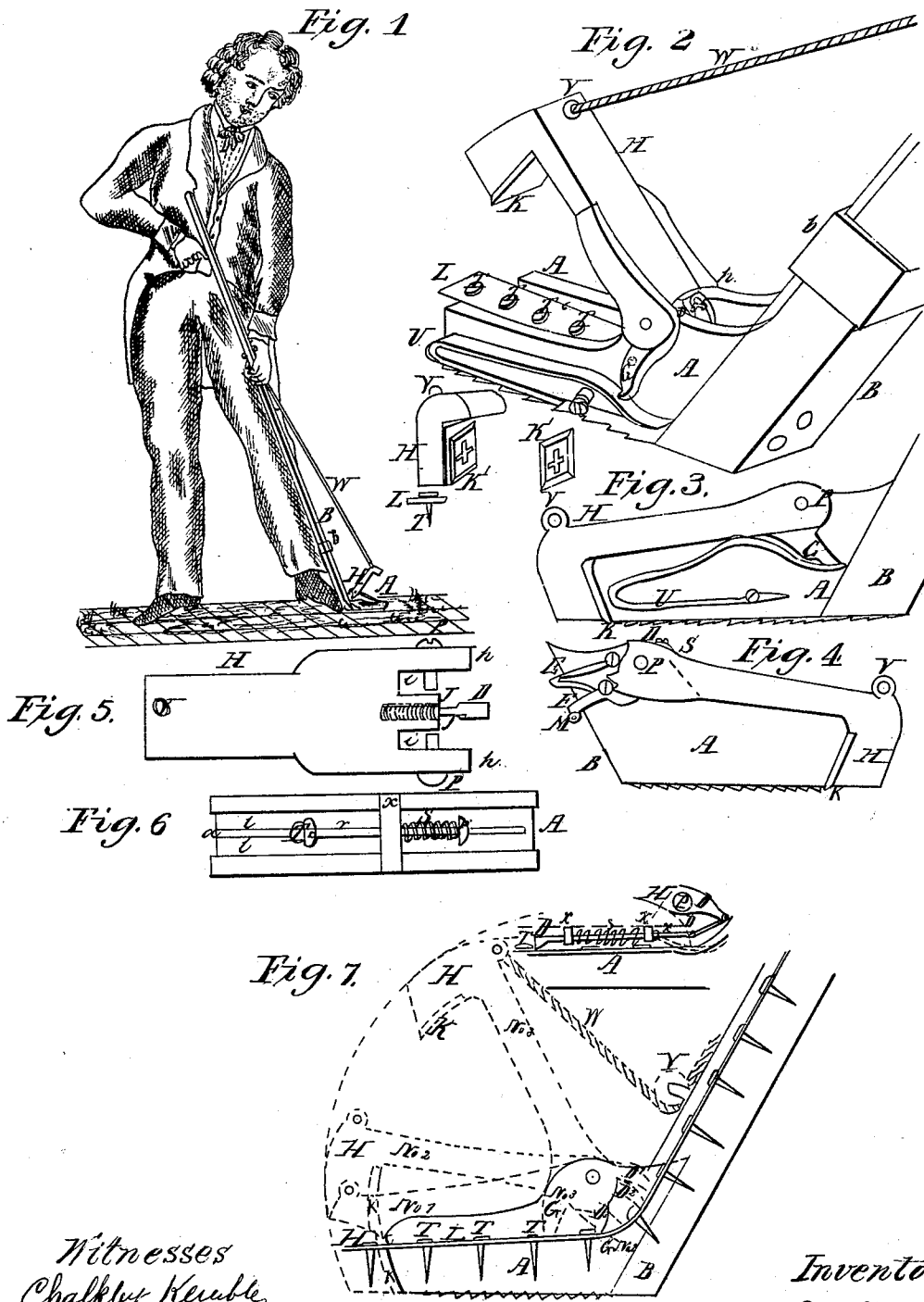


F. H. Stauffer.
Carpet Stretcher.

No. 102,331.

Patented Apr. 26, 1870.



Witnesses
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FRANCIS H. STAUFFER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 102,331, dated April 26, 1870.

IMPROVED CARPET-TACKING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

I, FRANCIS H. STAUFFER, of the city of Philadelphia, in the State of Pennsylvania, have invented certain Improvements in Carpet-Tacking Machines or Implements, of which the following is a specification.

The object of my invention is to produce a convenient mode of stretching and tacking down carpets, with tacks provided with leather, or its equivalent, between the tack-head and carpet, said tacks being inserted at regular intervals into a strip of leather or tape of a proper material, previously punched and provided by a separate device for the purpose, in such a manner that by raising the hammer, which hammer is also provided with a cutting-blade, and forced down by a powerful spring, will feed the strip forward with its tack in place ready to be cut off by the descending hammer, and the tack driven home by each successive blow.

Reference to the drawings making a part thereof, in which—

Figure 1 illustrates the application of my invention.

Figure 2 is a perspective view, full size.

Figures 3 and 4, side views.

Figure 5, top view of the hammer.

Figure 6, top view of the shoe.

Figure 7 illustrates the action of the hammer and its parts in three positions, together with the strip of leather with its tacks, and two of the modes for feeding the same forward by the heel-claw of the hammer, or jointed rod, with a claw or propelling end sliding over the head on the back motion of the heel, and dropping behind the head by its own gravity, so as to feed out the tack next the mouth of the shoe.

The shoe A and hammer H may be cast of malleable iron, and the bearings or the whole hardened equal to steel.

This shoe has a longitudinal channel, *l*, for a strip of leather.

Said channel is curved in the heel, adapted to the radius of the feeding-claw D, and continued up the wooden handle B for four or five feet.

There is also a deep slot, *a*, fig. 6, cut into the middle of said channel for the tack T, that penetrates through the leather strip L, to pass freely forward.

The hammer H has a cutting-blade, K, attached to its inner face next the shoe.

This blade or knife K may be somewhat narrower on the sides than the width of the hammer-head, of a square or equal-sided flat plate, with a cutting-edge on the four sides, provided with cross-slots K' for a binding-screw to come flush (in the beveled or countersunk slots) with the face next the shoe.

This blade would be both adjustable and reversible equal to four separate blades, with only a single cutting-edge.

This hammer is held by screw-bolts P on the raised sides of the heel portion of the shoe, having a cam-tooth, G, resting on a strong spring, U, on one or both sides, if necessary.

Centrally on the hind end of the hammer is a projection, J, to operate the feed-claw D, upon raising the hammer.

This feed-claw D is shown partly in fig. 2, a modification of which is shown by fig. 5.

The claw has a stem and spiral spring inserted into a tube formed for it, like an ordinary spring catch, so as to yield enough to carry the rounded end backward over the tack-head, and bring the claw or catch behind the head of the tack to catch and hold it when the hammer is so far raised as shown by position No. 2, fig. 7, so that, when the hammer is in position No. 3, the catch D² will be at D³, having pushed the tack and strip forward, where the knife cuts it off, and the hammer drives the tack through the carpet into the floor, with a square of leather under the head.

Fig. 4 shows a spring and trigger attachment for setting the hammer, similar to an old-fashioned flint-lock. This might be deemed an improvement, but for all practical purposes can be dispensed with, by simply inserting a stop to arrest the hammer when raised the proper height, or by adjusting the cord W, so that a knot formed in it will arrest the pull on the double or looped end, which ends may pass through an eye on each side of the handle.

The single cord may come direct from the ring V, on the head of the hammer, or passed around a pulley, Y, fig. 7.

Fig. 6 shows another mode of feed attachment.

Various devices used on machinery can be applied to push the leather and tack forward by raising the hammer. The springs also can be modified.

I am aware that an excellent tack-driver is in use, in which the tack is fed by hand down a tube, and seized, and driven home effectually by a hammer, spiral spring, cord, and pulley, but it is expensive, and the tack cannot be used provided with leather, so that I disclaim such an arrangement.

I am not aware, however, of any arrangement where a flat strip of leather provided with the tacks, either in a coil, or extending upward in the handle, is simultaneously fed forward, cut, and driven into the floor by means of a shoe and hammer provided with a cutter, so that by simply pulling on the cord and relaxing the pull, to allow the full action of the spring to force the hammer down, is, as I deem it, in itself a new arrangement of parts, independent of the specific mode of employing or constructing the spring or feeding device to actuate the same.

Fig. 7 illustrates one mode of operation that works well, and accomplishes the object in view.

Numerous other plans have suggested themselves

to me. I therefore do not desire to confine myself to a specifically defined arrangement in the minor parts.

The essential arrangement is the shoe, knife, hammer, and continuous strip of leather provided with tacks, and the feeding-device, when connected with the raising of the hammer, which arrangement I believe to be novel and useful.

I claim—

1. The arrangement of a tack-hammer, H, when provided with a cutter, K, in combination with a channeled and slotted shoe, A, spring or springs U, or

their equivalent, with a handle, B, in the manner shown and for the purpose specified.

2. In combination with the arrangement of the shoe and hammer, the feeding device, when so constructed that, by raising the hammer, a strip of leather, or its equivalent, provided with tacks at regular intervals, will be propelled forward in the manner shown, for the purpose set forth.

Witnesses:

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