

J. McWILLIAMS.

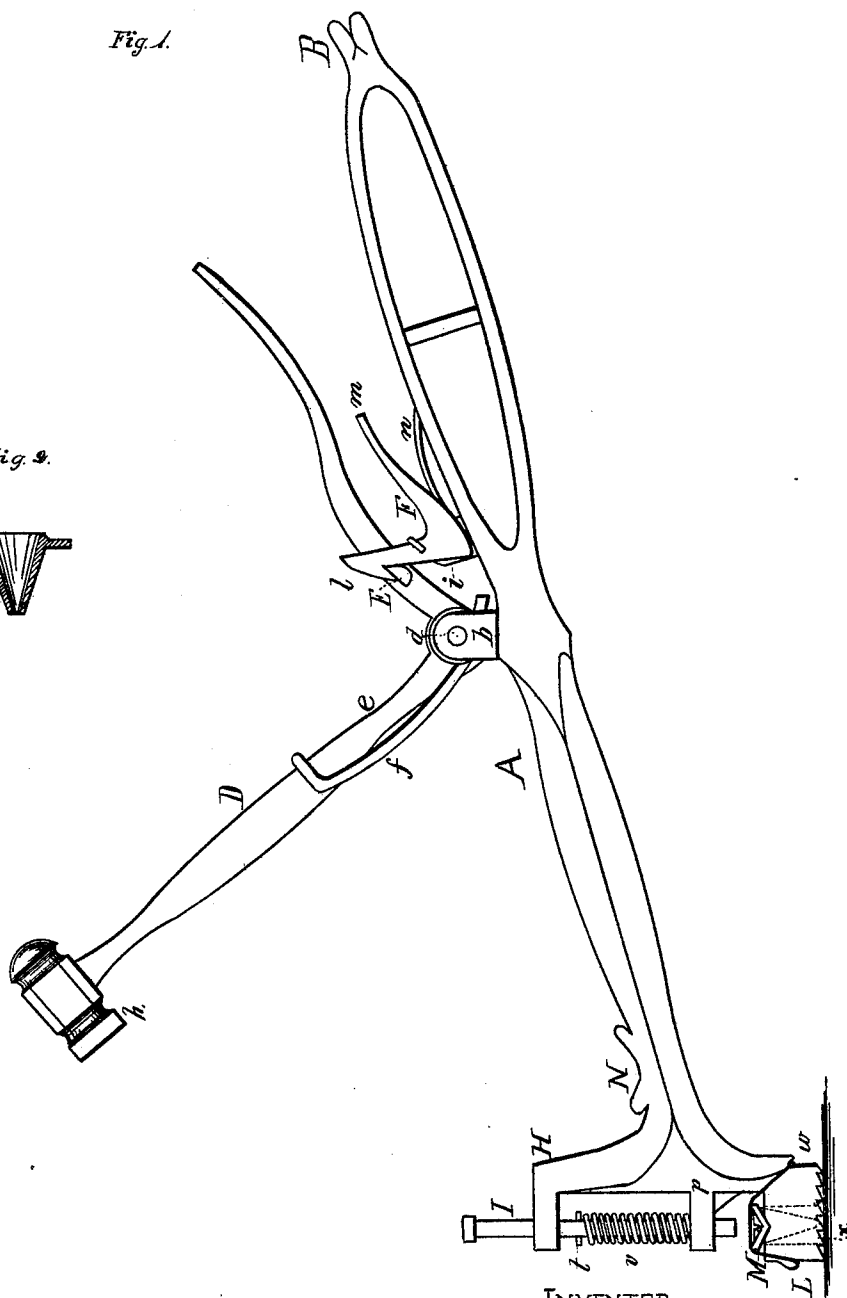
COMBINED TACK-DRIVER AND CARPET-STRETCHER.

No. 176,333.

Patented April 18, 1876

Fig. 1.

Fig. 2.



WITNESSES -
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JOHN MCWILLIAMS, OF BELLE VERNON, PENNSYLVANIA.

IMPROVEMENT IN COMBINED TACK-DRIVERS AND CARPET-STRETCHERS.

Specification forming part of Letters Patent No. **176,333**, dated April 18, 1876; application filed October 28, 1875.

To all whom it may concern:

Be it known that I, JOHN MCWILLIAMS, of Belle Vernon, Fayette county, Pennsylvania, have invented a new and useful Combined Tack-Driver, Carpet-Stretcher, and Tack-Drawer, of which the following is a specification, reference being had to the annexed drawings:-

The invention relates to devices for driving tacks or small nails; and consists in a spring-hammer held in striking position by a spring-catch, which, when released, the hammer descends upon a spring driving-bar, which, in thus descending, drives the tack placed in the receiver, the lower surface of the shoe of which is properly toothed to operate as a carpet-stretcher, while the rear end of the handle of the device is provided with a tack-extractor of ordinary construction.

The object of the invention is to provide a convenient device for driving or extracting tacks and small nails, and stretching carpet, and is to be distinguished from devices heretofore known by its having a spring catch or trigger, a hammer actuated by a spring, and operating upon a spring driving-pin.

Figure 1 is a side elevation of a device embodying the elements of the invention. Fig. 2 is a plan view of one-half of the receiver.

A in the accompanying drawings is a handle, having at one end the extractor B, of ordinary construction. At the center of the handle is placed the pivot-stand *b*, its standards connected by the axle *d*, passing through the elbow of the bell-crank *e*, which forms the handle of the hammer D. A coiled spring, *f*, encircles the axle *d*, having a central extension bearing upon the handle *e*, giving it a downward pressure. The front end of the hammer-handle *e* is furnished with a hammer-head, *h*. The other portion of the handle terminates in a lever, and adjacent the angle has the stop E, which is properly placed to pass below the head of the spring-catch F. Upon the pivot-stand *i*, placed a suitable distance in rear of the pivot-stand *b*, is pivoted at its angle the catch F, which consists of a bell-crank, the forward part of which terminates in a catch, *l*, the rear in a lever, *m*, which extends parallel to, and a proper distance above, the upper surface of the handle A. A

spring, *n*, is properly placed to give the catch pressure in a downward and forward direction. The catch is so placed that when the lever of the hammer-handle *e* is forced backward and downward the stop E shall pass below the catch *l*. The lever *m* and catch *l* are so placed in relation to each other that when the lever is depressed, the catch *l* is retracted, so as to free the stop E. The head of the hammer comes in contact with the upper end of an open chamber, H, secured to the front end of the handle A, and having the driving-pin I, which passes through an aperture in the top, and a guide-plate, *p*, near the base of the chamber, the pin being provided with a cross-piece, *t*, between which and the plate *p*, and encompassing the pin I, is placed a spiral spring, *v*, giving the pin an upward bearing. Directly below the chamber H is provided the shoe L, the lower surface of which is provided with the teeth *w*, which project in a downward and forward direction. The aperture *x* in the shoe has its axis in the same line as the axis of the pin I, and is intended to accommodate the receiver M, which consists of a hollow truncated cone, provided on two opposite sides with flanges *y*, each having a central depression to fit into grooves upon the upper surface of the shoe L. The receiver, as above described, is bisected centrally, vertically, and on a line in the center of the flanges *y*, and is placed in the aperture *x*, apex downward, and held in position by any suitable means. The tack is placed between the sections of the receiver, and is driven by the descent of the pin I, which, striking the head of the tack, parts the sections, and effects one purpose of the invention. A short distance in rear of the chamber H, on the handle A, is placed the thumb-piece N, by pressing upon which the shoe L is held down in place. Preferably the handle A should be opened, as in the present instance.

Operation: The hammer-head being suspended by passing the stop E under the catch *l*, a tack is placed in the receiver point downward. The teeth *w* are now placed in contact with the carpet, it being forced to the desired position, when the stop E is freed by pressing down the lever *m*, which permits the hammer-

head to descend, forcing down the pin I and driving the tack to place.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a tack-driver, the combination of a spring-actuated hammer with the catch F, for the purpose specified.

2. In a tack-driver, the hammer D, having spring *f*, pivot *d*, and rest E, in combination with the catch F, having the spring *n*, substantially as shown and described.

In testimony that I claim the foregoing improvement in combined tack-driver, carpet-stretcher, and tack-drawer, as above described, I have hereunto set my hand and seal this 22d day of October, 1875.

JOHN McWILLIAMS. [L. S.]

Witnesses:

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J. T. McALPIN.