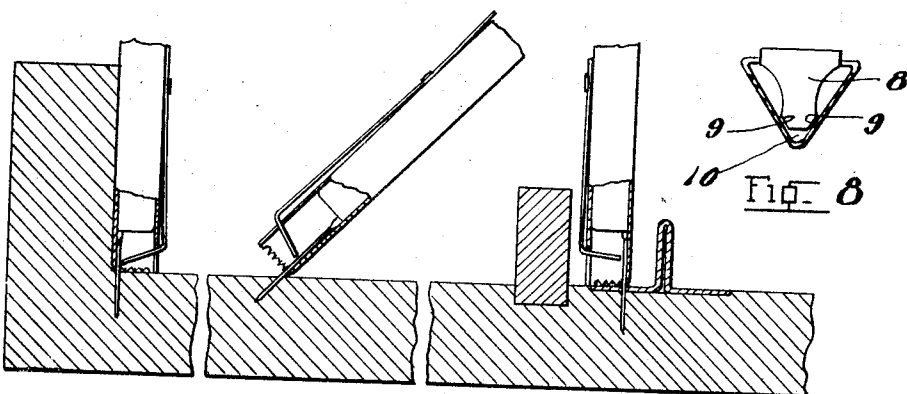
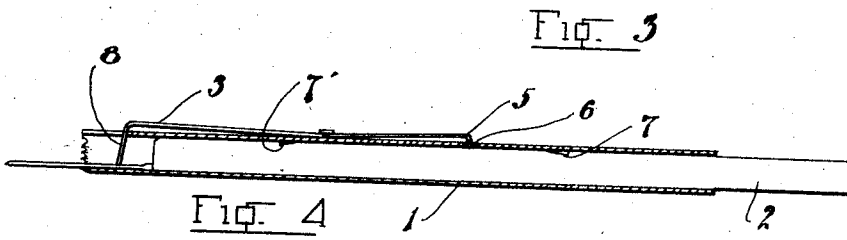
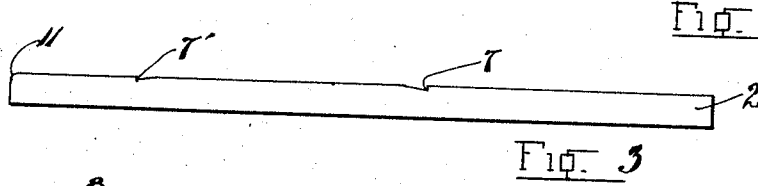
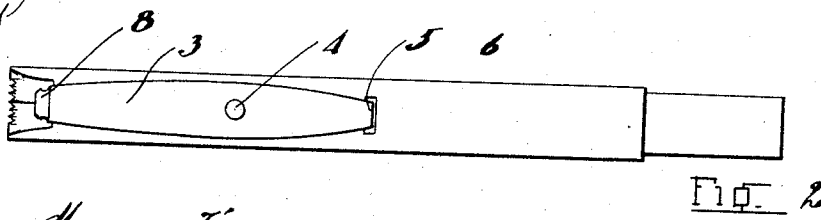
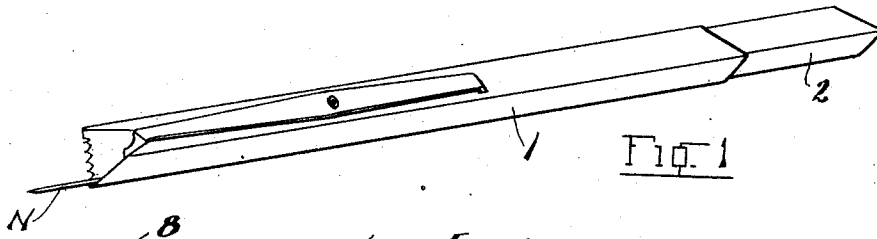


A. J. DE LANDER.
 NAIL DRIVING IMPLEMENT.
 APPLICATION FILED AUG. 11, 1919.

1,340,705.

Patented May 18, 1920.



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UNITED STATES PATENT OFFICE.

AUGUST J. DE LANDER, OF SPOKANE, WASHINGTON.

NAIL-DRIVING IMPLEMENT.

1,340,705.

Specification of Letters Patent.

Patented May 18, 1920.

Application filed August 11, 1919. Serial No. 316,728.

To all whom it may concern:

Be it known that I, AUGUST J. DE LANDER, a citizen of the United States, residing at Spokane, in Spokane county, and State of Washington, have invented certain new and useful Improvements in Nail-Driving Implements, of which the following is a specification.

The present invention relates to an improved nail driving implement designed especially for use in driving nails, tacks, &c., in places that are usually inaccessible for hammers or hatchets, and also for the purpose of assisting in holding short nails or tacks that are not adapted to be held in the fingers. The invention consists in certain novel combinations and arrangements of parts of the tool that is to be utilized in connection with a hammer, whereby the nail is guided to its place preparatory and preliminary to the hammer blow, and the invention further consists in certain novel combinations and arrangements of parts for retaining the reciprocable driving bar as will be hereinafter described and claimed.

In the accompanying drawings one complete example of the physical embodiment of the invention is illustrated, showing a comparatively inexpensive tool embodying the novel features of the invention and constructed and arranged according to the best mode I have so far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view of the device complete, showing a nail in position ready to be driven.

Fig. 2 is a top plan view of the tool or implement, as in Fig. 1, but with the nail omitted.

Fig. 3 is a side view of the driving bar.

Fig. 4 is a longitudinal sectional view of the casing, showing the driving bar in full and its relation to a nail.

Figs. 5, 6, and 7, are views showing several ways in which the implement may be used, and its adaptability for driving a nail in a close corner; driving a nail obliquely; and also for driving a nail between two objects where the space will not permit the entrance of a hammer.

Fig. 8 is an end view, enlarged, showing particularly the bent tongue fitting against the converging side walls of the casing.

In the preferred form of the invention as depicted in the drawings I utilize a metallic,

tubular casing 1 preferably V-shaped in cross section, and adapted to inclose the driving member 2, which is a metal bar, also V shaped in cross section and designed to fit neatly in the casing and be slidable therein. The casing carries a flat retaining spring 3 having a central fastening point 4 so that the resilient ends of the spring are free to be bent as will be disclosed. One end of the spring is bent to form a hook 5 and passes through a transverse slot 6 in the casing where it bears upon the face of the driving member, and its resiliency causes the hook to engage a notch 7 in the driving bar to prevent displacement of the bar through the lower end of the casing, while an oppositely arranged notch 7' spaced a suitable distance from notch 7, prevents the driving bar from passing out through the upper end of the casing. Thus either of these two notches may be engaged by the hook to prevent displacement of the driving bar, but the bar is permitted, in operation, to move the distance between these two notches.

At its opposite end the retaining spring is fashioned with an angular tongue 8 as a guide and retaining device for the nail N as it is being driven, and the tongue overhangs the lower end of the driving member until the nail has been driven far enough into the material and possesses sufficient rigidity to stand alone. At 9, 9, the tongue is cut off to form inclined faces to correspond with the inclined walls of the tube or casing so that the resilient tongue may extend a sufficient distance toward the narrow part or corner of the casing which provides a trough for the nail. Thus a space 10 is left between the tongue and the nail trough so that the nail may be held or retained in the tongue and trough while it is being inserted and driven into the material.

At 11 the edge of the driving bar is rounded or cam shaped so that as it encounters the tongue on the lower end of the spring, the tongue will be forced out, due to repeated hammer blows on the driving bar, and the nail or tack may thus be driven home.

It will readily be apparent that the device is adapted to hold or retain and drive various sizes of tacks and nails, and with it, the nails may be accurately placed previous to driving. The nails or tacks are fed, singly and head first into the casing below the driving bar, and the nail naturally seeks

and rests in the trough formed by the converging side walls of the casing, with its point extending through the space 10 of the trough in position to be hammered. The tool is specially adapted for driving the nail through sheet metal like metal weather strips, for the reason that the nail may be held in place for the hammer blows, and is not likely to be bent before entering the metal, due to improper delivery of the hammer blows directly upon the tack or nail head. If it is desired to countersink the nail after driving, a separate tool or implement may be employed, constructed with a smaller sized head, and the nail sunk as deep as desired.

Many uses are found for the tool, but it is especially useful in driving nails into shoe heels where it is essential that the nail be driven from the inside of the shoe. Other and numerous uses are found for the implement that might be mentioned, but it is apparent that I have provided a comparatively inexpensive, but efficient tool or implement, for performing its functions in a very satisfactory manner.

What I claim is—

1. The combination with a slotted tubular casing and a reciprocable driving member therein having spaced notches in its upper face, of a retaining spring centrally fixed outside the casing and having one end to engage either of the notches and its opposite end formed with a resilient tongue overhanging the front open end of the casing for retaining and guiding a tack as described.

2. The combination with a slotted tubular casing V-shaped in cross section and forming a nail trough, and a two-notched driving bar within the casing, of a centrally secured retaining spring on the outside of the casing having a hooked end projecting through the casing to engage either of said notches, the other end of the spring having a bent tongue with slanting faces overhanging the front open end of the casing to engage the walls of the trough, and said driving bar adapted to receive blows from a hammer to drive a nail, as described.

In testimony whereof I affix my signature.

AUGUST J. DE LANDER.