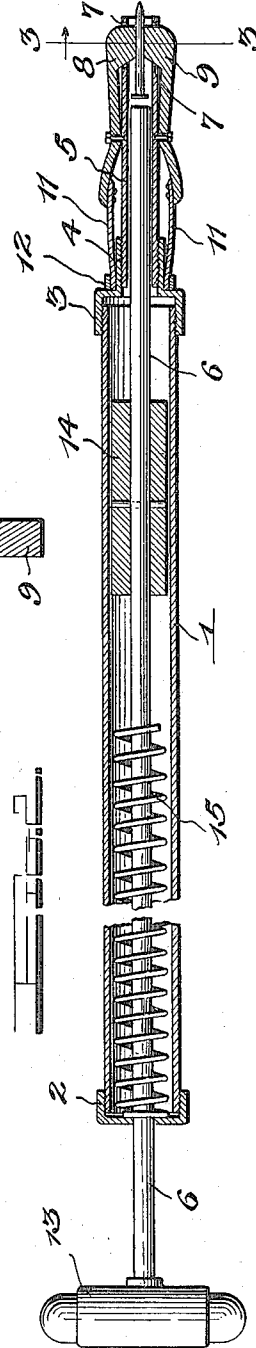


Patented Aug. 31, 1915.



Attorneys

UNITED STATES PATENT OFFICE.

JOHN ANDERSON, OF CHICAGO, ILLINOIS.

NAIL-DRIVING IMPLEMENT.

1,152,260.

Specification of Letters Patent.

Patented Aug. 31, 1915.

Application filed November 5, 1914. Serial No. 870,451.

To all whom it may concern:

Be it known that I, JOHN ANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Nail-Driving Implements; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to nail driving implements for driving nails or tacks in places which are inaccessible to a hammer.

The object of the invention is to provide a device of this character which will quickly and effectually perform the driving operation and at the same time reliably hold the nail or tack in position to receive the driving blow, thereby avoiding danger of injury to the fingers of the user.

With the above and other objects in view, the invention consists of certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 represents a side elevation of an implement constructed in accordance with this invention, parts being broken out for convenience in illustration; Fig. 2 is a longitudinal section thereof; Fig. 3 is a transverse section taken on the line 3-3 of Fig. 1.

In the embodiment illustrated, a cylindrical tubular casing 1 is shown having caps 2 and 3 removably mounted on the opposite ends thereof, said caps being preferably threaded on said ends. The cap 2 at the rear end of the casing is apertured for the passage of a plunger to be described and the cap 3 at the front end is provided with a tubular neck 4 which is internally threaded to receive a smaller tube 5 which forms a guide for the driving end of the plunger 6. This tube 5 is provided at its free end with oppositely disposed slots 7 for the passage of the nail gripping jaws 8 and 9 to be described. These jaws 8 and 9 are fulcrumed intermediately of their ends on said tube 5 and the forward or gripping ends thereof are adapted to pass through the slots 7 in the tube 5 and have their opposed faces provided with nail receiving grooves 10 as shown clearly in Fig. 3. The rear ends of these jaws diverge from the fulcrums thereof outward and have riveted thereto plate

springs 11 which exert their tension to hold said ends outwardly and thereby close the clamping ends of the jaws. (See Fig. 2.) The rear ends of these springs 11 are here shown secured to the neck 4 of the cap 3 by a clamping collar 12 but any other suitable means may be employed for this purpose.

Slidably mounted in the casing 1 and the tubular extension 5 is the plunger 6 which is made longer than the combined length of the casing and extension and is provided at its rear end with a handle 13 which is preferably made of wood or other similar material, the plunger itself being formed of metal. Secured to the plunger 6 within the casing 1, is a weight 14 which is designed to impart force to the blow of the plunger and it also serves as a stop for engaging a coiled spring 15 mounted on the plunger in the rear end of the casing and when said plunger is retracted, this weight 14 engages the inner end of the spring and compresses it between said weight and the cap 2. This spring is designed to impart additional force to the blow of the plunger.

In the use of this implement, when it is desired to drive a nail or tack in a place inaccessible to a hammer or otherwise, the jaws 8 and 9 are opened by forcing the inner ends thereof toward each other against the tension of the springs 11 and then placing a nail between said jaws. When the nail is properly placed, the spring pressed ends of the jaws are released and said springs 11 exert their tension to force the jaws 8 and 9 into gripping engagement with the nail to be driven as shown in Fig. 2. The nail is then properly positioned against the article into which it is to be driven and the plunger 6 is retracted by exerting an outward pull on the handle 13 which causes the weight 14 to compress the spring 15 in the casing 1 and when force is exerted on said handle, the plunger is rapidly driven forward thereby and by the action of the expanding spring 15 causing the front end of said plunger to engage the head of the nail and drive it into the article desired. The force exerted on the nail by the plunger 6 forces the head thereof through said jaws thereby opening them against the tension of the springs 11, said springs being strong enough to hold the nail to properly position it and are readily yieldable against pressure exerted on the inner faces of the jaws 8 and 9. After the nail has been

driven, these springs exert their tension to force the jaws into closed position where they remain until opened again for the insertion of another nail in the manner above described.

I claim as my invention:

A nail driving implement comprising a tubular casing having caps removably mounted on its opposite ends, the cap on the rear end being centrally apertured and that on the front end provided with a forwardly extending tubular neck, a tubular extension removably mounted in said neck and having oppositely disposed slots in the free end thereof, nail gripping jaws fulcrumed on said extension intermediately of their ends, the gripping ends of said jaws being operable through said slots and their other ends diverging, plate springs each having one end engaging one of the said diverging

ends of the jaws for forcing said jaw ends normally apart and the gripping ends of said jaws into closed position, a clamping collar engaging the other ends of said springs and encircling the neck of said cap, a plunger operable in said casing and extension and projecting through the aperture in the cap at the rear end of the implement, said plunger being provided with a handle, a weight secured to said plunger intermediately of its ends, and a spring coiled on said plunger between the weight thereon and the rear end of the casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN ANDERSON.

Witnesses:

J. F. WHITE,
H. H. LELANDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."