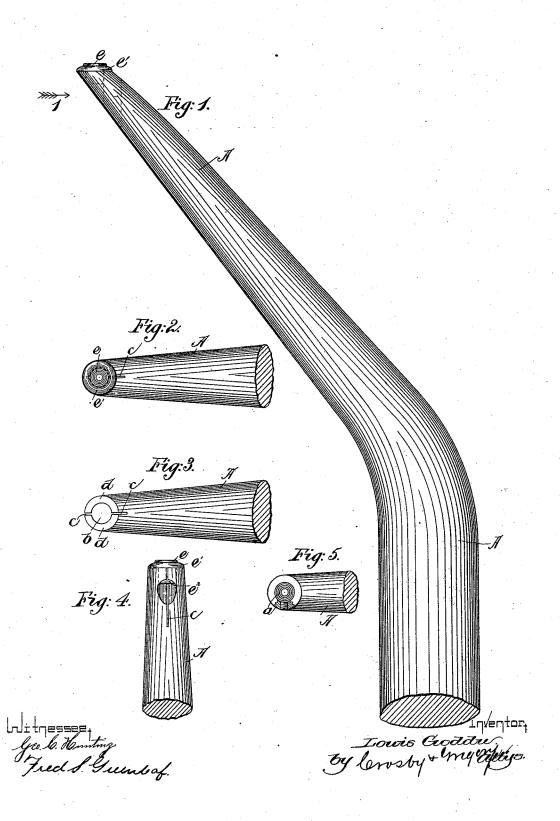
## L. GODDU. HORN FOR NAILING MACHINES.

No. 456,113.

Patented July 14, 1891.



## UNITED STATES PATENT OFFICE.

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## HORN FOR NAILING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 456,113, dated July 14, 1891.

Application filed September 17, 1890. Serial No. 365,224. (No model.)

To all whom it may concern:

Be it known that I, Louis Goddu, of Winchester, county of Middlesex, State of Massachusetts, have invented an Improvement in Horns for Nailing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Horns commonly in use in nailing-machines for boot and shoe work are provided with a block of steel constituting an anvil, against which the inner end of the nail or fastening

is driven.

In practice much difficulty has been experienced in holding this anvil in place, because the tip of the horn holding the anvil or block has to be made quite thin, and also in practice the extremity of the horn beyond the an-

20 vilis in use rapidly worn away.

To not only protect the extremity of the horn from wear and at the same time cause the retention of the anvil in just its proper position without the use of screws, I have 25 bored the extremity of the horn and then split it from its extremity through the said bore, thus making of the end of the horn a strong clamp, between the jaws of which I insert the shank of the tip, the latter having 30 a flanged table or lip to lap over and cover the end of the horn to its extremity.

My invention consists, essentially, in the combination, with a split horn, of a detachable anvil; also, in the combination, with the stip of a horn, of an anvil having a shank and a flange or table to cover the top of the horn.

Figure 1 in side elevation represents a sufficient part of a horn to illustrate my invention; Fig. 2, a partial top or plan view of the tip of the horn and anvil; Fig. 3, a similar view with the anvil removed; Fig. 4, a view of part of the horn, Fig. 1, looking at it in the direction of the arrow 1; and Fig. 5, a detail showing the old form of horn and anvil.

The horn A is and may be of usual shape.

Prior to this invention it has been customary to bore a vertical hole in the tip of the horn and fasten therein by a set-screw a cylindrical anvil a, as shown in Fig. 5, where it will be seen that the end of the horn outside

the anvil is left exposed. The hard wear to which the anvil is subjected drives the same into the horn, and the exposed part of the horn outside the anvil becomes worn away and gets thin, requiring frequent renewal of 55 the horn.

In accordance with my invention I have provided the horn with a vertical passage b and with a slot c intersecting the same, thus leaving the end of the horn with strong jaws 60 d d

The anvil is composed of a center part e, substantially like the top of the old form of anvil, and a surrounding flange e', which rests on the top and extends out to the rounded 65 salient end of the horn, as shown in the drawings, the shank  $e^2$  of the anvil—a little larger in diameter than the hole b, so as to somewhat expand the jaws d—being driven forcibly into the said hole, the jaws holding the 70 anvil firmly.

In practice, owing to the flange e', the anvil cannot be forced down onto the horn below its proper place, and owing to the flange covering the top of the horn the latter is not 75 subjected to hard wear, as in the old horn, and as a result the horn does not have to be renewed, for when the anvil, either at its central part or flange, becomes too much worn a new anvil of hard steel may easily be applied 80

to the horn.

I am aware that a horn has been provided with a round hole to receive the shank of an anvil-block, a shoulder of the block resting upon the top of the horn, as in United States 85 Patent No. 217,324; and I am also aware that in a pegging-machine for uniting soles with wooden pegs a horn has been made in two parts, one pivoted upon the other, each part being provided with a blade, so that when 90 one part of the horn was moved toward the other the peg driven into the slot between the two parts might be cut off, as in United States Patent No. 255,134; but prior to my invention I am not aware that the end of a horn has 95 ever been split to receive in it the shank of an anvil, the said shank and anvil being held firmly in place by the springing of the metal.

I claim— The herein-described nailing-machine horn, 100 it having a vertical opening in its tip and slitted vertically at each side the said opening in the direction of the longitudinal center of the horn, combined with an anvil-block having a shank which is forced into said opening and having a flange or shoulder to rest on the tip of the horn, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of 10 two subscribing witnesses.

LOUIS GODDU.

Witnesses:
BERNICE J. NOYES,
EMMA J. BENNETT.