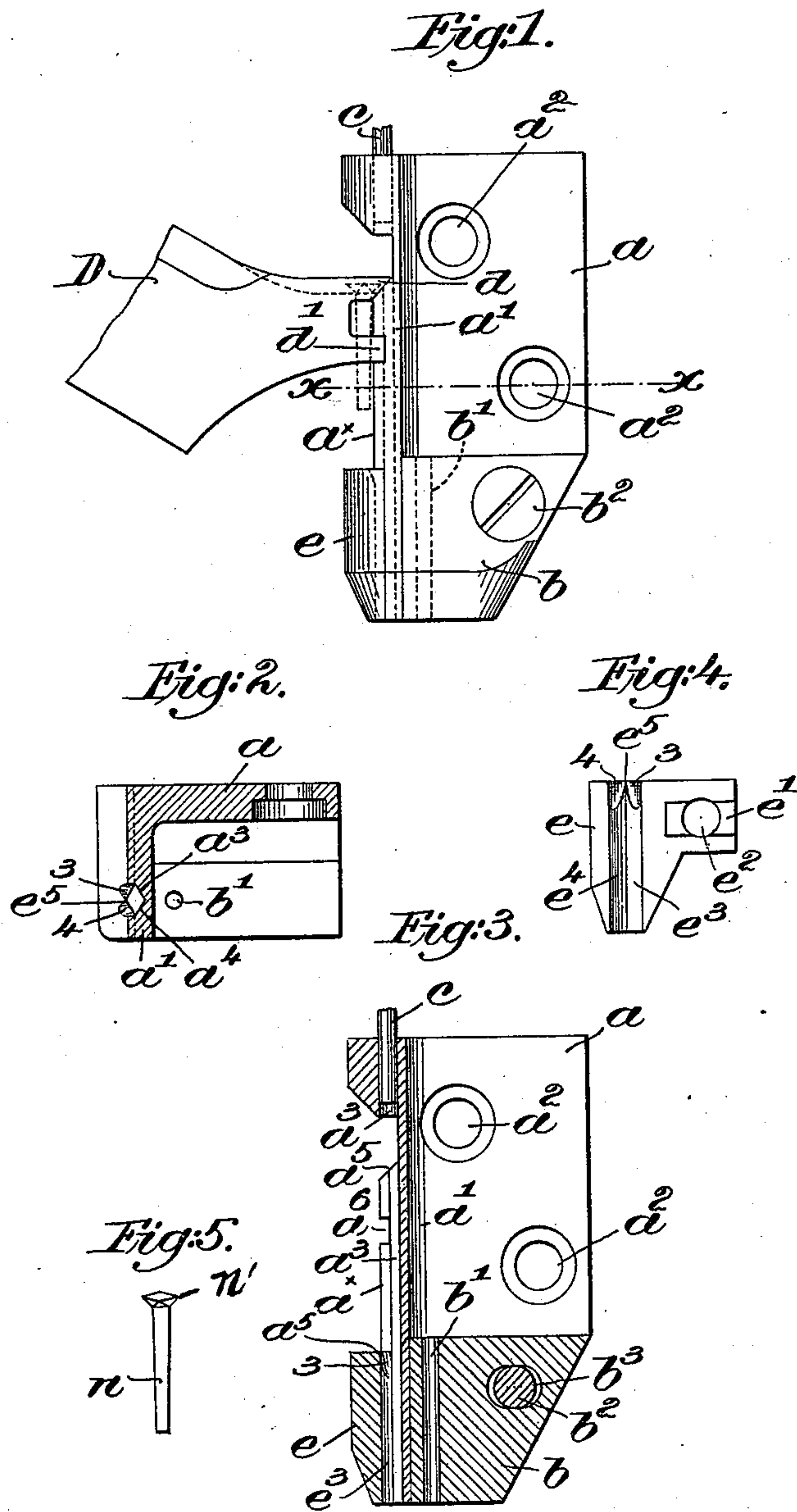


(No Model.)

L. GODDU.
NOSE PIECE FOR LOOSE NAIL DRIVERS.

No. 545,487.

Patented Sept. 3, 1895.



Witnesses.

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UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, ASSIGNOR TO JAMES W. BROOKS, TRUSTEE,
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NOSE-PIECE FOR LOOSE-NAIL DRIVERS.

SPECIFICATION forming part of Letters Patent No. 545,487, dated September 3, 1895.

Application filed January 9, 1895. Serial No. 534,300. (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
5 Nose-Pieces for Loose-Nail Drivers, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

10 In slug-nailing boots or shoes a series of nails is driven into the heel in such manner that the nail-heads stand in a certain position relative to the edge of the heel to thereby give a neat and finished appearance to the
15 boot or shoe, which would not be attained were the nails driven with no regard to the position of their heads. To accomplish this desired effect, considerable care has to be expended by the operator in slug-nailing, for in
20 using nails whose heads are square, oblong, or lozenge-shaped one certain dimension of each nail-head must occupy the same relative position to the edge or outline of the heel.

This invention has for its object the pro-
25 duction of a nose-piece for loose-nail drivers particularly adapted for slug-nailing, whereby each nail as it is fed to the nail-passage in the nose to be driven singly is correctly positioned automatically, so that when driven its head
30 will be properly located without care on the part of the attendant, who can, in consequence, give his entire attention to the proper presentation of the heel to the driving-point of the apparatus.

35 In accordance therewith my invention consists in a nose-piece for loose-nail drivers, having a nail-passage therein to receive singly the nails to be driven and a directing device in said passage to engage the heads of im-
40 properly-presented nails and turn them on their longitudinal axes into correct position to be driven, substantially as will be described.

Other features of my invention will be hereinafter described, and particularly pointed
45 out in the claims.

Figure 1 represents in side elevation a nose-piece for loose-nail drivers embodying my invention, a sufficient portion of the nail chute or raceway being shown to be understood.

50 Fig. 2 is a transverse sectional view taken on the line $x x$, Fig. 1. Fig. 3 is a vertical sec-

tional view of the nose-piece, taken through the center of the nail-passage. Fig. 4 is a view in elevation of the detachable back of the nose-piece, and Fig. 5 is a perspective view of
55 one of the nails to be driven.

The nose-piece to be described may be attached to any suitable loose-nail driver or slug-nailing machine. As herein shown, the nose-piece consists of a main supporting portion or
60 web a , having at one edge a flange a' and provided with suitably-counterbored holes a^2 , by means of which it may be secured to the head of the nailing-machine by suitable screws. (Not shown.) A solid foot b , having an awl
65 passage or throat b' therein, is adjustably secured to the web a by a set-screw b^2 , the foot being slotted at b^3 to receive the shank of the screw, and by means of which the awl-throat may be adjusted toward or from the nail-pas-
70 sage, to be described.

The flange a' is enlarged at its upper end and perforated at a^3 to form a guide for the nail-driver c , (partially shown in Figs. 1 and 3,) the rear face of the flange being grooved
75 below said guide to form parallel sides a^x and converging side walls $a^3 a^4$, beveled at their upper ends at a^5 to receive the correspondingly-beveled projection d of the nail-raceway D. (Shown partially in Fig. 1.) Each side a^x ex-
80 tends downward for a part of the length of the converging walls, and is notched at a^6 (see Fig. 3) to receive a lug d' at the end of the raceway D.

The nail-passage formed and partially in-
85 closed by the walls $a^3 a^4$ and the parallel sides a^x is completed at its lower or delivery end by a detachable back e , horizontally grooved at e' , Fig. 4, to engage a rib (not shown) on the rear face of the flange a' , and rigidly held
90 in place thereon by a suitable screw extended through a hole e^2 into the flange.

The inner face of the detachable back has formed therein a longitudinal groove or recess having converging side walls $e^3 e^4$, form-
95 ing with the converging walls in the flange a four-sided passage, as herein shown, corresponding in cross-section to the shape of and permitting the passage therethrough of the head n' of the nail to be used, one of such nails
100 n being shown separately in Fig. 5. The nails are introduced into the upper end of the race-

way D in usual manner, and they slide therein by gravity to the top of the partially-open nail-passage described in the nose-piece, from which they descend to the inclosed lower or delivery end thereof. It frequently happens that the nails are so presented to the delivery end of the nail-passage that their heads are incorrectly positioned to enter it, and the descent of the driver *c* will mutilate the heads and then force the mutilated nails into the heel, thereby marring or destroying the desired effect, and in so doing the nail may become jammed in the delivery end of the nail-passage, from which it must be removed. To obviate these difficulties and objections, I have devised a directing device to engage the head of each improperly-presented nail as it enters the delivery end of the nail-passage and to turn the nail on its longitudinal axis into correct position to be driven. I accomplish this by cutting away or forming a concavity in each of the side walls *e*³ *e*⁴ at their upper ends to form cam-surfaces 3 and 4, sloping away at each side from a lip *e*⁵, substantially in the line of intersection of said walls.

Should a nail be improperly presented, the lip *e*⁵ will act upon the head to turn it in one or the other direction, and one or the other of the cam surfaces 3 4 will complete the rotative motion of the nail on its longitudinal axis until the head is in proper position to enter and be driven from the delivery end of the nail-passage. Those nails properly presented will pass into the delivery end of the passage at once, and thus each nail-head as it enters the delivery end of the nail-passage will be in correct position to pass therethrough and be driven, making it impossible to clog the passage or to drive an incorrectly-positioned or mutilated nail into the heel.

I claim—

1. In a nose piece for loose nail drivers, a nail passage to receive singly the nails to be driven, and a directing device in said passage to engage the heads of improperly presented

nails and turn them on their longitudinal axes into correct position to be driven, substantially as described.

2. In a nose piece for loose nail drivers, a nail passage to receive singly the nails to be driven and corresponding in cross-section to the shape of the nail heads, and a directing device at the entrance to said passage, to engage the heads of improperly presented nails and turn them on their longitudinal axes into correct position to be driven, substantially as described.

3. In a nose piece for loose nail drivers, a nail passage to receive the nails to be driven, and a cam surface at the entrance to said passage to turn the heads of improperly presented nails into correct position to be driven, with the width of the nail heads in a fixed direction, substantially as described.

4. In a nose piece for loose nail drivers, a nail passage open longitudinally at its upper end to receive the nails and inclosed at its lower or delivery end, and a directing device, comprising adjacent oppositely turned cam surfaces at the entrance to the delivery end of the passage, to turn in one or the other direction, a nail improperly presented, substantially as described.

5. In a nose piece for loose nail drivers, a main supporting portion having a longitudinally open groove therein to form a nail passage, a removable back attached to said main portion and grooved to form the inclosed delivery end of the nail passage, and a directing device at the upper end of the delivery end of the passage, to turn into correct position the heads of improperly presented nails, substantially as described.

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

LOUIS GODDU.

Witnesses:

JOHN C. EDWARDS,
AUGUSTA E. DEAN.