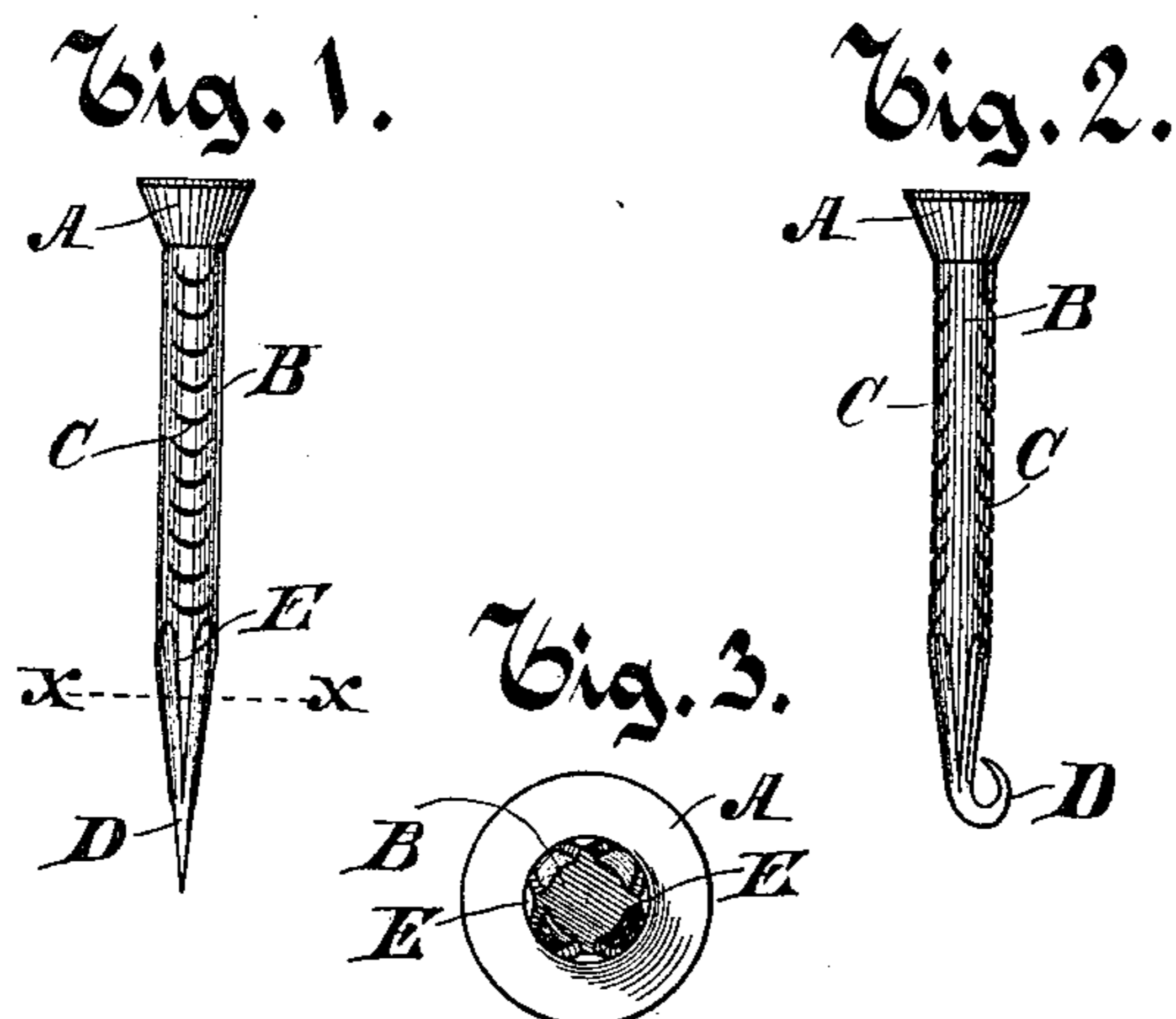


(No Model.)

L. W. AUSTIN.
SHOE NAIL.

No. 405,727.

Patented June 25, 1889.



Witnesses.

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UNITED STATES PATENT OFFICE.

LLOYD W. AUSTIN, OF MILWAUKEE, WISCONSIN.

SHOE-NAIL.

SPECIFICATION forming part of Letters Patent No. 405,727, dated June 25, 1889.

Application filed May 25, 1888. Serial No. 275,092. (No model.)

To all whom it may concern:

Be it known that I, LLOYD W. AUSTIN, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and
5 useful Improvements in Shoe-Nails; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of ref-
10 erence marked thereon, which form a part of this specification.

In the manufacture of shoe-nails it is desirable to produce a nail which may be readily and easily thrust through the sole and upper-
15 leather of the shoe, and which will readily and properly cripple and clinch in the process of driving, whereby the sole will be firmly and permanently secured to the upper-leather; and my invention relates particularly to the
20 form and construction of the point of the nail, whereby it may be easily thrust through the leather, and a proper and sure clinch may be obtained which will not involve the bending or crippling of the nail otherwise than to
25 such extent as is desirable for the clinch.

In the drawings, Figure 1 is a view of my complete nail. Fig. 2 is a view of the same nail in the form it takes in driving and clinching. Fig. 3 is a cross-section on line X X of
30 the nail shown in Fig. 1.

These nails are constructed from wire, and consist of a frusto-conical head A, a round shank B, provided with a series of serrations or notches C on two sides of the shank, and a point
35 D. The point D is conical, tapering from the shank to a medium point—that is, to a point not exceedingly fine nor very blunt—and this point in its upper and larger part is re-enforced and strengthened by four tapering ribs E E,
40 which extend from the shank down on the conical point about one-third or one-half its

length, or to such a distance as is desired to strengthen the point and provide against its crippling or bending. I preferably use four ribs, but may use any number not less than
45 three.

The form shown in Fig. 2 indicates the method and extent of the crippling and clinching of the nail in driving, and it will be seen that only the very point itself clinches, while
50 all that part of the point which is re-enforced by the ribs E E remains straight in line with the shank B. It will be understood that by this construction a nail is obtained which, while it has a sharp point expanding into the
55 full size of the shank by a long and slender taper, at no place is abrupt, which insures the easy passage of the nail through the leather, and also forms a point which cripples and clinches only at its end.
60

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

A nail consisting of a head, a shank of uniform diameter throughout its length, a long conical point tapering with uniform pitch
65 from the surface of the shank to the extremity of the nail, and three or more re-enforcing ribs of equal size integral therewith on the conical point, extending from the shank downwardly upon and along the surface of the
70 point a portion of its length, each rib terminating in a vanishing point a distance from the point of the nail, leaving a plain clinching-point below said ribs, substantially as and for the purpose set forth.
75

In testimony whereof I affix my signature in presence of two witnesses.

LLOYD W. AUSTIN.

Witnesses:

C. T. BENEDICT,
C. H. KEENEY.