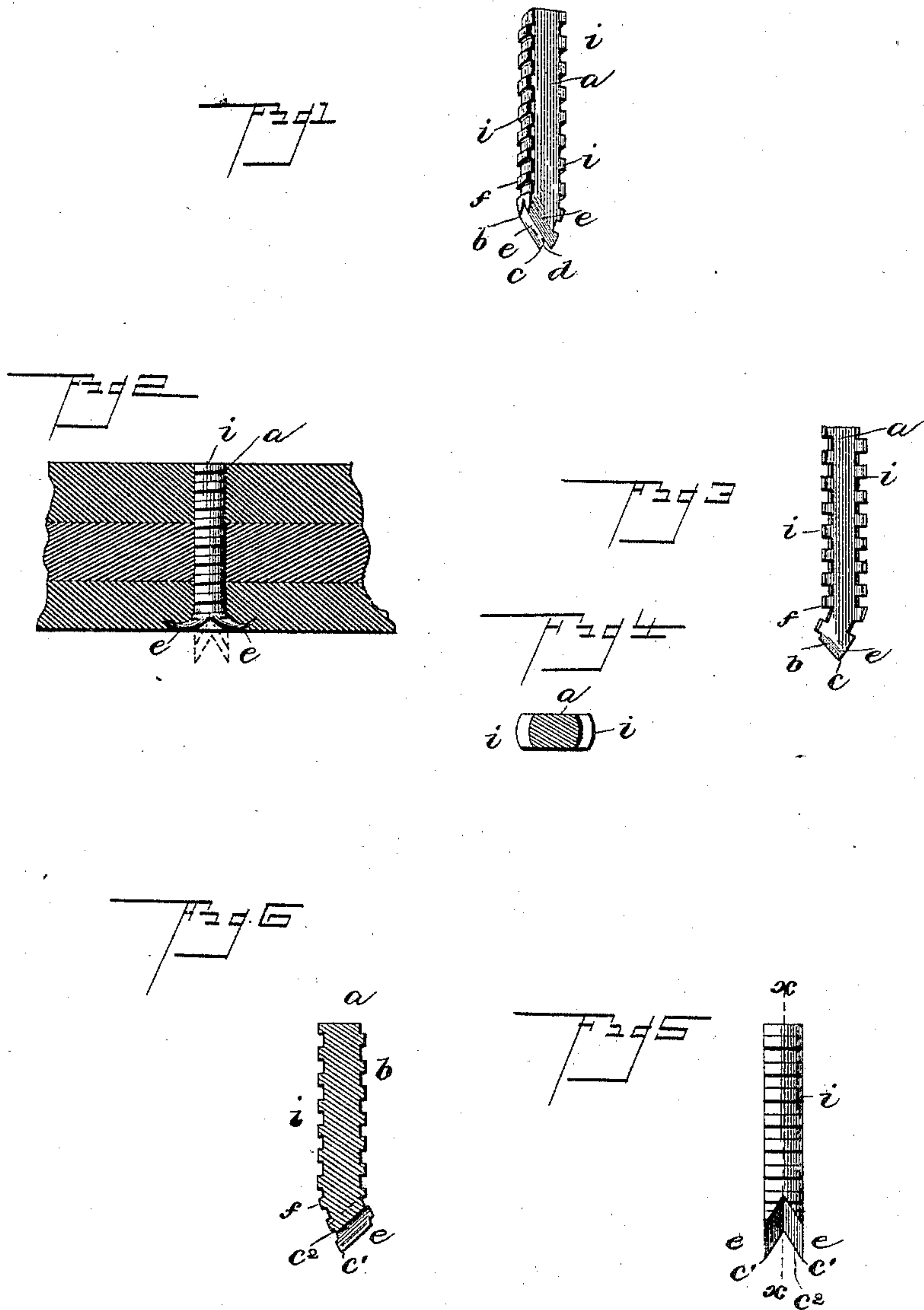


(No Model.)

S. W. ROBINSON.
PEG.

No. 440,723.

Patented Nov. 18, 1890.



Witnesses

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SPECIFICATION forming part of Letters Patent No. 440,723, dated November 18, 1890.

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To all whom it may concern:

Be it known that I, STILLMAN W. ROBINSON, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Clinch-Nails, of which the following is a specification.

My invention has for its object the production of a novel nail for use in the manufacture of boots or shoes.

My improved nail has a double or bifurcated point, shaped substantially as described, to leave two prongs, the body of the nail immediately above the point being bent slightly to place the extremities of the prongs of the point substantially in the line of the axis of the body of the nail, the said prongs presenting beveled chisel-like edges to cut their way through any obstruction in the awl-hole, the V-shaped notch at the point end of the nail being oblique or at an angle of about forty-five degrees, to thus act as a wedge to force aside the material displaced in advance of the point as the point approaches the anvil to be spread apart and clinched to resemble a rivet-head.

Figure 1, in perspective, represents one of my improved nails; Fig. 2, a sectional view of a portion of a shoe-sole showing a nail clinched thereon, the dotted lines showing the points of the nail before being clinched; Fig. 3, a side elevation of the nail; Fig. 4, a transverse section thereof. Fig. 5 is an enlarged view of the nail, looking at one of its corrugated sides; and Fig. 6, a section thereof in the line α' , similar letters referring to similar parts throughout the specification.

Referring to the drawings, a represents a headless nail the body of which is of substantially uniform shape or size, and, as shown, this body has two of its sides flattened, the said flattened surfaces being represented as connected by a rounded surface having corrugations or threads i thereon.

The point for the nail is formed by making in one end thereof from one of its corrugated faces, as b , to the opposite face d a V-shaped notch, the said notch being, however, slanted from the longitudinal axis of the nail at an angle of about forty-five degrees, thus leaving

two prongs $e e$, with their extremities $c c$ substantially in line with one side of the nail, and thereafter the body of the nail is bent slightly above the point at or about the line f to place the extremities $c c$ of the said prongs substantially in the line of the axis of the said nail, as shown in the drawings. This bending of the body of the nail, as described, to present the extremities of the said prongs in substantially the line of the axis of the nail prevents the running or shooting aside of the whole point of the nail when clinching, and as the said extremities are left in the line of the axis of the nail and in the direct line of force applied to the nail when being clinched the said prongs spread apart uniformly in the desired directions, leaving a rivet-like point, as best shown in Fig. 1, when viewed from the corrugated side of the nail. Should the point shoot aside, as stated, it does not clinch.

The point produced by notching the nail, as described, leaves a double oblique chisel-like cutting-edge at c^2 along and between the prongs $e e$.

It will be noticed that the V-shaped notch left in the formation of the point of the nail extends from one side of the nail diagonally upward at an angle of about forty-five degrees, leaving a space in the point of the nail above its extremities, in which the material of the sole displaced by the cutting-edges of the point, especially the material through which the awl may not have fully passed, may crowd and jam at or just about at the time that the extremities of the clinching-point pass through the stock upon the anvil and are spread and clinched. These cutting-edges cut their way through any stock which may not have been penetrated by the awl, or any stock which by reason of difference in size between the body of the nail and the awl is crowded in advance of the point of the nail in the bottom of the awl-hole, constituting a wad, the said wad becoming exceedingly hard by reason of the pressure from the nail.

I do not broadly claim a bifurcated or double point on a nail, the said point being formed by a right-angled cut through the body of the nail, nor do I claim a straight-bodied nail having a bifurcated point.

Having described my invention, I claim—

1. The herein-described shoe-nail, composed of a body bent slightly near its end and having two connected chisel-edged prongs the ex-
5 tremities of which are located substantially in the line of the axis of the body of the nail, to operate substantially as described.

2. A shoe-nail consisting of a body bent slightly near one end and having a slanted
10 V-shaped notch extending from one to the opposite side of the body of the nail at an angle of about forty-five degrees, leaving two

prongs *e*, having beveled cutting-edges, the extremities of the said prongs being connected by a cutting-edge *c*², extended across the body 15 of the nail from one to the other prong, the extremities of the prongs of the nail lying substantially in the axis of the body of the nail, as shown.

STILLMAN W. ROBINSON.

In presence of—

BARTON GRIFFITH,
C. C. SHEPHERD.