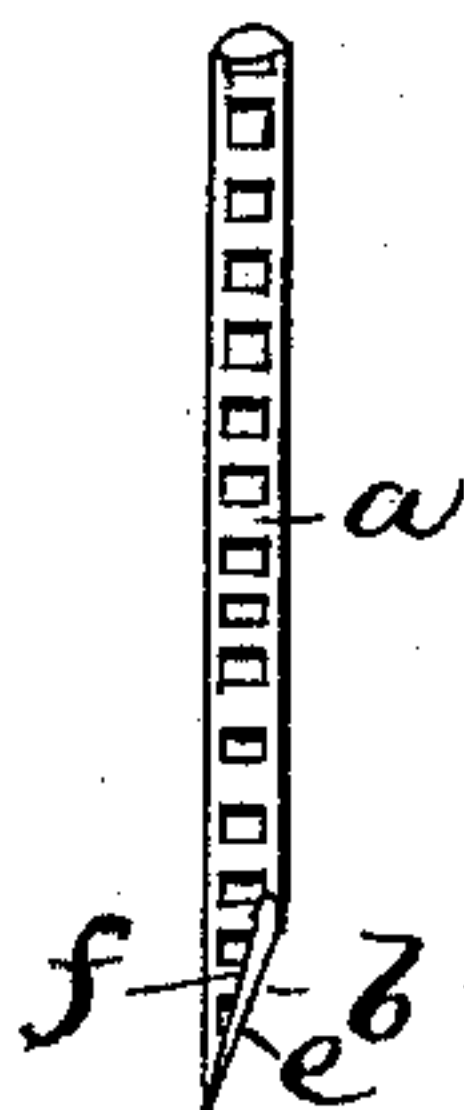
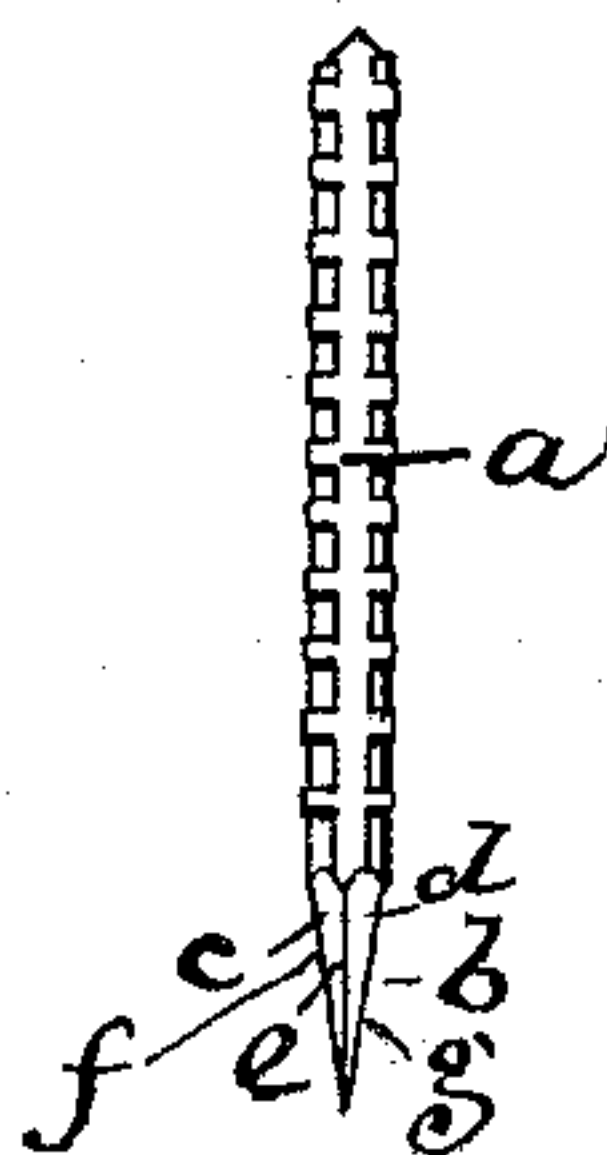


E. P. RICHARDSON.

Metal-Fastenings for Leather Work.

No. 147,430.

Patented Feb. 10, 1874.



Witnesses,
M. W. Frothingham.
L. H. Latimer.

Inventor,
Everett P. Richardson.
per Crosby & Gould.
Attys.

UNITED STATES PATENT OFFICE.

EVERETT P. RICHARDSON, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN METAL FASTENINGS FOR LEATHER WORK.

Specification forming part of Letters Patent No. 147,430, dated February 10, 1874; application filed January 21, 1874.

To all whom it may concern:

Be it known that I, EVERETT P. RICHARDSON, of Lawrence, in the county of Essex and State of Massachusetts, have invented an Improvement in Metal Fastenings for Leather Work; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In using (in sole-nailing machines) continuous wire for the formation of nails to be automatically cut and driven, it is a desideratum to secure nails the points of which will clinch when they strike the metal support upon which the inner sole rests. To insure such clinching, the nails have been variously pointed—sometimes by compressing the wire to a V shape at each point where the nail is severed, sometimes by cutting out a piece from each side to form such a V point, and sometimes by cutting the wire to leave a point on one side. But so far, no formation of the point has proved fully practical for the purpose wanted. For either the nail-point is too slim to be driven without crippling in the leather, or before it passes through the inner sole, or it is too rigid to clinch when, having passed successfully through the soles, it strikes the metal or metal-faced support.

To remedy these defects, or to insure a point that will always, without crippling, penetrate the soles by the blow of the driver upon the nail-head, and yet will clinch by striking the metal point after its penetration, I form each

nail-point triangular, or approximately triangular, in cross-section, and pyramidal, or approximately pyramidal, in form, with its point on one side, or substantially in the line of one side or edge, of the nail.

This construction makes a very penetrating point, or a point which, by reason of its sharp salient edges, readily cleaves its way so long as it meets material that can be practically penetrated by a nail, and yet a point which, by its slimness, always turns as soon as it meets the impenetrable metal.

My invention consists in the nail cut from continuous wire with such a point.

The drawing represents an enlarged view of one of the nails embodying my formation.

Figure 1 shows the nail in front view. Fig. 2 is a side view of it.

a denotes the shank, and *b* the point; *c d*, the two faces formed by cutting out a piece on each side to form the point, the cutting out of such side pieces leaving a sharp central rib, *e*, and almost equally sharp edges *f g*, and bringing the point to the long, slim, angular, and pyramidal shape shown in the drawing, the edges and shape insuring the penetration and subsequent clinch, as before described.

I claim—

A wire nail having the pyramidal point with its salient edges *e f g*, formed substantially as shown and described.

EVERETT P. RICHARDSON.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.