H. F. WHIDDEN.

Art of Making Shoe Nails.

No. 229,292. Patented June 29, 1880.

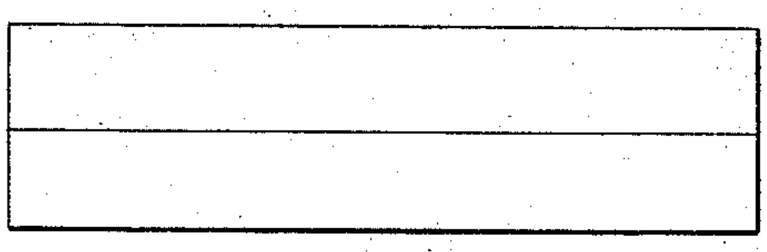

Fig.1.

Fig.2.

Fig.3.

Fig.4.

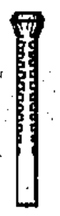

Fig.5.

Witnesses:

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UNITED STATES PATENT OFFICE.

HOSEA F. WHIDDEN, OF SOUTH ABINGTON, MASSACHUSETTS.

ART OF MAKING SHOE-NAILS.

SPECIFICATION forming part of Letters Patent No. 229,292, dated June 29, 1880.

Application filed April 7, 1879.

To all whom it may concern:

Be it known that I, HOSEA F. WHIDDEN, of South Abington, in the State of Massachusetts, have invented a new and useful Improvement in the Art of Making Shoe-Nails, of which the following is a specification.

The object of this invention is to make a headed cut shoe-nail having a wide chisel-shaped clinching-point of uniform thickness at the cutting-edge of the point and corrugations upon its parallel sides; and the invention consists in a new and useful process by which this object is attained.

In the drawings, Figures 1, 2, and 3 represent different stages in the process of manufacture, as will be hereinafter more particularly set forth, while Figs. 4 and 5 are views of the finished nail.

My process is as follows: I first draw an ingot of brass to the shape shown in Figs. 1 and 2, thus producing a nail-strip beveled upon one side of one edge to such a degree that the thin edge would roll over and clinch, if driven against an anvil, under blows of a hammer falling upon the opposite edge. I next feed this beveled strip flatwise and straight forward, without turning into a cut-nail machine, to the action of the cutters, whose successive cuts are in parallel lines across the strip, the gage against which the strip is fed being so located that a cross-section of each blank at the head end, or where it is of full size, will be substantially square.

The machine used differs from the machine used for making the nails patented to me in Letters Patent No. 164,889, in not requiring the strip to be turned, and the strip therefore can be fed much nearer to its butt-end, or even be used in a coil of any length, whereby there results a great saving of waste. The strip is so fed to the machine that its thick edge is on the side of the machine in which the header is placed, and the cutters are so hung that they cut from the thick edge toward the thin edge of the strip.

It will be found that each blank as it falls from the cutters has lost the peculiar one-sided bevel of the nail-strip, the act of cutting in the manner described having straightened the point, so that the blank has the appearance of being beveled in a substantially equal degree upon both sides, as seen in Fig. 3.

The straightened blanks fall successively to the griping-dies, by which they are held while they are headed. The griping-dies are so shaped as to round the corners or edges of the blank, and they are provided with nicks corresponding to the corrugations shown in the drawings on the body of the nail.

The nail may be headed as in ordinary machines for making cut shoe-nails with heads; but the head shown in the drawings is formed in a countersink at the end of the jaws opposite to the point and a countersink in the header, substantially as described in the patent granted to me June 22, 1875, and numbered 164,889.

Corrugated shoe-nails are usually made of brass, and I have found that brass can readily be drawn from the ingot to a strip of the desired form. With other metals it may be preferable to bevel an ordinary nail-strip by presenting it to the action of a cutting-instrument. However prepared, a nail-strip thus beveled at one edge upon one side is new, and it will be found to be a desirable form of strip, both because from it can be cut nail-blanks which will receive corrugations to the best advantage, and because the wide chisel-shaped point is of uniform thickness from side to side.

In another application for a patent now pending I have fully described and claimed the shoe-nail which is the result of the above-described process.

What I here claim is—

1. The above-described process of making shoe-nails by first preparing a metallic strip with one edge beveled upon one side, and then feeding it to mechanism which cuts off the blank, thereby straightening the point end, shapes the body, and forms the head, all substantially as specified.

2. A nail-strip beveled upon one side, substantially as described, for the purpose specified.

HOSEA F. WHIDDEN.

Witnesses:
WILLIAM W. SWAN,
H. G. OLMSTED.