

(No Model.)

E. WILDER.

NAIL.

No. 376,620.

Patented Jan. 17, 1888.

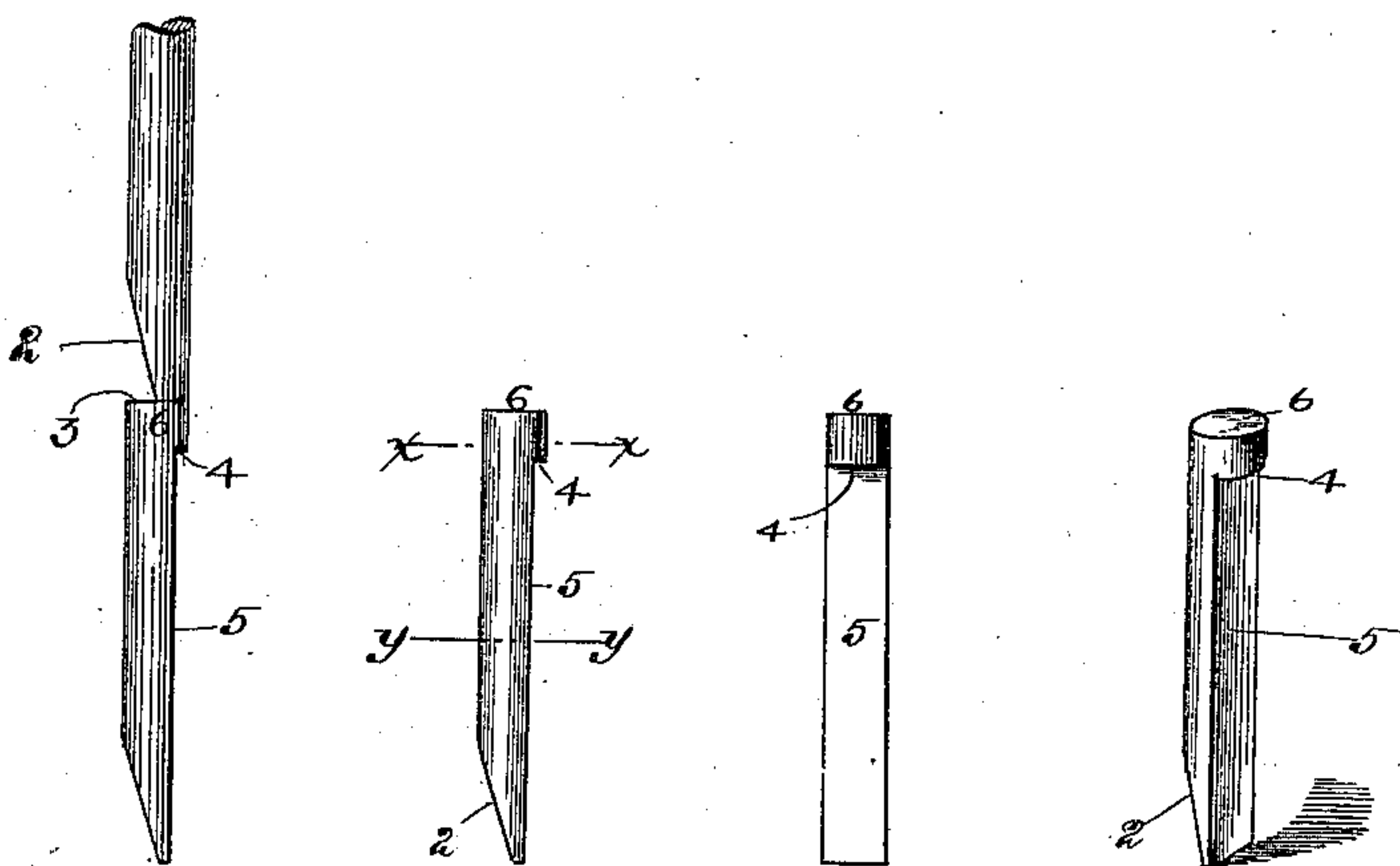


Fig. 1. Fig. 2. Fig. 3. Fig. 4.



Fig. 5



Fig. 6

WITNESSES:

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UNITED STATES PATENT OFFICE.

ELIHU WILDER, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO THE PLUME & ATWOOD MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT.

NAIL.

SPECIFICATION forming part of Letters Patent No. 376,620, dated January 17, 1888.

Application filed August 1, 1887. Serial No. 245,804. (No model.)

To all whom it may concern:

Be it known that I, ELIHU WILDER, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Nails, of which the following is a specification.

This invention has for its object to provide a nail primarily for securing boot or shoe soles, although applicable to other purposes, which shall be capable of being formed from continuous wire, and shall have a head at one end larger than the body or shank of the nail, and a point at the other end adapted to turn or clinch uniformly.

The invention consists in a wire nail cut away at one side to form a diagonal surface, and cut away at the opposite side to form a flat surface extending from the point nearly to the opposite end and terminating in a shoulder, the nail retaining the original diameter of the wire at the last-mentioned end, so that a head larger than the shank or body of the nail is provided, all of which I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side view of a piece of wire, showing the method of cutting to form the nails. Figs. 2 and 3 represent elevations of the completed nail from different sides. Fig. 4 represents a perspective view of the nail. Figs. 5 and 6 represent, respectively, sections on lines *x x* and *y y*, Fig. 2.

The same letters of reference indicate the same parts in all of the figures.

In carrying out my invention I take a piece of cylindrical wire of indefinite length and cut in one side thereof a notch having a side, 2, which is oblique to the axis of the wire, and a side, 3, which is substantially at right angles to said axis, said notch being formed by shearing-cutters, which remove a part of the metal. The wire is then severed in line with the side 3 of the notch to form a substantially flat head, and at the same time the side of the severed portion or nail opposite the side in which the notch was formed is sheared off from the end intersected by the oblique side 2 nearly to the opposite end or head and there terminating in a shoulder, 4, this operation forming a flat side, 5, substantially parallel with the axis of

the nail, and leaving a head, 6, of the full diameter of the wire. By thus cutting away the wire at two opposite sides, forming a flat oblique surface, 2, at one side and a flat surface, 5, at the opposite side parallel with the axis of the nail, I provide the nail with a point which is adapted to turn or clinch perfectly, and with a head larger than the body, whereby the nail is prevented from working into the material in which it is inserted, said head being formed without increasing the diameter of the wire.

This nail can be advantageously made in a boot or shoe sole nailing or tacking machine organized to make and drive nails.

In another pending application filed concurrently with this for improvements in the process of and machinery for making and driving nails I have shown a machine having devices for forming this improved nail, and reference may be had to said application for a description of said devices.

The oblique surface 2, formed at one end of the nail and made shorter than the length of the nail, enables a uniform clinching-point without regard to the length of the nail.

I claim—

1. A nail made from cylindrical wire, having one side cut away at one end to form a diagonal surface, 2, and the opposite side cut away to form a flat surface, 5, of considerably greater length than the surface 2, the said surface 5 forming a chisel-point by its intersection with the surface 2, and by its elongation preventing the driven nail from turning, as set forth.

2. A wire nail cut away at one side to form an oblique surface, 2, and cut away at its opposite side to form a flat surface, 5, extending from the end intersected by the surface 2 nearly to the opposite end, and there terminating in a shoulder, 4, the last-mentioned end having the full diameter of the wire, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of July, 1887.

ELIHU WILDER.

Witnesses:

C. F. BROWN,

ARTHUR W. CROSSLEY.