

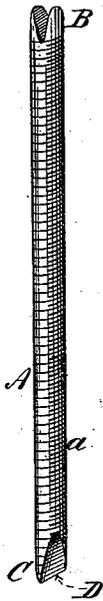
(No Model.)

H. A. HARVEY.  
WIRE SCREW NAIL.

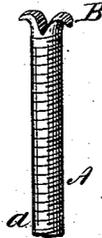
No. 377,452.

Patented Feb. 7, 1888.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

HAYWARD A. HARVEY, OF ORANGE, NEW JERSEY.

## WIRE SCREW-NAIL.

SPECIFICATION forming part of Letters Patent No. 377,452, dated February 7, 1888.

Application filed July 29, 1887. Serial No. 245,589. (No model.)

*To all whom it may concern:*

Be it known that I, HAYWARD A. HARVEY, of Orange, New Jersey, have invented a certain Improvement in Wire Screw-Nails, of which the following is a specification.

This improvement relates especially to wire nails, the peculiarity of which is that they are comparatively slender in proportion to their length.

The invention consists in providing the end of the blank which is to serve as the head with a V-shaped notch of such depth that when the nail is used the blows of the hammer upon its bifurcated end spread apart the two branches thereof and make them subs-  
serve the purpose of a head. Ordinarily the notch is not entirely obliterated by the act of driving in the nail, and enough of it remains to serve as a nick for the engagement of a screw-driver, by means of which the screw-nail may be unscrewed from the wood into which it has been driven.

The formation of the bifurcated heads is preferably effected in the act of severing the blanks from the coil of wire from which they are made by the use of suitable V-shaped cutting-dies. The blanks thus successively produced are each bifurcated at one end and chisel-pointed at the other end. Having been severed from the coil, the blanks may be successively fed to a threading-machine, by means of which a screw-thread may be formed upon their bodies. It is not, however, essential that the blanks be severed from the coil before being threaded, because the coil of wire may be itself provided with a screw-thread, which may be either continuous or formed upon the wire at suitable intervals, leaving blank or unthreaded portions at and adjoining the places where the severing operations are to be performed.

It will of course be understood that the notched or bifurcated head may be employed for wire screw-nails having points of any shape, such as conical points or pyramidal points; but as wire screw-nails are ordinarily used for driving in comparatively soft wood, the chisel-point will be found to answer every purpose, and the wood will not offer sufficient resistance to prevent the screw-nail from being readily unscrewed and removed by means of a screw-driver.

The accompanying drawings of wire screw-nails embodying the invention are as follows: Figure 1 is a perspective view of a wire screw-nail bifurcated at one end and chisel-pointed at the other, having a rolled screw-thread formed upon the whole of its body from the head to the point. Fig. 2 is a view of the head and adjoining portion of the screw-nail shown in Fig. 1, exhibiting the effect of driving in, spreading apart, and curling over the branches of its bifurcated head. Fig. 3 is an elevation of a conically-pointed wire screw-nail embodying the invention of the bifurcated or notched head, and having the portion of its shank adjoining the head unthreaded. Fig. 4 is an elevation exhibiting the effect produced upon the head of the wire screw-nail shown in Fig. 3 by the act of driving it into wood.

The characteristic features of screw-nails embodying the present invention are, first, that their bodies A, or any desired portions thereof, are provided with a screw-thread, *a*; second, that their heads B are of the same diameter as their bodies, but are bifurcated; and, third, that their points C are suitably sharpened. It is, however, an incidental feature of the invention when applied in the production of wire screw-nails provided with the chisel-point D that the bifurcated head of one blank or screw-nail and the chisel-point of the next adjoining blank or screw-nail are simultaneously produced in the act of severing the blanks from the coil of wire from which they are made.

What is claimed as the invention is—

1. A wire screw-nail having one end suitably pointed, and having its opposite end notched or bifurcated, but of the same diameter as its body, and having its body or any desired portion thereof provided with a screw-thread, substantially as shown and described.

2. A wire screw-nail having a chisel-point and a notched or bifurcated end, and a body the whole or any desired portion of which is provided with a screw-thread, substantially as shown and described.

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Witnesses:

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