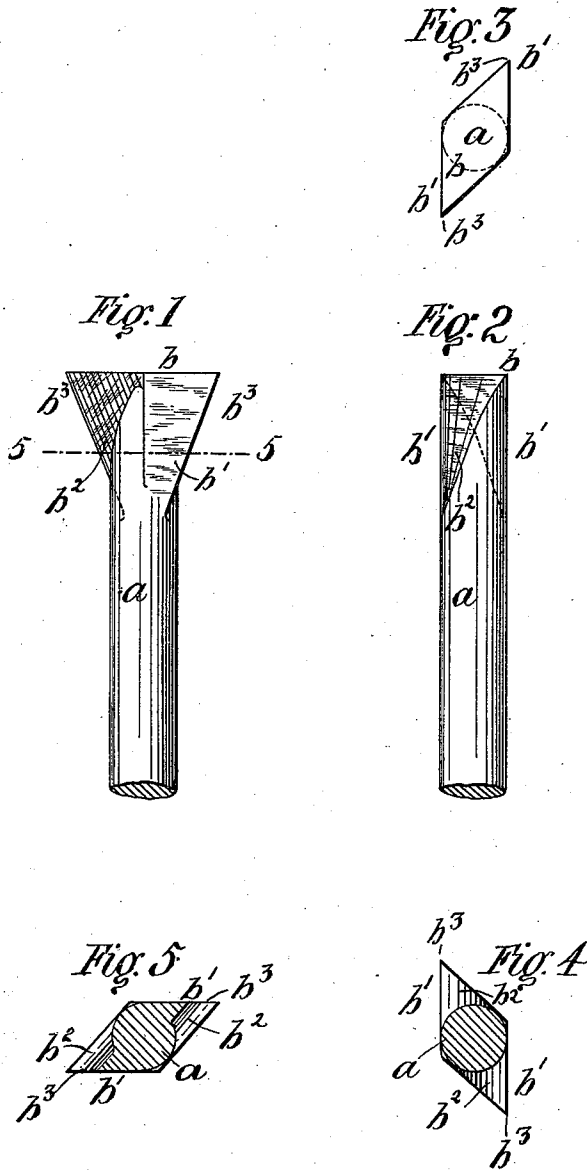


(No Model.)

W. SHEDLOCK.  
NAIL.

No. 547,812.

Patented Oct. 15, 1895.



Witnesses.

*Catharine Georgi*  
*John M. Eastley*

*William Shedlock,*  
*Inventor.*  
*per Alfred Shedlock,*  
*Atty.*

# UNITED STATES PATENT OFFICE.

WILLIAM SHEDLOCK, OF LONDON, ENGLAND.

## NAIL.

SPECIFICATION forming part of Letters Patent No. 547,812, dated October 15, 1895.

Application filed January 5, 1894. Serial No. 495,774. (No model.) Patented in England July 23, 1892, No. 13,435; in France January 18, 1893, No. 227,243; in Belgium January 19, 1893, No. 103,043; in Germany January 24, 1893, No. 72,177, and in Austria June 21, 1893, No. 2,135.

To all whom it may concern:

Be it known that I, WILLIAM SHEDLOCK, engineer, a citizen of the United States, residing at London, England, have invented new and useful Improvements in Nails and Spikes, (for which I have obtained patents in Great Britain, July 23, 1892, No. 13,435; in France, January 18, 1893, No. 227,243; in Belgium, January 19, 1893, No. 103,043; in Germany, January 24, 1893, No. 72,177, and in Austria, applied for January 25 and issued June 21, 1893, No. 2,135,) of which the following is a specification.

My invention relates to wire and other nails and spikes. Many kinds of nails as heretofore made are objectionable by reason of the comparatively large unsightly holes that are left in the wood when such nails are driven into the same, so that their heads are sunk below the surface thereof. Moreover, such nails are liable, when driven into the wood so that their heads are flush with the surface thereof, to unduly injure or displace the fibers of the wood in such a manner that the head of the nail does not properly fill the hole formed in the wood by the driving of the same therein. For these reasons the ordinary wire nails cannot be employed for fine work, such as joinery. It has also been proposed to make nails with projections and cutting-edges under the heads to cause the heads to more readily enter the wood; but these projections and cutting-edges have been arranged in one plane coincident with the axis of the nails, and such construction has little if any advantage over the ordinary flat-headed nails, as the entering edges act on the fibers of the wood in one plane and consequently tend to split the same, particularly when such nails are driven into hard wood.

Now my invention has for its object to obviate these defects, and this I accomplish by forming the head of the nail with cutting-edges arranged in different planes and formed by the juncture of surfaces inclined to one another, one of the surfaces of each of the cutting-edges being in a plane parallel to and preferably coincident with a side of the nail and the other sides at an angle to the axis of the nail. The upper edges of these surfaces

constituting the sides of the head form or determine the boundary of the head, so that no part of the head projects beyond or overhangs the side surfaces forming the cutting-edges to offer resistance flatwise to the surface of the wood while the nail is being driven therein, and as the cutting-edges are in different planes they act on different lines of fibers of the wood, and consequently the head may be driven flush with or into the wood without splitting the same or crushing down the fibers around the hole formed by the head. Moreover, when these nails are driven with their heads flush with the wood, an even smooth surface is produced, well adapted to receive paint without requiring any preliminary puttying or filling process.

In the accompanying drawings, which represent a nail made according to my invention, Figure 1 is a side elevation. Fig. 2 is an edge elevation. Fig. 3 is a plan or top view. Fig. 4 is an under side view showing the body or shank of the nail in section; and Fig. 5 is an under side sectional view taken on the line 5 5, Fig. 1.

In the manufacture of nails according to my invention I propose to use suitable material primarily drawn or formed into wire, and then by means of suitable dies form the heads of the nails as shown and complete the nails. The shank or body *a* of the nail is represented cylindrical in form, as are the bodies of ordinary wire nails now in use. It may have any desired form.

The head of the nail is composed of two trilateral projections extending from opposite sides of the body, the upper surfaces *b b* of these projections being in one plane and forming the top of the nail. The side surfaces *b' b'* of the two projections are in different planes parallel to the axis of the nail and extend from and are coincident with opposite sides of the body *a*, the other side surfaces *b<sup>2</sup> b<sup>2</sup>* angularly arranged in relation to the axis, each joining the body *a* from a point at the lowest part of the vertical side *b'* of the trilateral projection of which it forms a part to the top of the body, where the upper part, the vertical side *b'* of the other trilateral projection, joins the body. The junctures of the sides *b' b'* and the sides

$b^2 b^2$  form the cutting-edges  $b^3 b^3$ , which extend to the outer limits of the head, thus providing means for a cutting separation of the fibers of the wood for the whole extent of the head.

5 It will be observed that the cutting parts of this nail-head are chisel-shaped—that is, one side vertical and the other side inclined—so that they will enter the wood with a minimum driving power, will make clean cuts without tending to split the wood, which is further  
10 insured by the cutting-edges being in different planes, and impart great holding power to the nail, as the inclined sides of the cutting-edges cause the vertical sides to be pressed  
15 firmly against the sides of the hole formed by the head, and the head will fit snugly in the wood without any crushing of the fibers at the surface of the wood.

I claim as my invention—

20 1. A nail or spike having its head composed of projections, one side of each of which is in a plane parallel to and in line with the body, the other side of each of said projections being inclined to the axis and extending from

the top of the head to the side that is parallel to the body. 25

2. A nail or spike having cutting edges formed on its head in different vertical planes parallel to the axis of the nail, each of said cutting edges being formed by two surfaces 30 one of which is in a plane parallel to the body and the other inclined to the axis of the nail, whereby said cutting edges separate the fibers of the wood in different planes when the nail is driven with its head flush with the surface 35 of the wood.

3. A nail or spike having opposite sides of its head in planes parallel with the axis and in the same plane with the corresponding side of the body and the other sides of its head at 40 angles thereto, the meeting edges of adjacent sides forming cutting edges extending from the body to the top surface of the head and to the outer points or limits thereof.

WILLIAM SHEDLOCK.

Witnesses:

DAVID YOUNG,  
HENRY W. LYNDEN.