(No Model.)

T. J. SLOAN.

WIRE NAIL.

No. 348,589. Patented Sept. 7, 1886.

Fig. 1.

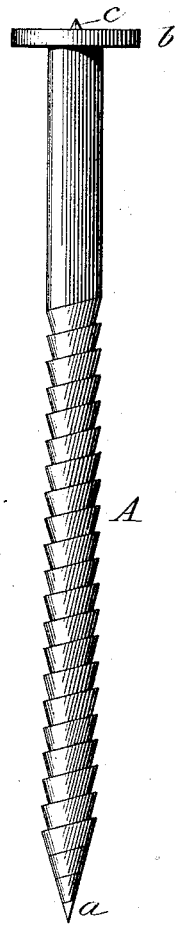


Fig. 2.

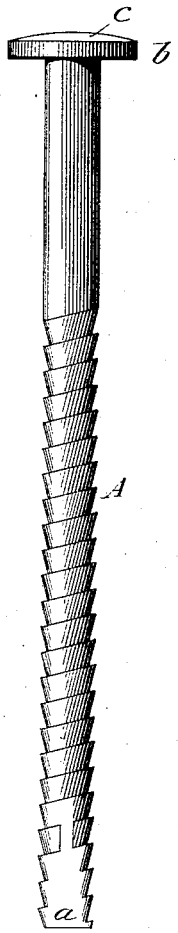
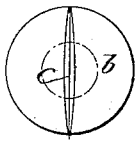


Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS J. SLOAN, OF ST. MANDÉ, FRANCE.

WIRE NAIL.

SPECIFICATION forming part of Letters Patent No. 348,589, dated September 7, 1886.

Application filed March 19, 1886. Serial No. 195,846. (No model.) Patented in France July 13, 1880, No. 137,782, and July 13, 1881, No. 143,931.

To all whom it may concern:

Be it known that I, THOMAS J. SLOAN, formerly of the city, county, and State of New York, and now of St. Mandé, Seine, in the Republic of France, have invented an Improvement in Wire Nails, of which the following is a specification.

This invention belongs to that class of nails which have substantially cylindrical bodies, and which from the material of which they are made are commonly known as "wire nails."

The invention comprises a novel combination in a nail of this class of certain specific features, whereby the nail may be much more readily driven to its place, and whereby its hold when thus driven is rendered much more secure than is found practicable with nails of ordinary structure.

In practice the nails may be made of the several sizes commonly known in the trade or of such other sizes as may be demanded by the exigencies or caprice of the market.

The accompanying drawings represent a wire nail made according to my said invention, but for the sake of clearness of delineation greatly exaggerated in size, in which—

Figure 1 is a side view; Fig. 2, a side view at right angles to Fig. 1, and Fig. 3 a top view—that is to say, a view showing the outer surface of the head of the nail.

The point of the nail is made sloping or inclined at opposite sides to form a chisel-point, as represented at *a*. The head *b* of the nail is in shape substantially flat with a circumferential contour more or less approximating a circular form. Across the outer surface of the said head *b*, and in substantially the same plane as the chisel-edge of the point *a* is formed a line or mark, *c*. This mark *c* may be formed by the die by means of which the head is shaped or flattened in the operation of making the nail, and the said mark may consist of a small ridge or elevation formed transversely upon said outer surface of the head *b* in the described relation with the chisel-edge of the point *a*, or in lieu of this the mark may comprise a slight depression. The cylindrical body A from its chisel-point to a point more or less distant from the head *b* is spirally threaded or grooved—in other words, screw-threaded—in order that the nail when driven in place may secure a more firm and positive hold upon the wood fibers in contact with which it is forced.

The peculiar advantages arising from the use of a nail made according to my invention are that the chisel-point cleaves its way straightly—that is to say, without bend—irrespective of any curvature, twist, or irregularity in the grain of the wood. In other words, the chisel-point cuts its way through the fiber of the wood without being deflected, thereby not only insuring much easier driving of the nail, but avoiding any distortion from the path through which it is driven, and thus enabling the contiguous surface of the wood to more closely grip the roughened or grooved surface of the shank of the nail, thereby enabling the nail to hold with far greater tenacity than would be the case if the nail itself were bent or deflected, inasmuch as such bend or deflection when allowed inevitably enlarges the space formed by the driving of the nail and renders the hold of the latter insecure. Furthermore, the driving of the nail in many cases may be advantageously facilitated by bringing the chisel-point in such relation with the known or estimated course of the fiber of the wood as will enable the chisel-edge to act most effectively in cleaving its way therethrough. The transverse mark *c* on the head *b* being in the same or substantially the same plane as the chisel-edge of the point enables the said point to be adjusted as may be desired, inasmuch as the direction of the chisel-edge is correctly indicated by the transverse mark on the head, and this latter is fully exposed to the eye of the person driving the nail.

When desired, the shank of the nail may have its roughened surface formed by circumferential concentric grooves not spiral in character; or it may be otherwise roughened, in order to secure the strong holding power incident to the roughened configuration of the said shank; but in general it will be found preferable to have the shank screw-threaded, as described.

What I claim for my invention is—

As a new article of manufacture, the herein-described wire nail, having a roughened shank, a chisel-point, *a*, and a head, *b*, provided with a transverse mark on its outer surface arranged in definite relation with the edge of the chisel-point, to indicate by its own transverse position the transverse position of the said chisel-point, all substantially as and for the purpose herein set forth.

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