Nichols & Strong,

Making Picture Nails,

No. 32,527. Patented June 11, 1861.

Fig 1.

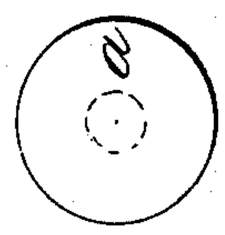


Fig 2.

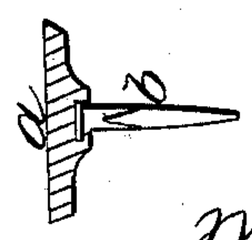


Fig 3.

Fig 4.

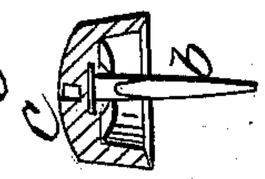


Fig 5.

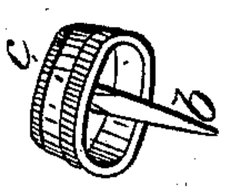
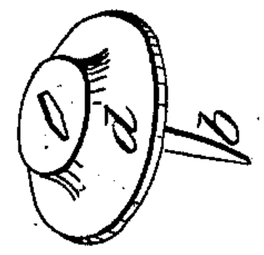


Fig 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

W. H. NICHOLS AND F. D. STRONG, OF EAST HAMPTON, CONNECTICUT.

IMPROVED NAIL OR SCREW HEAD.

Specification forming part of Letters Patent No. **32,527**, dated June 11, 1861.

To all whom it may concern:

Be it known that we, W. H. NICHOLS and F. D. STRONG, of East Hampton, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Constructing Ornamental Heads on Nails and Screws; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a top view of the circular disk or blank which is cast on the head of a nail or screw before it is swaged into its desired shape. Fig. 2 is a vertical section through the blank of Fig. 1, exposing the nail-head. Figs. 3, 4, 5, and 6 represent ornamented heads which are produced from the blanks or disks of Figs. 1 and 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is an improvement in forming ornamental metallic heads on the heads of common nails or screws by first casting a circular blank on the head of a nail or screw suitably adapted to the size thereof, and then producing from said blank a head of the desired shape and ornamentation by subjecting the blank to heavy pressure between swaging-dies adapted to the purpose, thereby obtaining a superior article at less cost and with less imperfect work than can be produced in the ordinary method of forming ornamental heads on nails and screws.

To enable those skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

The tacks or screws on which the ornamental heads are to be formed are put into suitable molds and a thick circular disk or blank *a* is cast on each, as represented in Figs. 1 and 2 of the drawings. The thickest portion of these blanks is in the center, surrounding the head of the nail *b* or screw, as the case may be, and the thin portion is at and near the circumference of the blanks. The head of the nail *b* is therefore embedded in a good solid body of metal, and the disk *a* will be held rigidly on the nail. These blanks can be cast on the nails much more rapidly and sounder in blank form than in the old way of casting cup-shaped heads, where a core is necessary to give the cup shape to the heads, and where a core is used it is well known that very much of the work has to be done over again in consequence of the "blow-holes" which are left in the heads by imperfect casting; but in casting the solid blanks *a* a core is not used, and the molten metal will therefore flow freely into the molds and make perfect castings. The blanks *a* having been cast around the nail-heads, as described, and represented in Figs. 1 and 2 of the drawings, these blanks are subjected to heavy pressure between suitable swaging-dies, and the metal is formed into the cup-shaped heads *c c*, as represented in Figs. 3, 4, and 5, or into the button-shaped head *d*, as represented in Fig. 6, or in any other desirable form may these blanks be swaged by using dies suitably adapted to the purpose.

Here again we obtain an advantage in securing the metallic heads to the heads of the nails or screws, for in the swaging process the metal will be firmly compacted around the tack-head, and there will be little liability of the heads working loose under ordinary usage.

The metallic heads receive their ornamentation in the swaging process, and this process so hardens the metal that it will receive a better polish and is not liable to tarnish.

We are aware that ornamental heads have been produced on the heads of nails, screws, &c., by casting the same in molds in the cup form, and we are also aware that such heads have been produced by swaging disks of rolled sheet metal around the heads of screws and nails, neither of which methods do we claim; but,

Having thus described our improvement, we claim and desire to secure by Letters Patent as an improved article of manufacture—

An ornamental nail or screw made with a head which is first cast upon the shank and then pressed, in the manner herein shown and described.

W. H. NICHOLS.
F. D. STRONG.

Witnesses:
ELLEN A. BARTON,
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