T. C. RICHARDS.

SCREW ATTACHMENTS FOR PICTURE-NAILS.

No. 169,921. Patented Nov. 16, 1875.

Fig: 1

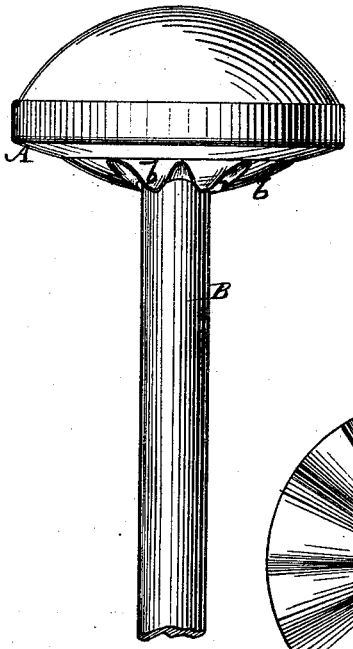


Fig: 2

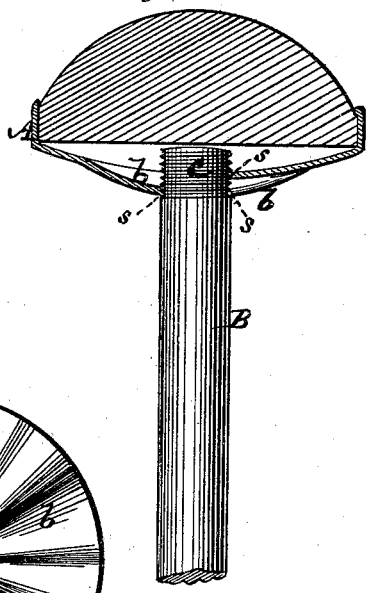


Fig: 3

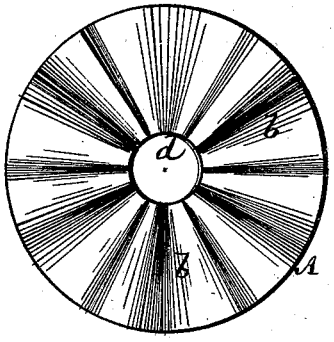


Fig: 4

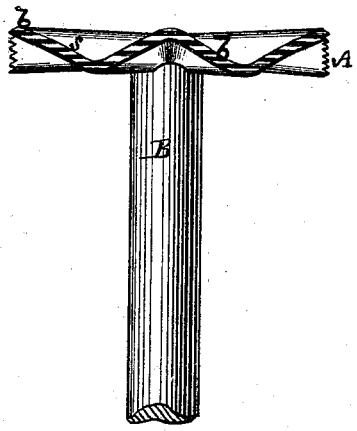
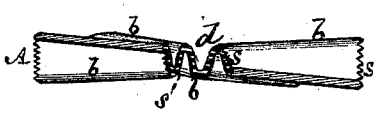


Fig: 5



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THOMAS C. RICHARDS, OF WEST WINSTED, CONNECTICUT.

IMPROVEMENT IN SCREW ATTACHMENTS FOR PICTURE-NAILS.

Specification forming part of Letters Patent No. **169,921**, dated November 16, 1875; application filed April 19, 1875.

To all whom it may concern:

Be it known that I, THOMAS C. RICHARDS, of West Winsted, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Screw Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms part of this specification.

This invention has for its object the cutting of screw threads on sheet metal with great economy as regards the amount of metal used. To this end the invention consists in a male or female screw composed of a corrugated disk or plate of metal, having the screw-thread formed upon or in and intersecting its corrugations.

The invention is applicable to the heads of picture-nails and various other articles.

Figure 1 represents a side view, upon an enlarged scale, of a picture-nail, in part, having my invention applied; Fig. 2, a longitudinal section thereof. Fig. 3 is a face view of a corrugated disk designed to have a screw-thread on it in accordance with my invention. Fig. 4 is an edge view of the same screwed on a rod or nail-shank; and Fig. 5, a transverse section of said disk.

In Figs. 1 and 2, A is a sheet-metal cup or plate composing the outer case or shell of the head of a picture-nail. This sheet-metal cup is struck up to form corrugations *b*, extending to the center of it, and so that on perforating such corrugated portion a hole having a corrugated edge is left, within or on which a screw-thread, *s*, intersecting the corrugations, may be cut to admit of the cup being screwed onto a rod or nail-shank, B, having a screw-thread, *c*, on it to correspond.

In Figs. 3, 4, and 5, in which similar parts to those shown in the previous figures have like letters, a similar construction is shown, the corrugations *b* only being of different shape, and these may be almost indefinitely varied, as may also the shape and use of the corrugated article generally. It is immaterial, so far as the invention is concerned, whether the screw-thread *s* on the corrugated disk-plate or other article be a female one—that is, be made around the corrugated edge formed by the hole *d*—or whether it be a male one—that is, around the outside edge of the disk or plate.

By thus cutting the screw-thread within or on and intersecting the corrugations, I obtain a long screw-bearing for the disk or plate, although using but very thin sheet metal in the production of it.

I claim—

A male or female screw composed of a corrugated disk or plate of metal, having the screw-threads formed upon or in and intersecting its corrugations, substantially as and for the purposes herein described.

T. C. RICHARDS.

Witnesses:

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