2 Sheets--Sheet 1.

A. TAPLIN.

Mode of Forming Sheet-Metal Threaded-Collars.

No. 161,912. Patented April 13, 1875.

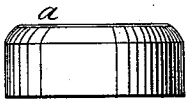

Fig. 1.

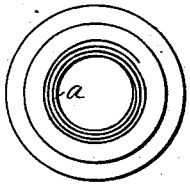

Fig. 2.

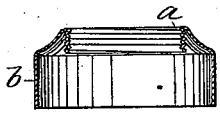

Fig. 3.

Witnesses

George W. Mitchell.

Henry A. Mitchell

Inventor

Alvin Taplin.

By James Shepard

Atty.

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2 Sheets--Sheet 2.

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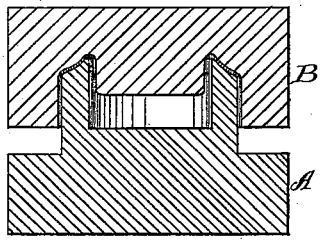
Fig. 4.



Witnesses.

Henry A. Mitchell

Geo. H. Gourdy

Inventor

Alvin Taplin

By James Shepard Atty.

THE GRAPHIC CO. PHOTO.-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

ALVIN TAPLIN, OF FORESTVILLE, CONNECTICUT.

IMPROVEMENT IN MODES OF FORMING SHEET-METAL THREADED COLLARS.

Specification forming part of Letters Patent No. **161,912**, dated April 13, 1875; application filed January 11, 1875.

To all whom it may concern:

Be it known that I, ALVIN TAPLIN, of Forestville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in the Art of Forming Threaded Sheet-Metal Collars, of which the following is a specification:

My improvement consists of first forming the thread upon a flat surface, and then forming said flat, threaded surface into a collar, all as hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a lamp-collar embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a central vertical section. Fig. 4 is a central vertical section of an ordinary swaging-die for striking up lamp-collars.

Ordinarily these lamp-collars have been struck into form by dies, and afterward threaded by means of a tap, which cuts the thread. Other collars, as caps for fruit-jars, oil-cans, &c., are also made by first forming the collar or cap, and subsequently threading it by spinning, swaging, or otherwise. For this reason I do not claim as new threading a sheet-metal collar or cap by offsetting the metal so as to form a thread upon both sides of the collar.

In my process the collar or cap may be partially formed, as shown in Fig. 2, leaving the portion designed to be formed into a threaded collar flat. In said figure the central portion *a* is designed to be formed into a threaded collar. I form the thread upon this flat portion by striking it up in dies, the thread beginning at the edge of the central hole, and gradually extending outward, in spiral or scroll form, for a distance equal to the desired depth for threaded portion of the collar. The flat portion *a*, with the thread thus formed upon it, is fully shown in Fig. 2.

While I prefer to form this thread by striking up in dies, it may be formed by other known processes, provided it is formed in the flat blank previous to forming the collar into its final form. When the thread is thus formed in the flat blank or partially-finished collar, it is placed in or on the ordinary finishing-die, and struck up into its final form, throwing the portion *a* into a ring or collar, as shown in Fig. 3, the thread then being in the usual form of a threaded hole, and ready to receive a proper male screw without further fitting.

The dies employed for striking the threaded blank into its final form consist of a male and female die of the form of the finished collar, and are precisely the same as dies ordinarily used for striking up similar articles, care being taken that the space between the male and female die at the point which comes opposite the thread *a* is such as not to batter and flatten the thread, as shown in Fig. 4, and in which A designates the male and B the female member.

The blank, threaded as shown in Figs. 1 and 2, is placed upon the dies above described, and "struck up" in precisely the manner as the same-shaped blank would be struck into the same final form if there were no thread on it; or, in other words, the presence of the thread, after the dies are properly fitted, makes no difference whatever in the process of striking up.

If desired to form the threaded collar upon some other portion of the device than that shown in the drawing, it can be easily done by merely threading that portion of the blank which is designed to be formed into the threaded collar when in the flat, and afterward forming it into a collar. For example, suppose it was desired to thread the portion *b* of Fig. 3, instead of the portion *a*. In that event the thread in scroll form would be formed at the outer edge of a flat disk for a width equal to the desired depth of the threaded collar, after which threading the disk may be formed into a collar, when the thread will be ready for use, as in the portion *a* before described.

Although my process was primarily intended for lamp-collars and lamp-burners, it is evident that it may be used advantageously in forming threaded sheet-metal collars for various uses.

I claim as my invention—

The improvement in the art of forming threaded sheet-metal collars which consists of first threading the blank in the flat, and afterward forming said threaded portion into a collar, substantially as described.

ALVIN TAPLIN.

Witnesses:
JAMES SHEPARD,
GEORGE W. MITCHELL.