

W. CARR.

Apparatus for Shrinking Metal Bands.

No. 141,992.

Patented August 19, 1873.

Fig. 1.

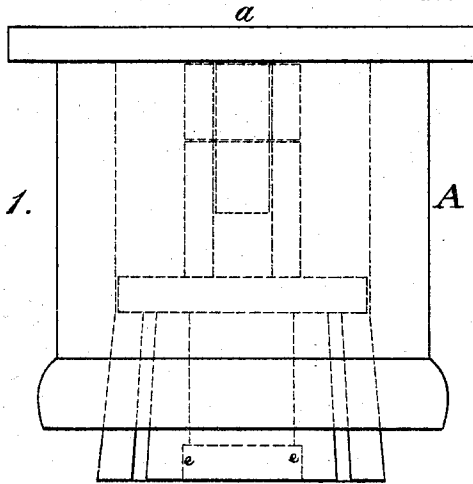


Fig. 2.

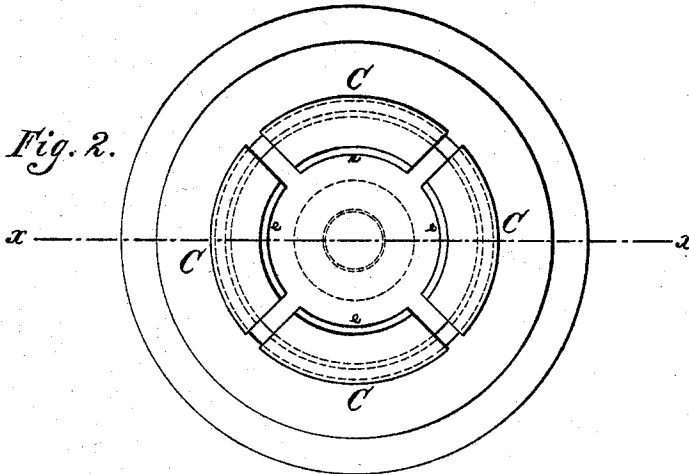
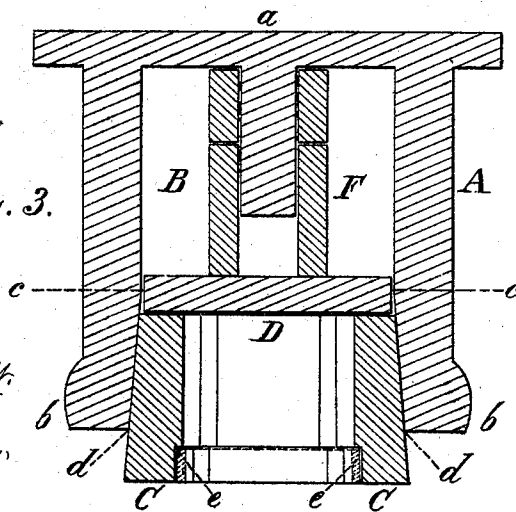


Fig. 3.



Witnesses:
Jacob C. Schmidt,

Moiland J. Walton,

Inventor:

W. Carr,
by
John A. Schenck & Co.
attys.

UNITED STATES PATENT OFFICE.

WILLIAM CARR, OF LOGANSPOUT, INDIANA, ASSIGNOR TO KELSEY BROWN,
OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR SHRINKING METAL BANDS.

Specification forming part of Letters Patent No. 141,992, dated August 19, 1873; application filed April 18, 1873.

To all whom it may concern:

Be it known that I, WILLIAM CARR, of Logansport, county of Cass and State of Indiana, have invented a new and useful Improvement in Band-Shrinkers; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side view of the device embodying my invention. Fig. 2 is a bottom view thereof. Fig. 3 is a central vertical section in line *x x*, Fig. 2.

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

This invention relates to an apparatus for shrinking metal bands for various purposes; and consists in a hollow box having its inner face partly contracted, and receiving a series of tapering plates, the band being applied to and held on the inner faces of the tapering plates, which plates are caused to advance into the box by pressure on the latter, and, owing to the contracted inner face of the box, the plates are forced together, and thus act on the band so as to shrink the same. It also consists in a spring for forcing out the tapering plates, and assist the operation of removing the band when shrunk.

Referring to the drawings, A represents a box or hollow body, which is closed at its top and open at bottom *b*. The inner face or cavity B is cylindrical to the point *c*, where it flares or tapers to the bottom *d*. C represents a series of circular sections or plates of tapering form, which together constitute a sectional ring, and are adapted to enter the cavity B and occupy position thereon, as shown in Fig. 3. The inner faces of the sections are shouldered, as at *e*, for the reception and retention of the band to be shrunk, the band being illustrated by the dotted lines. Within the cavity is placed a disk or head, D, which bears

against a spring, F, arranged in the cavity between the top *a* of the box A and the head, and the sections or plates C when in use rest against said head.

The operation is as follows: The section C being placed in the box, the head D and spring F having been previously properly located, the band is fitted within the sections C against the shoulders *e*, and rests on a suitable bed. The outer ends of the sections are thus thrown and held out so that the sections will not enter the box without subsequent manipulations. Power is now applied to the box A, so that the latter is forced over the sections, whereby the said sections, owing to the tapering form of the cavity B, are contracted, and thus act on the band and shrink it in a uniform, easy, and reliable manner, as is evident to those familiar with the art.

The box may be rested on the ground or a suitable bed, and the sections C be uppermost, so that the power may be applied to the latter to force them in the box; but the operation will be the same as has been stated.

When the band is shrunk, the power on the box is removed or withdrawn, and the spring F pressing against the head D serves to force out the sections C, and assist the operation of releasing the band.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The tapering sections C, forming a hollow sectional ring, and having shoulders *e* on the inner faces, in combination with the box A, tapering on its inner face, substantially as and for the purpose set forth.

2. The spring F and head D, in combination with the sections C C and body A, substantially as and for the purpose set forth.

The above signed by me this 24th day of March, 1873.

WILLIAM CARR.

Witnesses:

T. S. ROLLINS,
KELSEY BROWN.