

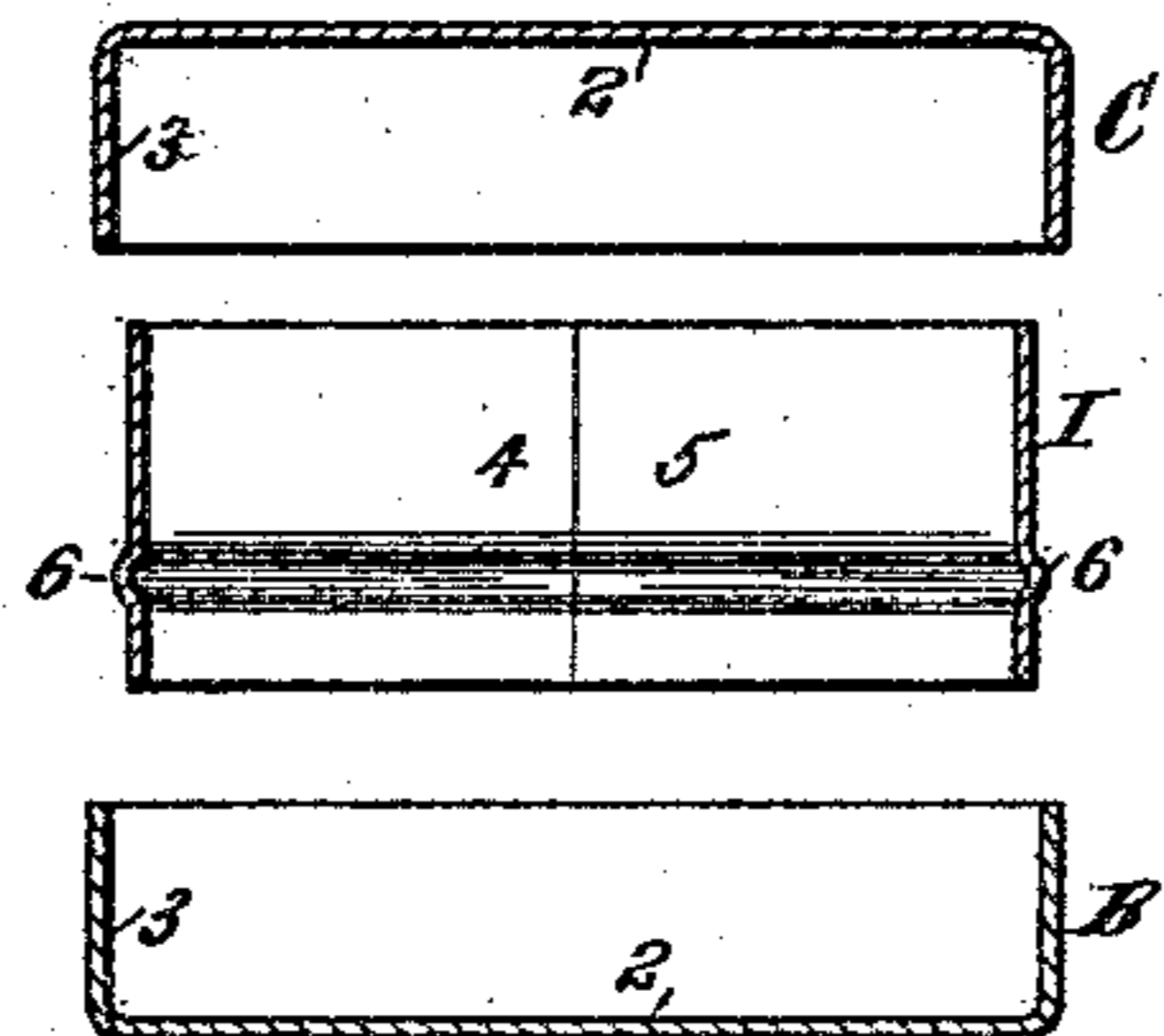
(No Model.)

W. H. ATKINSON.  
METAL BOX.

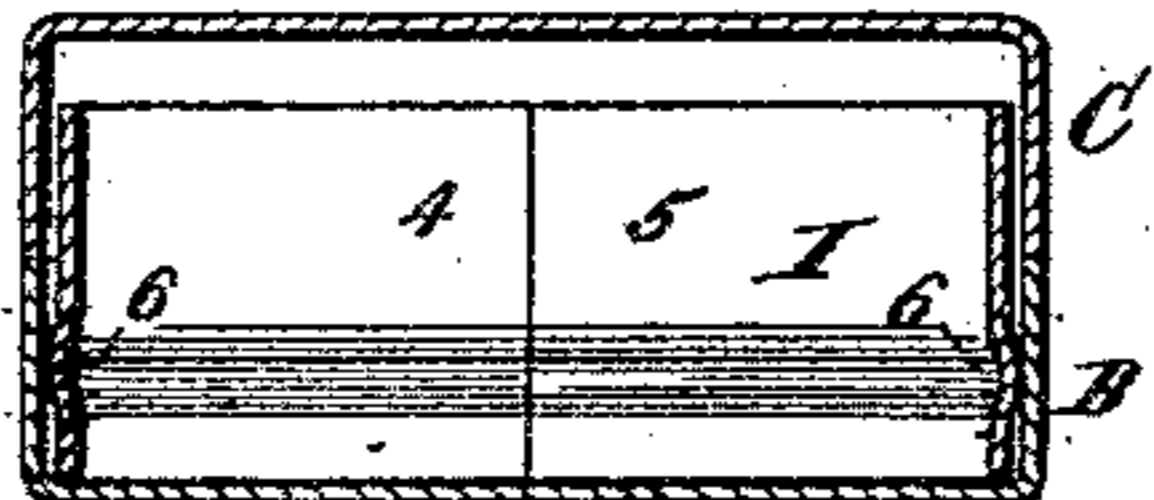
No. 411,773.

Patented Oct. 1, 1889.

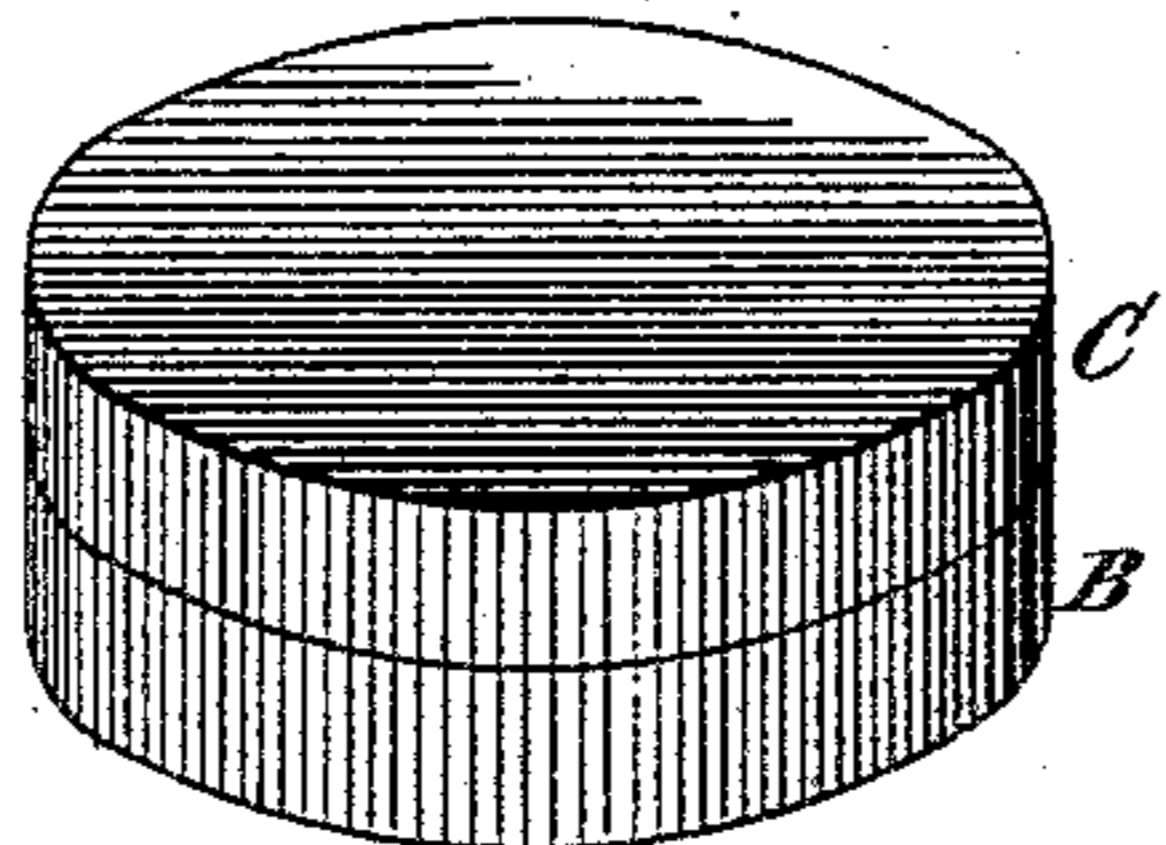
*Fig. 1.*



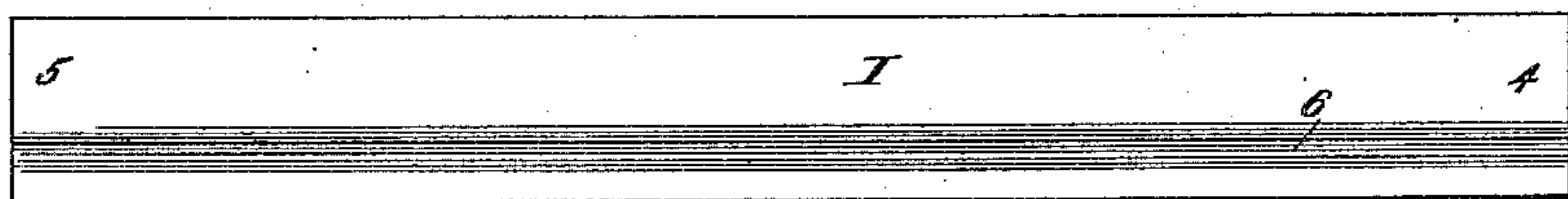
*Fig. 2.*



*Fig. 3.*

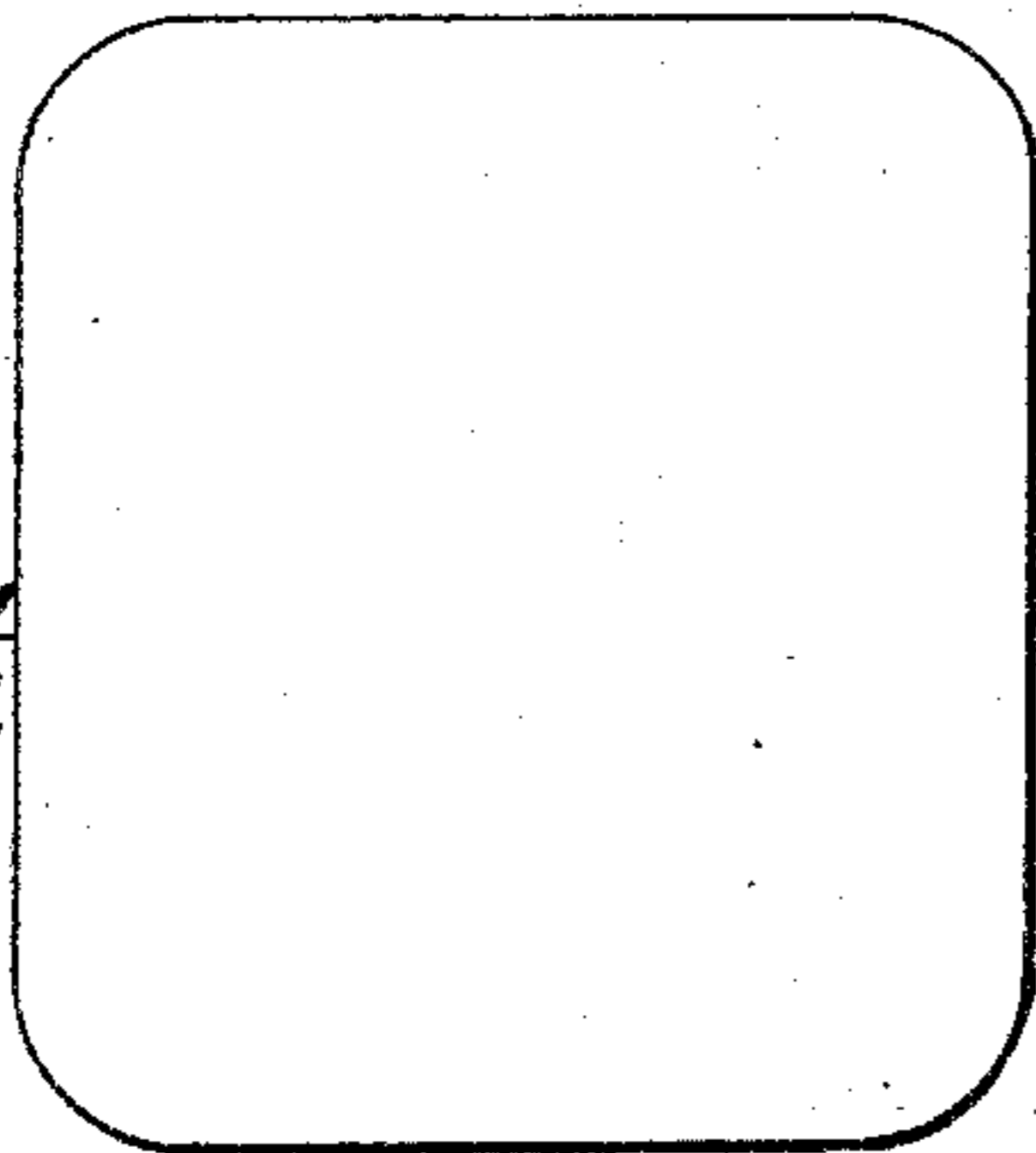


*Fig. 4.*

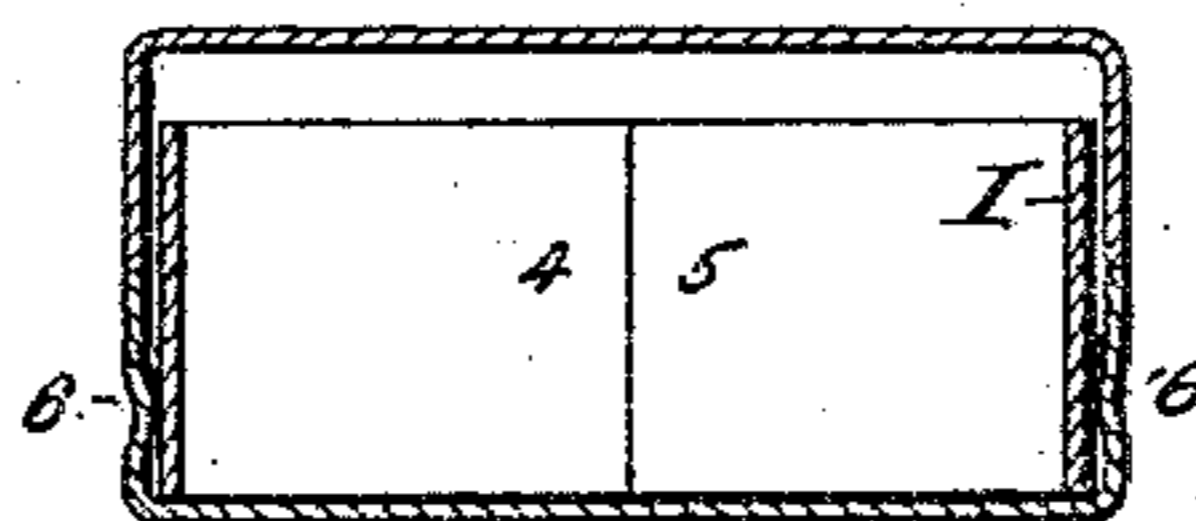


*Fig. 6.*

Attest:  
Geo. H. Bots.  
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*Fig. 5.*



*Inventor.*

William H. Atkinson  
by Philip Phelps Hony  
Attys

# UNITED STATES PATENT OFFICE.

WILLIAM H. ATKINSON, OF BROOKLYN, NEW YORK.

## METAL BOX.

SPECIFICATION forming part of Letters Patent No. 411,773, dated October 1, 1889.

Application filed May 8, 1889. Serial No. 310,028. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. ATKINSON, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Metal Boxes, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 This invention relates to that class of boxes wherein the body is provided with a projecting collar upon which the cover is held, said neck being so related to the body and cover that the body shall present a smooth exterior.

15 The invention consists in fastening the said collar within the body by means of a holding-bead, whereby the necessity of soldering is removed and the collar is adapted to so fit the cover that the latter may be easily removed and replaced, as will be more particularly hereinafter pointed out and claimed.

In the drawings illustrating this invention, Figure 1 is a sectional elevation showing the 25 cover, collar, and the body of the box separated from each other. Fig. 2 is a similar view showing these parts associated to form a complete box. Fig. 3 is a perspective view of the box. Fig. 4 is a plan view of the collar-strip straightened out. Fig. 5 is a sectional elevation showing a modification of the invention, and Fig. 6 is a plan view of one form of box.

35 Heretofore boxes of this character have had the collar for receiving the cover secured within the box by soldering, which mode of fastening necessitates a difficult operation, adding greatly to the cost of production of what must from trade necessity be a cheap article of commerce. When boxes are small— 40 and the greater portion of the boxes produced are diminutive—the difficulty of properly soldering is increased, and the liability of the collar becoming detached by reason of faulty soldering is great.

45 In producing my improved box I form the body B and cover C out of suitable plates of metal shaped to suit the ultimate contour of the box, swaged into cup-like form to provide them with a base 2, surrounded by a flange 3. (See Fig. 1.) The collar I is a straight strip of metal of proper width to provide the necessary projection above the body B to re-

ceive the cover C, and of a proper length that will cause its ends 4 5 to meet and abut 55 when said strip is forcibly pressed within the body B, so as to snugly fit against the inner wall of said body, said collar then projecting from the body in proper position to guide the cover onto the body B and hold the same in place, so that the exterior of the box shall be 60 even and smooth. To secure the collar I in this position so that it may be held firmly in place against all tendency to leave that position when the cover C is removed, I provide 65 a holding-bead 6, preferably formed in the collar-strip by the usual swaging operation, in such a position that it will when the collar-strip is curved and inserted into the body B form a horizontal bearing pressing against 70 the inner wall of the body, and securing the collar I in place with its protruding portion standing very slightly within the plane of the inner surface of the body, and thus being adapted to receive the cover and hold it 75 in place with a less frictional resistance than is exerted by the said bead. This holding-bead 6 may be formed in the body B itself, as in Fig. 5, the pressure exerted by forcing the collar to place through the contact of its 80 meeting ends 4 5 being sufficient in either case to securely hold the collar against dislodgment without any other means of fastening.

Although I have described this improvement 85 in its application to a circular box, it may be applied to a square box with rounded corners, as shown in Fig. 6, and to the many other shapes or designs common in this article.

What is claimed is— 90

The herein-described metal box, consisting of the cup-shaped body B, the collar I, fitting within the body, with its ends 4 5 abutting, and its upper edge extending above the body and held in place by a bead 6, which produces 95 frictional engagement between the body and collar, and the cover C, also cup-shaped and adapted to fit over the upwardly-projecting edge of said collar, substantially as described.

In testimony whereof I have hereunto set 100 my hand in the presence of two subscribing witnesses.

WILLIAM H. ATKINSON.

Witnesses:

T. H. PALMER,

G. M. BORST.