J. W. DOWLING.

Combined Wood and Sheet-Metal Box.

No. 205,739. Patented July 9, 1878.

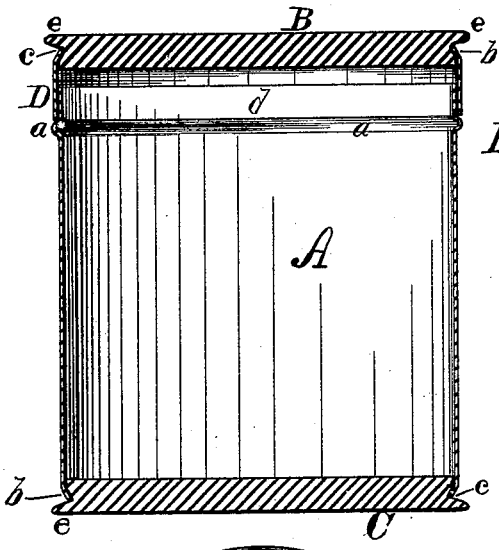

Fig. 1.

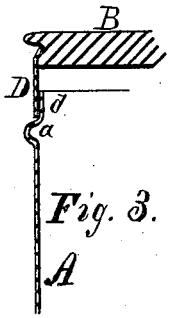

Fig. 3.

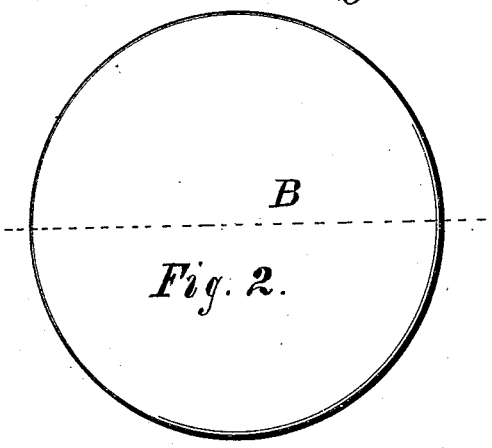

Fig. 2.

Attest:

Geo. Hebard.

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UNITED STATES PATENT OFFICE.

JOHN W. DOWLING, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN COMBINED WOOD AND SHEET-METAL BOXES.

Specification forming part of Letters Patent No. **205,739**, dated July 9, 1878; application filed May 6, 1878.

To all whom it may concern:

Be it known that I, JOHN W. DOWLING, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Combined Wood and Sheet-Metal Boxes, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a longitudinal central section; Fig. 2, an end view; and Fig. 3, a detached section, described further on.

The object of my invention is to produce a cheap and substantial box for the purpose of holding much of the finer and more valuable merchandise of the grocer; also paint-leads, blacking, collars, &c.; and it consists in a sheet-metal body, preferably cylindrical in form, with wooden heads or ends, the novelty of the invention consisting in the manner of forming the heads and securing them to the metal body, fully explained further on.

In the drawing, A is the body of the box, preferably formed of sheet metal, and B and C respectively the top and bottom heads, fashioned out of cherry or other suitable wood. The upper head B, I provide with a narrow band, D, of the same metal of which the body is made, the head B and band D together forming the cover proper of the box.

The wooden heads B and C are made alike, each being provided with a continuous peripheral groove, *c*, of angular cross-section, into which, by suitable machinery, the edge of the metal body A and band D are bent and closely rolled, forming flanges *b*, that gripe tightly upon the heads, as fully shown in the drawing.

The flanges *b* are turned inward at a sufficiently sharp angle to thoroughly "set" the metal, rendering it stiff, and adding largely to the strength of the box, at the same time holding firmly upon the wooden heads, thus dispensing with nails, rivets, solder, &c., in the construction of the box, save as to a single longitudinal soldered seam in the body.

In forming the grooves *c* in the heads, projecting ledges or flanges *e* are left, having a slightly larger diameter than that of the inclosed portion of the heads, which flanges form finger-rests for conveniently removing the cover.

The body A and band D are of equal diameter, the portion *d* of the body above the bead *a* being offset inward to the amount of the thickness of the metal, as shown in Fig. 3, allowing the cover to fit upon the outside.

The reducing of the diameter of the body at *d* to enter within the band D of the cover is done at the same time the bead *a* is formed, and is of great importance in manufacturing the boxes, for the bodies are cut from pipes or tubes previously formed, and the remnants, after the full-length pieces are cut off, are immediately cut into bands for the covers, as are also any pieces that may be in any way rendered unfit for bodies. Thus a large amount of material is utilized that would otherwise be wasted; and, further, were the portion at *d* not reduced in size, it would necessitate the making of two-sized tubes, one for the bodies and one for the bands, also two sizes of wooden heads, all of which would require extra sets of tools for their formation, besides leading to confusion and consequent loss from the liability of there being put together improper parts, which, as now made, are interchangeable, and may be united indiscriminately.

These boxes may be made oval, or other shape than cylindrical, and I manufacture them of various sizes and proportional depths, to hold spices, agents' samples, shoe-blacking, &c.

Boxes having wooden heads and sheet-metal sides or bodies have been known before. Such, broadly, I do not claim.

What I claim as my invention, and wish to secure by Letters Patent, is—

A box consisting of a metal body, metal cover-ring, and of wooden heads formed at their periphery into an annular groove, *c*, to receive the flange *b* of the body, and into an annular projecting bead or finger-rest, *e*, substantially as shown and described.

JOHN W. DOWLING.

Witnesses:

E. B. WHITMORE,

F. B. HUTCHINSON.