I. PORTER.

Sheet-Metal Can.

No. 205,677. Patented July 2, 1878.

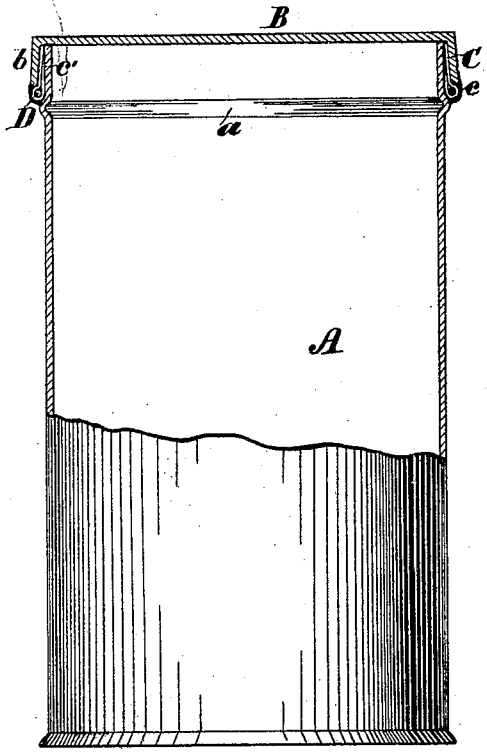

Fig. 1.

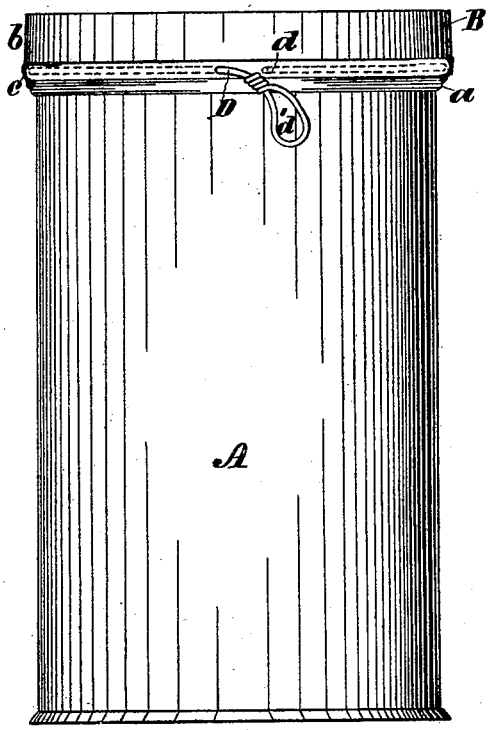

Fig. 2.

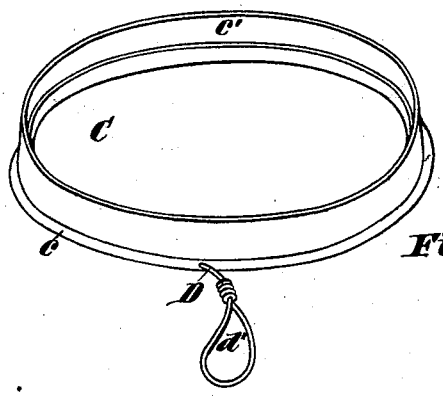

Fig. 3.

WITNESSES:

Saml. J. Vanstavoren

Jos. B. Connolly

INVENTOR,

Isaac Porter,

By Connolly Bros, ATTORNEYS.

UNITED STATES PATENT OFFICE.

ISAAC PORTER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **205,677**, dated July 2, 1878; application filed June 8, 1878.

To all whom it may concern:

Be it known that I, ISAAC PORTER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sheet-Metal Cans and similar vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a side elevation of a can, partly in section, with my improvements attached thereto. Fig. 2 is a side elevation of the same, and Fig. 3 is a perspective view of my improvements.

My invention has relation to that class of cans and similar vessels in which a frangible joint is employed to connect the body of the vessel with its top, lid, or end; and my improvement consists in the combination, with a band or ring of soft brass or equivalent metal or material, constituting a frangible joint, connecting the rim of the can-cover with the body of the can, of a ripping-wire, string, or equivalent medium, so arranged that by the exertion of traction or tension upon it said soft-metal band or ring will be ruptured or broken to permit the detachment of the lid from the body of the can or other vessel.

Referring to the accompanying drawing, A designates the body of a can or similar vessel, and B its top, lid, or end. Said body is, by preference, formed with an outwardly-projecting bead, *a*, near its upper edge, (to hold the joint-band in place,) while the lid B has the usual annular depending flange *b*.

C represents a ring or band of soft brass or other equivalent metal or material. Said ring or band is formed with a rib or bead, *c*, around its lower edge, the part above such bead or rib constituting an annular flange, feather, or fin, *c'*, which is applied to the vessel so as to rest against the body of the same and inside the depending flange *b* of the lid B.

D is a wire string or equivalent flexible medium, which rests inside the rib or bead *c*, one of its ends being fastened or concealed therein at or about the point *d*, while its other end projects, and is formed into an eye or loop, *d'*.

The ring or band C being applied to the vessel, as shown, and the lid B slipped over it, solder is employed to fasten the rib or bead *c* to the body A and top B, respectively, the soldering operation having the effect of covering or coating said rib so as to conceal the brass and give the joint the same or nearly the same color as the other parts of the tinned metal.

To detach the lid, the looped projection *d'* of the wire is taken hold of and traction or draft exerted on the wire. This has the effect of fracturing or rupturing the outer fold or thickness of the rib *c*, leaving the lower part of the band C adhering to the body of the vessel, while its upper part remains in and goes with the lid.

By arranging the wire D so as to leave a part of the bead *c* unoccupied, said part will not be ruptured when draft is exerted on the wire, and will answer for a hinge on which the lid may be thrown back; or, if preferred, the concealed end of the wire may be brought fully up to the point where the opposite end projects from the rib *c*, so that the joint may be ruptured throughout its entire circumference by traction on the wire, thus permitting the entire removal of the lid from the body of the vessel.

I have shown the soft-metal band or ring as completely covering the ripping-wire D, except the projecting end of the latter; but this is not absolutely necessary, as like results may be obtained by forming the rib or bead *c* so as to only partially surround said wire, acting thus as an external sheathing, which is open on the rear side or side adjacent to the body of the vessel.

What I claim as my invention is—

1. The band C, of soft metal or equivalent material, adapted for soldering or attachment to a can, A, having a cover, B, with rim C, and formed with a rib or bead, *c*, and provided with a ripping wire or string, D, substantially as shown and described.

2. The combination of the can A, cover B, ripping-wire D, and a band of soft or thin metal or other material, located between the can and rim of cover, and inclosing the ripping-wire, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of May, 1878.

ISAAC PORTER.

Witnesses:
S. J. VAN STAVOREN,
CHAS. F. VAN HORN.