J. I. SPENCER.
Sheet-Metal Can.

No. 212,064. Patented Feb. 4, 1879.

Fig. 1.

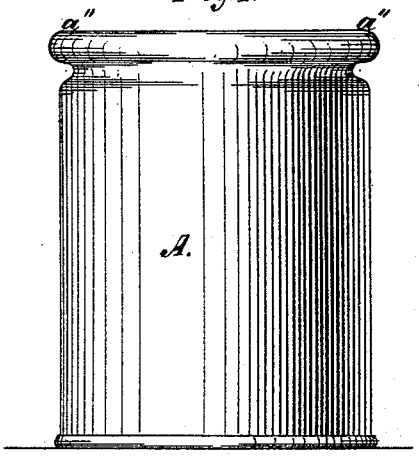


Fig. 2.

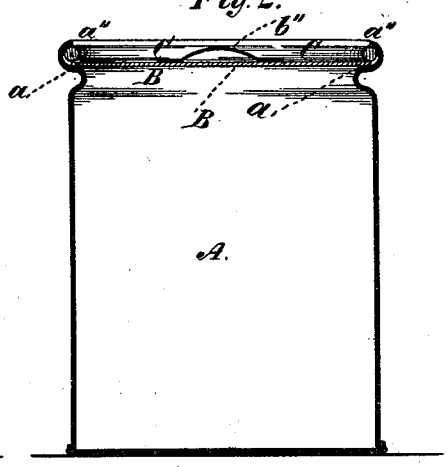


Fig. 3.

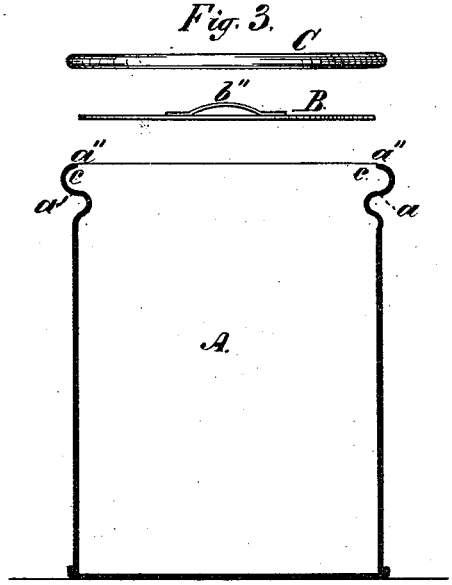


Fig. 4.

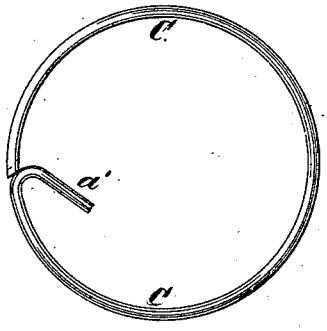


Fig. 5.

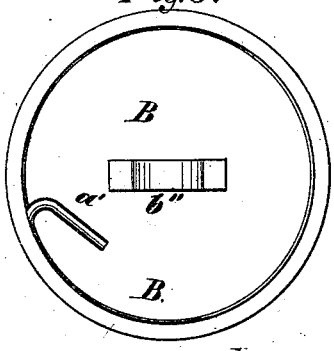
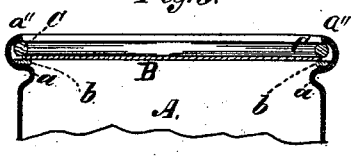


Fig. 6.



Witnesses:

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A. Wells Jr.

Inventor:

James I. Spencer
per James A Whitney Atty.

UNITED STATES PATENT OFFICE.

JAMES I. SPENCER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS RIGHT TO HERMON W. LADD, OF CHELSEA, MASS.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **212,064**, dated February 4, 1879; application filed July 22, 1878.

To all whom it may concern:

Be it known that I, JAMES I. SPENCER, of the city, county, and State of New York, have invented an Improvement in Sheet-Metal Cans, of which the following is a specification:

This invention comprises a novel combination of parts, whereby provision is made for retaining the lid or cover of a sheet-metal can or box snugly and securely in place while it is desired that the can or box shall remain closed, and also for the convenient opening and reclosing of the can or box when occasion requires.

Figure 1 is a side view of a can made according to my invention. Fig. 2 is a central longitudinal sectional view of the same in a closed condition. Fig. 3 is a like view, showing the parts detached from each other. Fig. 4 is a detail view of one of the elements of the combination embraced in the invention. Fig. 5 is a plan view of the can or box made according to my invention. Fig. 6 is a sectional view, showing the manner in which a packing-ring may be used in connection with the aforesaid combination.

The body A of the can may be of cylindric or other suitable form, and with the usual closed bottom. The upper edge portion, *a''*, of said body A is turned, shaped, or headed to provide an internal shoulder, *a*, above which the metal is turned, shaped, or headed to form an internal groove or annular recess, *c*, care being taken that the inwardly-turned edge *a''* shall not project quite inward to or beyond the inner edge of the shoulder *a*, the object of this being that the lid or cover B, the circumferential shape of which suitably conforms to that of the body A, may rest upon the shoulder *a*, its circumferential portions being situate in the lower part of the groove or annular recess *c*, and resting upon the aforesaid shoulder. The lid or cover B being thus in place, a wire, C, bent into annular form, as represented in Fig. 4, is placed in the said groove or recess, and thus binds the circumferential portions of the lid or cover B down upon the shoulder *a*. The said wire has one of its ends bent more or less inward toward its center, as shown at *a'*, and this end *a'* affords a handle, by which, grasped by the fingers of the operator, the wire may be quickly and conveniently withdrawn, thereby liberating the lid or cover, so that it may be readily lifted or taken out. To facilitate this removal of the lid or cover, said lid or cover may be provided with a ring, loop, strap, or equivalent device, as shown at *b''* in Figs. 2 and 3.

In order to promote the increased utility of my invention in the various uses to which cans or boxes made according to said invention may be put, there may be applied in connection therewith additions, adjuncts, or supplementary features, as follows: When desired, the edge *a''* may be pressed (by any suitable means or machinery) down upon the wire C after the latter has been placed in the groove or recess *c*, as hereinbefore explained, this tightening of the said edge upon the said wire rendering the joint between the lid or cover B and the shoulder *a* of the body A more tight; but the pressure of the said edge upon the said wire should not be so great as to materially hinder the convenient withdrawal of the wire, as hereinbefore explained.

When desired, a packing of paper or other suitable material may be interposed between the shoulder *a* and the circumferential portions of the lid or cover B, as indicated at *b* in Fig. 6; or, to more or less hermetically close the can, the wire may be coated with paint before being put in place in the groove *c*, or a layer of paint may be laid over the external surface of the wire and the adjacent surface of the lid or cover and the edge *a''*, or melted paraffine may be applied around the wire; or, when desired, the external surface of the wire may be lightly soldered to the adjacent surface of the lid or cover B and the adjacent edge *a''*, care being taken that the soldering be so lightly done that it shall interpose no material obstacle to the withdrawal of the wire, as hereinbefore explained; but, except when a can made air-tight by soldered joints is insisted upon, this last will, it is believed, be seldom required.

It is preferable that the wire C have more or less elasticity, so that it own spread or expansion may be sufficient to hold it in place in the groove *c*.

It will of course be observed that by the combination of parts herein set forth and claimed the can may be readily closed or opened whenever desired, as often or as occasion may require, it being of course understood that I do not claim the use of a wire for simply rupturing a soldered joint, or a wire rigidly fixed or immovable, and designed merely to retain the end of a vessel in place without provision for removal; but

What I claim as my invention is—

The combination of the body A, constructed with the shoulder *a* and internal groove *c*, the lid or cover B, and the removable wire C, the removable wire C being provided in the internal groove *c*, and serving to hold the lid or cover B upon the shoulder *a*, substantially as and for the purpose set forth.

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Witnesses:

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