

(No Model.)

2 Sheets—Sheet 1.

C. H. LEGGETT.
CAN COVER OR THE LIKE.

No. 581,293

Patented Apr. 27, 1897.

FIG. 1.

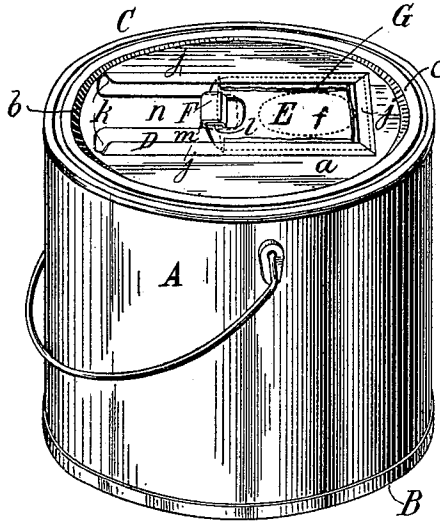


FIG. 2.

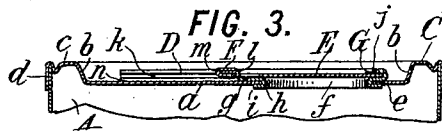
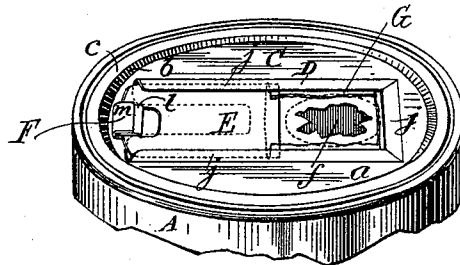


FIG. 4.



FIG. 5.

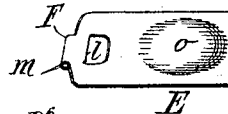
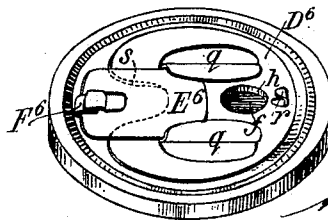


FIG. 16.



WITNESSES:

Fred White

Thomas Wallace

INVENTOR:

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By his Attorneys.

Arthur C. Fraser

(No Model.)

2 Sheets—Sheet 2.

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FIG. 6.

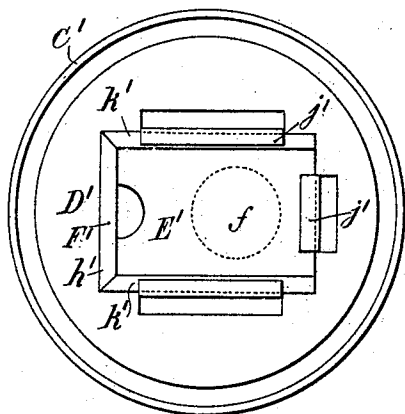


FIG. 8.

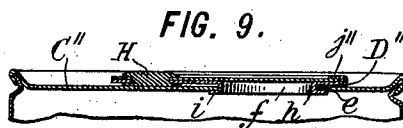
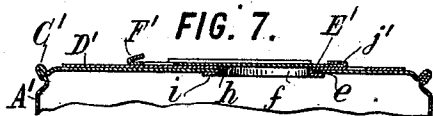
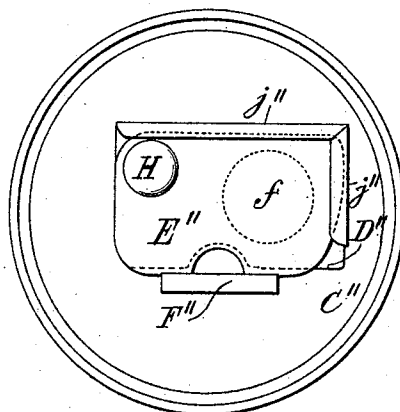


FIG. 10.

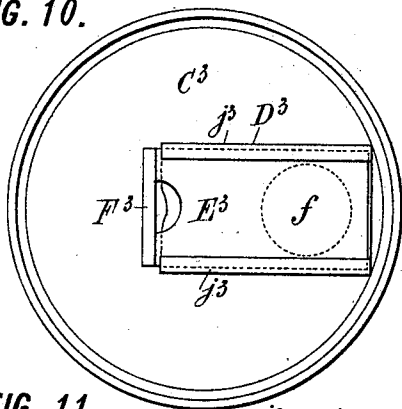


FIG. 12.

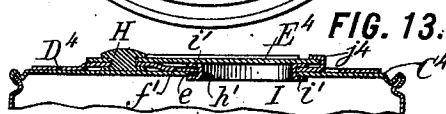
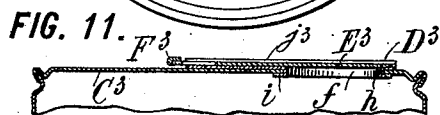
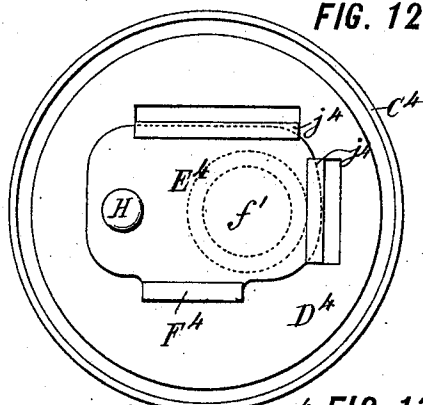
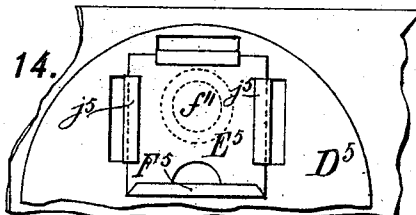


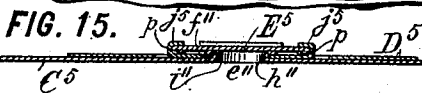
FIG. 14.



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INVENTOR:

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By his Attorneys,

Arthur C. Fraser & Co.

UNITED STATES PATENT OFFICE.

CLINTON H. LEGGETT, OF NEW YORK, N. Y.

CAN-COVER OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 581,293, dated April 27, 1897.

Application filed September 25, 1896. Serial No. 606,939. (No model.)

To all whom it may concern:

Be it known that I, CLINTON H. LEGGETT, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Can-Covers or the Like, of which the following is a specification.

This invention relates to covers for cans, and aims to provide certain improvements in such devices especially applicable to those covers which are irremovably fixed to the can, as, for example, those employed for chlorid-of-lime cans, seed and cereal boxes, and the like.

The invention aims to provide a simple, cheap, and compact cover which will serve to make a tight closure and can be readily opened to expose an aperture leading to the interior of the can.

To this end the invention provides, in addition to the usual can top, wall, or cover having an aperture, a supplemental top or wall having an aperture coinciding with that in the usual top, having a flange entering the latter aperture and riveted or pressed against the inner face of the usual top and thereby united thereto by a leak-tight joint, which supplemental cover has suitable holding and guiding provisions and carries a movable or sliding cover which can be moved to open or close the aperture.

The invention also provides an improved combined metal and paper cover and certain improvements in details of construction of the parts, all of which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of a can having a combined metal and paper cover embodying the preferred form of my present improvements, the parts being in the closed position. Fig. 2 is a fragmentary perspective view thereof, the parts being in the open position and the interior of the can exposed through the aperture. Fig. 3 is a fragmentary axial section thereof, the parts being in position shown in Fig. 1. Fig. 4 is a perspective view of the supplemental cover alone and inverted, showing its condition before application to the usual cover. Fig. 5 is a perspective view of the sliding cover alone and inverted. Fig. 6 is a plan, and Fig. 7 is a fragmentary axial section showing a modification. Figs. 8 and

9 are like views showing another modification.

Figs. 10 and 11 are like views of still another modification. Figs. 12 and 13 are like views of still another modification. Figs. 14 and 15 are respectively a fragmentary plan and an axial section showing still another form of supplemental cover and movable slide, and Fig. 16 is a perspective view showing a paper cover with a modified form of supplemental metallic cover and slide.

In the modifications shown in Figs. 6 to 13, inclusive, the parts are all made of metal, while in the construction shown in Figs. 1 to 5, inclusive, and in Fig. 16 the usual cover is made of paper and the supplemental cover and slide are made of metal.

Referring to Figs. 1 to 5 of the drawings, I will first describe in detail the preferred form of my invention as therein shown. In this construction A is the can-body, B is the bottom thereof, and C is the top wall or usual cover thereof. Preferably the cover C is constructed with a flat smooth middle wall *a*, depressed below the surrounding portion of the cover, surrounded by a rise or shoulder *b*, extending upward to the top *c* of the cover, which extends outwardly in any form to the flange *d*, the wall being provided with an aperture *e*, preferably eccentric of the cover and affording an opening through it. On the wall *a* is seated and fixed an auxiliary cover D, which carries a movable cover E. The cover D has an aperture *f*, coinciding with the aperture *e* and affording communication through the usual and additional covers, and has a flat bottom *g*, surrounding this aperture and extending along the wall *a* of the usual cover. The additional cover D is formed with a downwardly-extending flange *h*, passing through the aperture *e*, which flange has an outturned edge *i*, bent or pressed against the inner or bottom face of the wall *a* with sufficient force to make a leak-tight joint between the usual and additional walls or covers. The additional cover has inturned side and end edges *j* at three sides, beneath which is a track or slideway *k*, within which slides and fits the movable cover E. The movable cover is a substantially flat plate of sufficient length and width to cover the aperture *f* and fit within the tracks *k*, which tracks are long enough to permit sliding of the cover backward until it completely exposes the aperture. The slid-

ing cover has a thickened handle portion F, preferably formed by two ears, the one, *l*, being cut partly out of the body of the cover and turned outward on the top face thereof; and the other, *m*, being a projection on the rear end of the cover, folded up on top of the ear *l*, by grasping which the cover can be moved toward and from the open position at will.

- 10 To facilitate grasping the handle F with the ends or nails of the fingers, the additional cover D is constructed with a space or slot *n* in its outer end, which extends from its end nearly to the aperture *f*, thus leaving a small
15 space below the handle F, as shown.

To obtain an elastic pressure of the sliding cover over the aperture, the former is preferably constructed with a slight downward convexity or partly-spherical portion *o*, which
20 in the closed position lies over the aperture *f* and presses against the edges of the neck or flange *h*, being prevented from rising by the engagement of the edges *j* with the top face of the slide. This convexity also serves to
25 resist danger of accidental opening of the slide.

The depression of the wall *a* of the usual cover is preferably sufficient to bring the additional cover and the sliding cover below the
30 top *c* of the usual cover, so that the cans can be packed and handled without danger of injury or displacing the slide.

When desired as an exceptional protection against leakage, a thin slip of paraffin-paper
35 G can be placed beneath the sliding cover E with its edges folded over the edges of the latter, as shown, thereby making an extremely-tight joint. When the cover is slid back, this paper can be broken, as shown in Fig. 2,
40 or it can be removed from its position in any suitable manner.

I prefer to make the cover C of pressed paper or other fibrous material; but, if desired, it may be made of metal or any suitable material.
45 The additional cover D and sliding cover E are preferably made of metal, being stamped and bent into the desired form and shape. When the usual cover is of paper, the flange *h* of the additional cover protects
50 the edges of the paper at the aperture. The additional cover reinforces the body of the paper cover and gives a suitable strong holder for the sliding cover.

It will be seen that my invention provides
55 improvements in covers which can be readily and advantageously availed of for various constructions of can and other covers; and it will be understood that the invention is not limited to the particular details of construction and application set forth as constituting
60 the preferred form of the invention, but that these can be modified as circumstances or the judgment of those skilled in the art may dictate without departing from the spirit of the
65 invention.

In the modification shown in Figs. 6 and 7 the cover C' is a fixed metal cover seamed

onto the can-body A', and the additional cover D' is circular in form, covering the major portion of the fixed cover and having upturned
70 ears *j'*, beneath which slides the sliding cover E', the edges *k'* of which are folded inward at the sides where they pass under the ears *j'* and at the end where they serve as the handle F'. In other respects the fixed cover has
75 an aperture *e* and the additional cover an aperture *f* and a flange *h*, the edge *i* of which is turned inward against the inner face of the fixed cover. No convexity of the slide is shown in this construction nor is any paper
80 interposed.

The construction shown in Figs. 8 and 9 comprises a fixed metallic cover C'', to which is applied an additional cover D'', having a neck or flange *h* passing through the aperture
85 *e* in the fixed cover and having an out-turned edge *i* embracing the under face of the latter, to which additional cover is secured by a rivet H a movable cover E'', which swings on the rivet H toward and from the aperture
90 *f*. The movable cover at its end and side passes under ears *j''* on the fixed additional cover, and at its outer side has a handle F'', formed by its overturned edge.

The construction shown in Figs. 10 and 11
95 comprises a fixed metal cover C³, on which is fixed an additional cover D³, which has side flanges *j*³ embracing a sliding cover E³, having a handle F³, formed by overturning the outer edge of the cover. The additional cover
100 D³, as with the other forms described, has an aperture *f*, a neck *h*, passing through the fixed cover, and a flange *i*, pressed against the inner face of the latter.

In the construction shown in Figs. 12 and
105 13 the usual cover C⁴ is a fixed metal cover, on the top of which is fixed a circular additional cover D⁴, which has ears *j*⁴ turned up from its body on two sides, under which ears swings the movable cover E⁴, which is pivoted
110 to the additional cover by a rivet H, and has a projecting handle F⁴ formed by turning up a projection on its free side. The additional cover here has an aperture *f'* coinciding with the aperture *e* in the cover C⁴, and is fixed
115 thereto by a tubular or eyelet rivet I, having a neck *h'* extending through the fixed cover and edges *i'* at top and bottom pressed against the outer face of the cover D⁴ and against the inner face of the cover C⁴, and binding them
120 together with a leak-tight joint protecting the edges of both. The cover E⁴ bears on the top of the rivet I.

In the construction shown in Figs. 14 and
125 15 the additional cover D⁵ is a disk-shaped metal plate having an aperture *f''*, which coincides with the aperture *e''* in the usual wall C⁵, and is closed by a movable cover E⁵, which is composed of a sheet of metal folded upon itself at its edges, the wall C⁵ having a flange
130 *h''* passing through the aperture *f''* in the cover D⁵ and having an edge *i''* pressed against the outer face of the latter, the cover E⁵ having its outer edges *p* of its sides bent

underneath itself and sliding under the edges j^5 of the cover D^5 .

In the construction shown in Fig. 16 the cover C^6 is a pressed paper cover, on the top of which is fixed a substantially circular metal disk constituting the additional cover D^6 , which has an aperture f , a flange h , passing through the paper cover and riveted against the inner face thereof, flanges q q , cut from the body of its sides and folded inward over the sliding cover E^6 , a similar end flange r for arresting the latter, and a recess s , providing a space for the handle F^6 of the sliding cover, which in construction is substantially identical with that described with reference to Figs. 1 to 5, except that it is devoid of convexity.

It will be understood that the word "cover" as herein used includes any wall or envelop of any casing or receptacle and that the improvements herein described can be applied to any such wall or envelop where desired and according to such construction as is best suited to the contents of the package or the manner of its removal. The invention can be readily employed for such packages as the oblong closed paper boxes used to pack cereals or seeds and for other purposes, the aperture being made large enough to permit removal of the contents through it with a spoon, if desired.

It will be seen that the joint between the usual wall or cover and the additional wall or cover is an important feature of improvement. This joint is in the nature of an eyelet or tubular rivet, which utilizes the necessary apertures through the parts to traverse the latter and bind the parts together with a firm and leak-tight joint, thus avoiding any puncturing or attachment elsewhere than that surrounding the aperture. This tubular-rivet connection serves to protect the edges of the wall and additional cover and to give a smooth, round, and strong edge surface for the aperture f , as well as a suitable flat bearing edge for the sliding cover. It can be formed rigidly in any of the three ways illustrated, either by making it as an integral flange with the additional cover, or as a separate eyelet, or as an integral flange with the usual cover or wall.

The additional cover and sliding cover constitute an attachment for application to a box or receptacle and can be sold in the form shown in Figs. 4 and 5 for this purpose, the flange h being ready to enter any hole which may be cut to fit it, whereupon its inner edge i can be turned outwardly against the inner face of the wall through which the hole is cut.

It will be seen in Figs. 2 and 3 that the shoulder b , surrounding the wall a , acts as a stop in the path of the slide E and prevents escape or undue withdrawal thereof.

When the additional plate and its sliding cover are used for attachment to any wall, the flange h can, if desired, be replaced by the tubular rivet I , (shown in Figs. 12 and 13),

which can be loosely set in the aperture f in the additional wall and can be passed through any aperture which may be provided for it in the wall to which it is to be applied, whereupon by compressing the upper and lower flanges of the rivet against the two walls the attachment can be firmly fastened in place and its slide used to open or close the aperture through the rivet.

I prefer to make the additional cover or wall D of thin sheet-zinc, which metal is stamped and bent to form the riveting-flange h and the tracks or guideways j , and has certain antifriction properties and sufficient flexibility so that in case of undue creasing of the flanges forming the tracks k the sliding cover E is still comparatively easy of movement from the closed to the open position.

The advantage of interposing the paper G in constructions where the interior of the can is coated with rosin, paraffin, or other material before filling is that the paper acts to prevent adhesion of the coating with the slide. Such adhesion might necessitate the use of considerable force to open the slide. Consequently in lime-cans or others so coated internally I prefer to use the paper, which keeps the coating away from the sliding cover, so that the latter can be easily opened, and then the paper and the coating on it opposite the aperture can be broken, as shown in Fig. 2, to cause access to the interior of the can. Cans of this construction are generally filled from the bottom, the bottom cover being seamed or soldered on after filling. The inside of paper cans or boxes is usually lined with rosin applied while hot, in which case the interposition of the sheet of paper G is especially advantageous. In other cases, as, for example, when a metal can and cover are employed and the can itself is sufficiently tight, a perfect sealing can be made by simply applying a thin coating of paraffin or wax to the inner face of the slide after the latter has been closed, making this application with a brush or otherwise through the aperture f from the inside while the can is inverted and before it is filled or its bottom applied.

What I claim is—

1. In can-covers and the like, a cover proper having an aperture, in combination with an additional cover fixed thereto and having an aperture coinciding with that in the cover proper, a flange surrounding said apertures and passing from the outer face of the additional cover through the cover proper and embracing the inner face thereof, and a movable cover carried by said additional cover and movable across said flange and toward or from said aperture to open or close it.

2. In can-covers and the like, a cover proper having an aperture, in combination with an additional cover fixed to said cover proper, having an aperture coinciding with that in the latter, having a tubular flange projecting

into said aperture and having slideways, and a sliding cover carried in said slideways and movable across said flange and over said aperture to open and close the latter.

3. In can-covers and the like, a cover proper in combination with an additional cover fixed thereto, said covers having coinciding apertures, and the one having a flange projecting through the aperture in the other and engaging the remote face thereof for fastening them together, a movable cover carried by said additional cover and moving past said flange, and a sheet of packing material between said movable and additional covers.

4. In can-covers and the like, a cover proper having an aperture, and a movable cover fixed thereto and movable over said aperture to close it, said movable cover having an elastic convex portion over and sprung into said aperture when said cover is in the closed position.

5. In can-covers and the like, a cover proper consisting of fibrous material having an aperture, and an additional cover consisting of metal fixed to said cover proper and having an aperture coinciding therewith, means fixing said covers together within said apertures, and a movable cover carried by said additional cover and movable thereon to close said aperture.

6. In can-covers and the like, a cover proper having an aperture, in combination with an additional cover fixed thereto over said aperture, and having slideways, and a sliding cover sliding in said slideways to open and close said aperture and having a handle, said additional cover having a recess beneath and opposite said handle permitting access thereto.

7. In can-covers and the like, a cover C having an aperture, in combination with an additional cover D fixed thereto, having slideways k , space n at one end and aperture f near its other end, and a sliding cover E carried in said slideways, movable over said aperture and having a handle F for moving it opposite said space.

8. In covers for cans and the like, a cover or wall having an aperture, in combination with an additional cover embracing said wall and having an aperture coinciding with that in the latter, a tubular rivet traversing said apertures having an opening through it coinciding therewith, and having an outturned flange uniting said wall and additional cover, and a movable cover carried by said additional cover and sliding over said tubular rivet and closing communication therethrough.

9. In can-covers and the like, a wall having an aperture, and an additional cover having an aperture coinciding with that in the wall and fitting against the latter, one of said parts having a lateral projecting annular flange traversing the aperture in the other and fixing the latter in place, one having an opening through said flange coinciding with said apertures, and one of said parts having a slide

moving across said flange and closing said apertures.

10. The improved attachment for can-covers and the like, consisting of a plate having an aperture, and a lateral annular flange at side of said aperture adapted to pass through and be riveted against the wall of a can, and a movable cover connected to said plate and movable thereon past said flange to open and close said aperture.

11. The improved attachment for can-covers and the like, consisting of a plate or additional cover D having an aperture f , and a lateral flange h surrounding said aperture and adapted to pass through and be clamped against the inner side of the apertured wall of a can, and a sliding cover connected to said plate and sliding thereon past said flange toward and from said aperture.

12. In can-covers and the like, a cover having a wall a having an aperture and a shoulder b , in combination with an additional cover having slideways and fixed to said wall, and a sliding cover carried in said slideways of said additional cover and movable to open and close said aperture, said movable cover moving in the plane of said shoulder, and limited in its opening movement by the latter.

13. The improved attachment for use as a can or other cover, consisting of a plate having an aperture and adapted to be fixed against the wall of a vessel with its aperture coinciding with an aperture in such wall, having means at the edges of its aperture for passing into such aperture in such wall and thereby fastening it to such wall, and a movable cover on the outer face of said plate and moving past said means and across said aperture to close it.

14. An attachment for can or other covers consisting of a plate for resting against the wall of a can, having an aperture for coinciding with an aperture in such wall, in combination with a movable cover on the outer face of said plate, moving over said aperture to close it, and a tubular rivet having an opening through it constituting the opening through such apertures extending inwardly through said aperture for fastening said plate to such wall.

15. The improved attachment for cans and other vessels, consisting of a plate adapted to be fixed to the apertured wall of a vessel, and having an inwardly-extending flange for surrounding and guarding the edges of such wall, and having an opening through it for permitting exit through such wall and plate, and a movable cover movably connected to said plate and moving past said flange and across the opening through it.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CLINTON H. LEGGETT.

Witnesses:

GEORGE H. FRASER,
THOMAS F. WALLACE.