

No. 854,893.

PATENTED MAY 28, 1907.

J. JOHNSTON.  
BOX COVER OPENER.  
APPLICATION FILED FEB. 9, 1906.

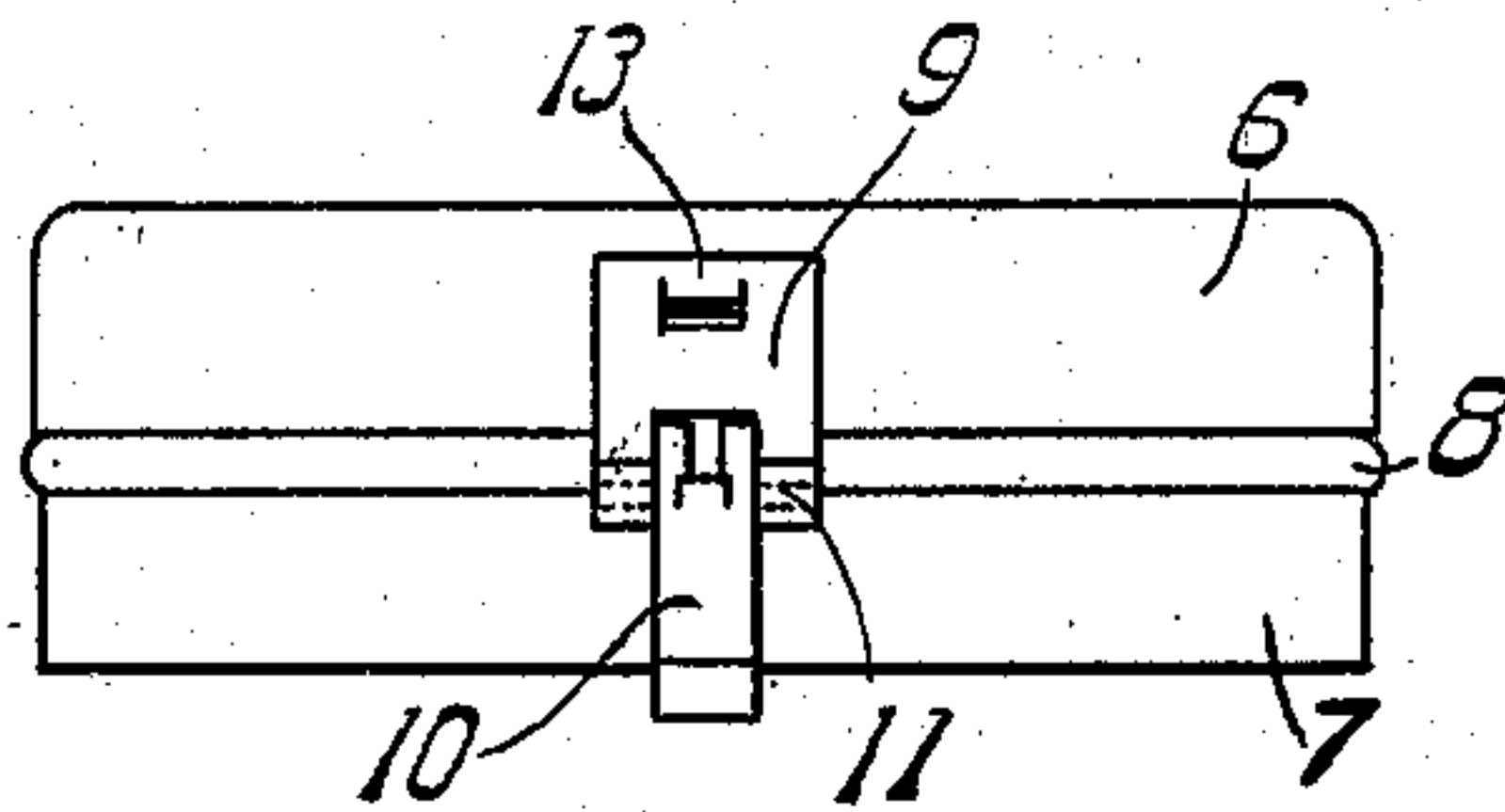


FIG. 1.

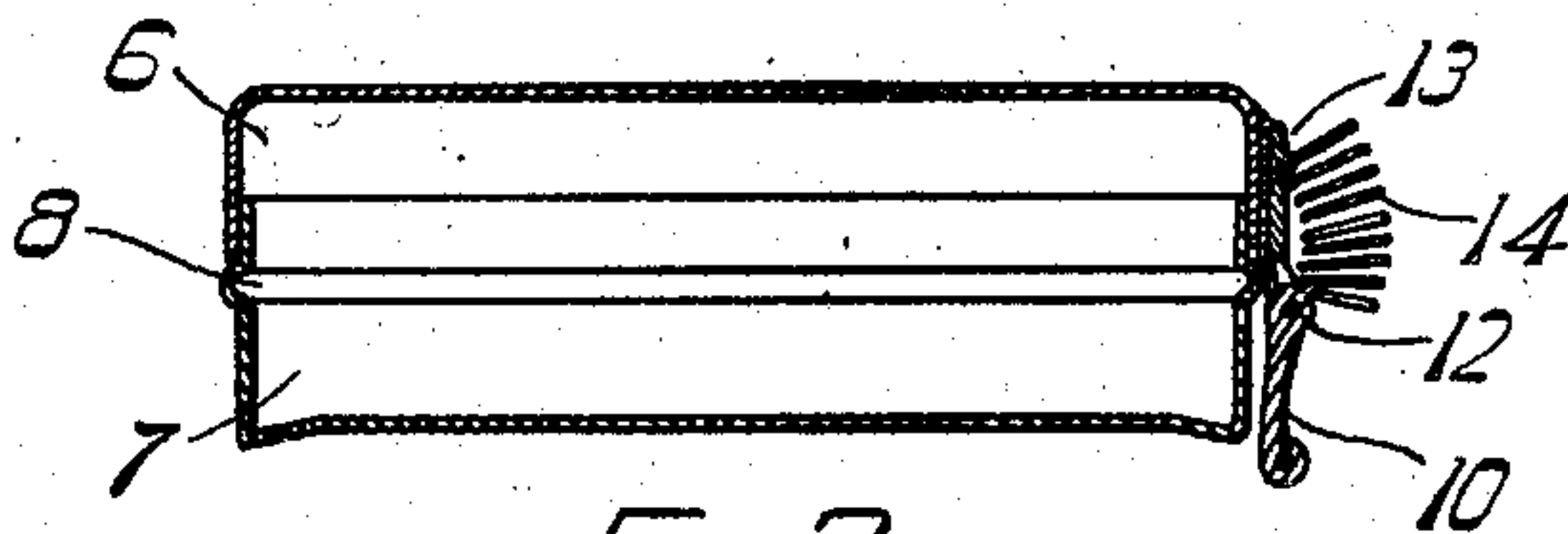


FIG. 2.

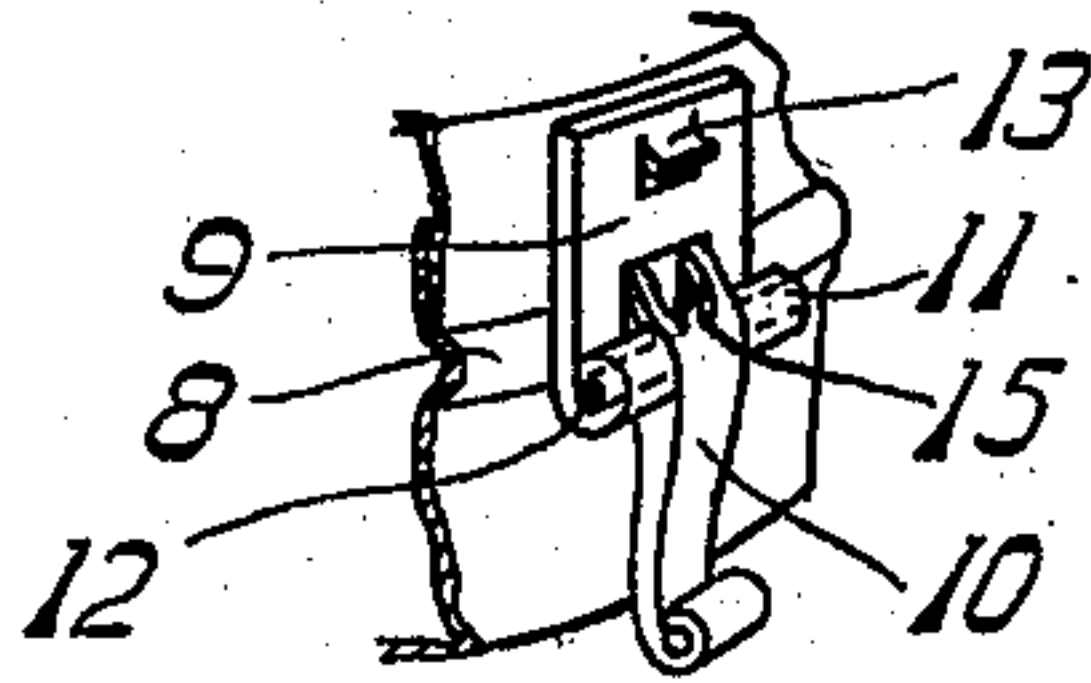


FIG. 3.

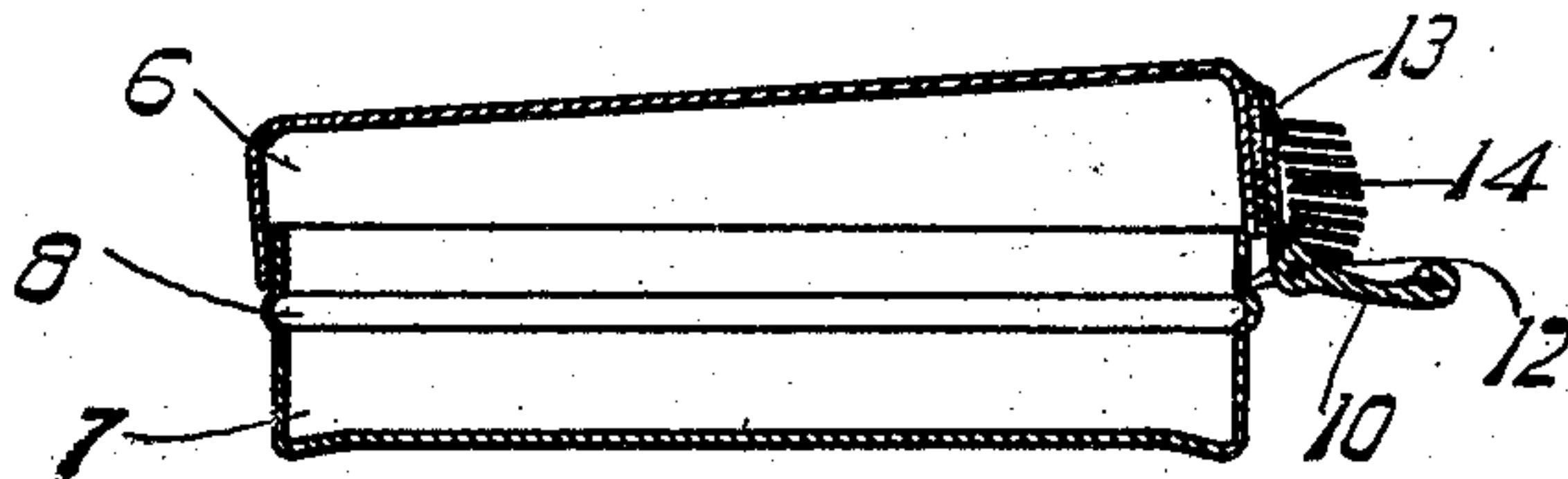


FIG. 4.

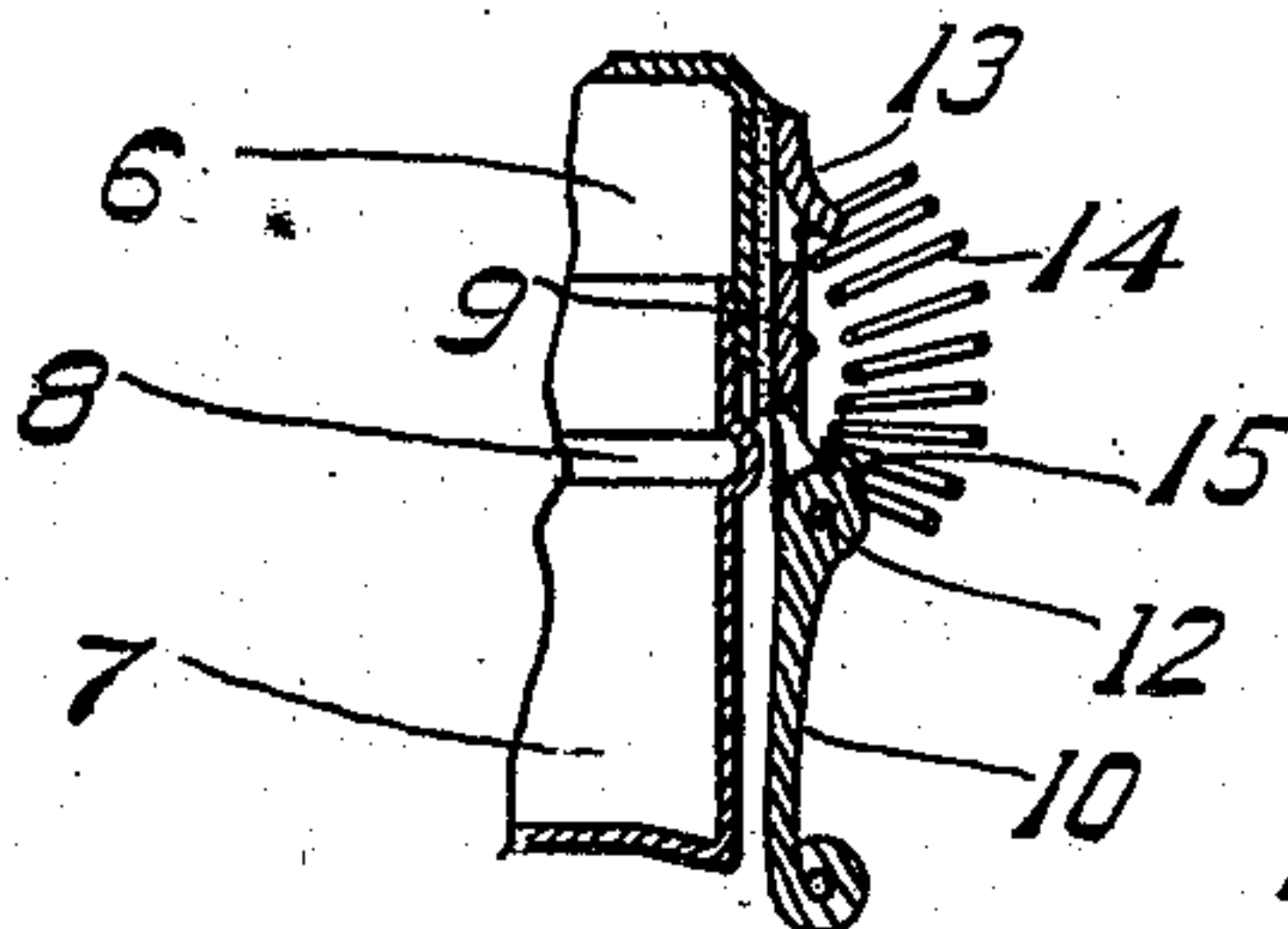


FIG. 5.

WITNESSES  
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# UNITED STATES PATENT OFFICE.

JAMES JOHNSTON, OF MEDFORD, MASSACHUSETTS.

## BOX-COVER OPENER.

No. 854,893.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed February 9, 1906. Serial No. 300,228.

*To all whom it may concern:*

Be it known that I, JAMES JOHNSTON, of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Box-Cover Openers, of which the following is a specification.

The object of this invention is to provide a simple and efficient means of removing the covers from ordinary tin boxes, generally of cylindrical form and used for various purposes. The difficulty in opening such boxes is universally felt, and serious injury to the hands often follows the attempt.

My invention furnishes a short lever fulcrumed in bearings connected to the cover and acting by its short arm on a projection on the box to start the cover from its normal position, after which it may be readily removed.

In the drawing Figure 1 is a side or edge view of a covered box provided with my lever device without the spring attachment, and Fig. 3 is a perspective detail of the same. Figs. 2 and 4 are vertical sections through the complete device, the latter figure showing the position of parts when the cover is lifted. Fig. 5 is a sectional detail on a larger scale.

The numeral 6 represents the box cover, 7 the body of the box and 8 a protuberance thereon, here shown as an annular bead serving to stiffen the box and limit the downward movement of the cover as heretofore.

9 is a thin metallic plate soldered or otherwise affixed to the outer peripheral wall of the cover, and represented as extending down to the bottom of bead or protuberance 8. At the lower part of this plate its middle portion is cut away to receive a short lever 10, while the side portions are rolled up to form bearings 11 for the journals or pivot 12 of said lever. Plate 9 has, at or near its upper edge, a hooklike projection 13 to engage the upper coil of a suitable spring 14. A corresponding hook 15 is formed on lever 10 near its pivot. The spring and these projections for its support are not essential to the operation of opening the cover although they tend to lift it to proper height when it is started by the lever. The spring also serves

to return the lever to its normal, downwardly extending position, when released by the operator.

The lever 10 is preferably formed about as shown in Fig. 3,—its long arm thickened or turned up terminally and its short arm duplicated or broadened and made quite short so as to engage at tip in the angle along the upper line of the annular bead 8. Thus when the long arm of the lever is raised it will lift the cover, when the box is held fast, or depress the box when the cover is held fast by the operator. Instead of a projection on one of the parts, to engage the short arm of the lever, an indentation or seat may be formed, for the same purpose, adjacent to the tip of such arm.

I claim as my invention:

1. In box cover openers, the box body having a peripheral projection, in combination with the cover having lever bearings affixed thereto, and a lever pivoted in said bearings to normally occupy a vertical position substantially parallel with the sides of the box and form upper and lower arms, leaving the top and bottom of the box unobstructed, said upper arm being movable toward the side of the box and into engagement with said projection and said lower arm being movable away from the side of the box to cause the engagement of said upper arm with said projection and thereby effect the opening of the box, substantially as described.

2. In box cover openers, the box body having a peripheral projection and the cover having a metallic plate affixed thereto, in combination with a pivoted lever mounted in bearings on said plate and adapted to engage such projection, and with a spring interposed between and connected terminally to said plate and lever, for the purpose set forth.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JAMES JOHNSTON.

Witnesses:

A. H. SPENCER,  
A. T. PALMER.