

No. 777,167.

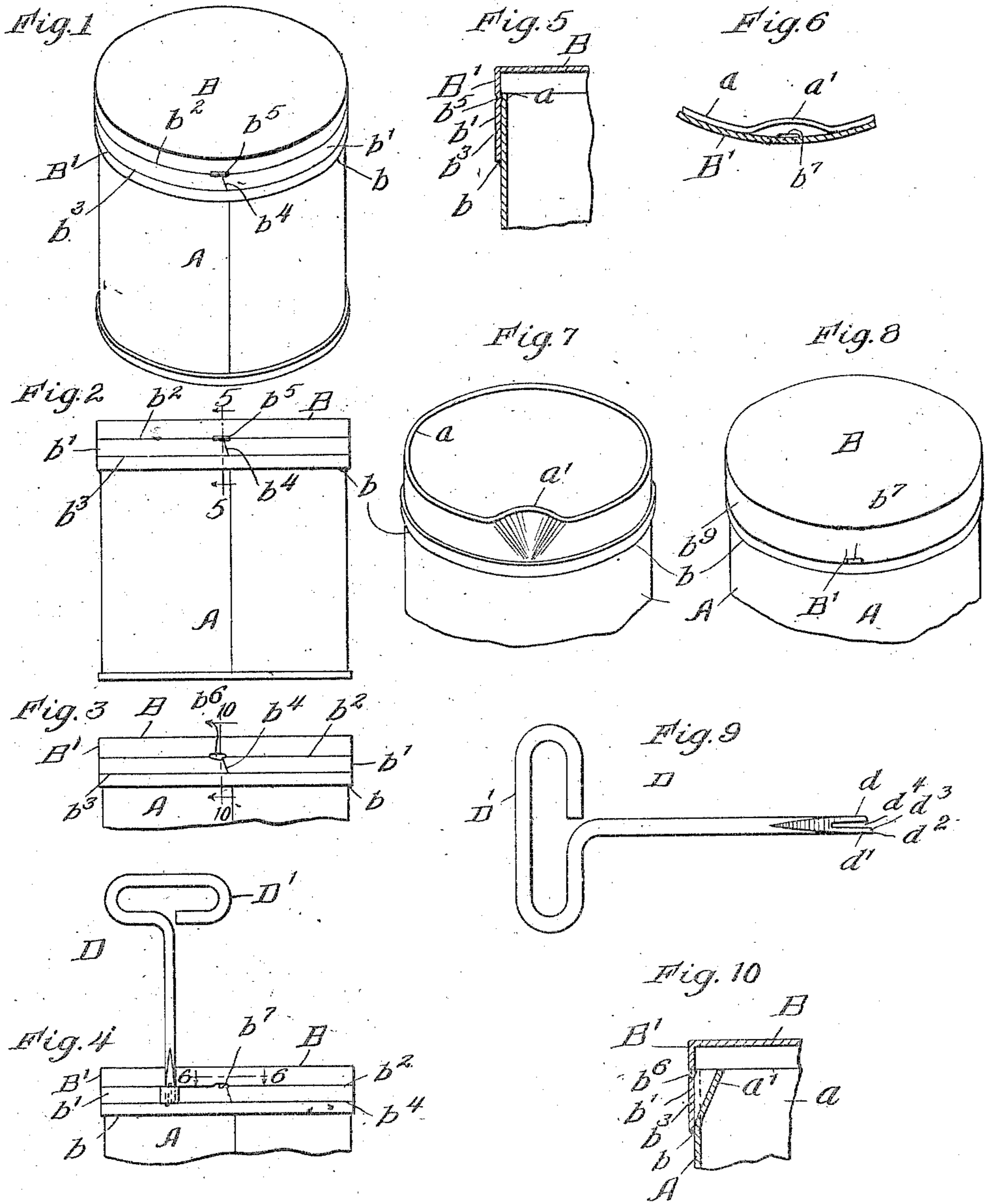
PATENTED DEC. 13, 1904.

H. B. WILLIAMS.

TONGUELESS TEARING-STRIP FOR KEY OPENING PAINT CANS.

APPLICATION FILED AUG. 8, 1904.

NO MODEL.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## TONGUELESS TEARING-STRIP FOR KEY-OPENING PAINT-CANS.

SPECIFICATION forming part of Letters Patent No. 777,167, dated December 13, 1904.

Application filed August 8, 1904. Serial No. 219,883. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY B. WILLIAMS, a citizen of the United States, residing in the borough of Brooklyn, New York city, in the county of Kings and State of New York, have invented a new and useful Improvement in Tongueless - Tearing - Strip Key - Opening Paint-Cans, of which the following is a specification.

My invention relates to tongueless-tearing-strip key-opening cans.

The object of my invention is to provide a tongueless-tearing-strip key-opening paint-can of a simple, efficient, and economical construction, which may be easily and conveniently opened with certainty and without danger of failure, and which after being opened will have a slip-cover capable of again closing the can to protect the paint from dust or deterioration while its contents are being used.

My invention consists in the means I employ to practically accomplish this important object or result—that is to say, it consists in a can having a deep flange seamless cover adapted to be soldered at the lower edge or portion of its flange to the body to close the can hermetically tight, said cover having a tongueless-tearing-strip marked off or bounded by parallel scores or weakened lines, the lower one of which is just above the lower or soldering rim or zone of the cover-flange and the upper one of which scores or weakened lines is sufficiently below the top of the cover to leave the cover with a slip-cover flange after the tearing-strip has been removed, said tearing-strip having a transversely-extending zone or weakened line across the same and also a longitudinal groove or depression for insertion of a sharp or chisel pointed key, and thus forms a slot or opening parallel to the tearing-strip at the upper edge thereof adjacent to the transverse score which extends across the tearing-strip. When the sharp or chisel pointed key is inserted through the flange of the cover at the key-insertion groove

therein, it forms a dent, notch, or depression at the upper portion of the can-body inside the cover-flange, which receives the intumed shoulder or flange formed at the intumed edge of the slip-cover flange by the insertion of the key, so that by turning the slip-cover after the can is opened, with this shoulder into registry with the corresponding dent or notch formed in the can-body, the slip-cover can be readily applied to the can after it has been opened.

In the accompanying drawings, which form a part of this specification, Figure 1 is a perspective view of a tongueless-tearing-strip key-opening paint-can embodying my invention. Fig. 2 is a side elevation. Fig. 3 is a side elevation showing the can after the key has been inserted at the key-insertion groove. Fig. 4 is a similar view showing the tearing-strip partially wound upon the key. Fig. 5 is a vertical section on line 5 5 of Fig. 2. Fig. 6 is a horizontal section on line 6 6 of Fig. 4. Fig. 7 is a perspective view of the can after it has been opened. Fig. 8 is a similar view showing the opened can closed by the slip-cover, and Fig. 9 is a detail view of the key. Fig. 10 is a section on line 10 10 of Fig. 2.

In the drawings, A represents the can-body; B, the cover, the same having a deep flange soldered at its lower or soldering zone *b* to the can-body. The deep flange *B'* of the cover is also furnished with a tongueless-tearing-strip *b'*, marked off or bounded by parallel scores or weakened lines *b<sup>2</sup>b<sup>3</sup>*. The tearing-strip *b'* is also provided with a transversely-extending and preferably inclined score or weakened line *b<sup>1</sup>* and with a longitudinally-extending key-insertion groove *b<sup>5</sup>* at the upper score or weakened line *b<sup>3</sup>*. This key-insertion groove *b<sup>5</sup>* adapts a sharp or chisel pointed key *D* to be readily inserted through the cover-flange *B'*, and thus form a longitudinal slot *b<sup>6</sup>* therein, through which slot the key *D* may be introduced with its forks *d d'* astride the tearing-strip. The key-insertion groove *b<sup>5</sup>* itself and the act of insert-

ing the key through the same form an in-  
turned flange, shoulder, or projection  $b^8$  at  
the lower edge of the slip-cover zone or band  
 $b^7$  of the cover B, which would prevent the  
5 slip-cover being applied to the can to close the  
same after the can has been opened, if the up-  
per end  $a$  of the can-body remained even or cir-  
cular; but the act of inserting the key through  
the cover-flange B' at the key-insertion  
10 groove  $b^5$  also turns inward the upper edge of  
the can-body at the point engaged by the key,  
and thus forms an inward bend or notch  $d'$  in  
the upper edge of the can-body, which will re-  
ceive or accommodate the inward projection  
15 or shoulder  $b^8$  at the lower edge of the slip-  
cover flange  $b^7$ , and thus enable the slip-cover  
to be readily applied. As the upper edge of  
the can-body will give or bend inward when  
engaged by the key, I find by actual experi-  
20 ment that the can-body lying inside the cover-  
flange B' at the key-insertion groove  $b^5$  does  
not prevent the easy insertion of the key  
through the cover-flange. This result is also  
due to the fact that the cover-flange B' is only  
25 soldered to the can-body at its lower zone or  
portion  $b$ , thus leaving the upper edge of the  
can-body free to yield inward when the key is  
inserted.

The key D is made of steel wire and has an  
30 integral loop-handle D', a sharp point  $d^2$ , and  
cutting edge  $d^3$ , preferably slightly inclined,  
as shown, and a longitudinal slot  $d^4$ , forming  
the forks  $d$   $d'$  to fit astride the tearing-strip  
 $b'$  at the slot  $b^6$ , so that by turning the key the  
35 tearing-strip will first part along the trans-  
verse score or weakened line  $b^4$  and then wind  
in the usual manner about the key. After  
the can has been opened by removing the tear-  
ing-strip  $b'$  the soldering zone or band of the  
40 deep flange B' of the cover forms a shoulder  
or stop for the slip-cover flange  $b^7$  of the cover  
B. The upper end  $a$  of the can-body A, which  
fits within the flange B' of the cover B, acts  
as a mandrel or support for the cover-flange  
45 B' in winding the tearing-strip about the key  
and causes the can to open with ease and cer-  
tainty and prevents danger of the tearing-strip  
running out and failure of the can to open  
properly.

50 By my invention the labor and expense of  
soldering separate tongues to the tearing-strip  
and also the uncertainty and failure of open-  
ing incident to the use of separate-piece  
tongues on the tearing-strip are entirely avoid-  
55 ed and a much cheaper and better can pro-  
duced.

I claim—

1. The tongueless-tearing-strip key-open-  
ing paint-can herein shown and described, and  
60 comprising a can-body and a deep flange-cover  
soldered to the body at the lower rim or zone  
of said deep flange, the deep flange of the  
cover being provided with an endless and  
tongueless tearing-strip having parallel scores

or weakened lines, a score or weakened line 65  
extending transversely across the tearing-  
strip, and a key-insertion groove parallel to  
the tearing-strip adjacent to said transverse  
score or weakened line, said deep flange of  
the cover having a slip-cover flange rim or 70  
zone above the tearing-strip for again closing  
the can after it has been opened, the upper  
end of the can-body projecting within said  
cover-flange adjacent to said key-insertion  
groove therein, so that a sharp or chisel point- 75  
ed key can be inserted through said groove  
preliminary to opening the can to form a bend  
or notch in the upper end of the can-body to  
receive the inturned flange or shoulder at the  
lower edge of the slip-cover flange of the cover 80  
after the can has been opened and thus adapt  
the can to be again closed by a slip-cover,  
substantially as specified.

2. A tongueless-tearing-strip key-opening  
can, having a deep flange-cover and a body 85  
fitting and projecting within the cover-flange,  
the deep flange of the cover comprising a lower  
or soldering zone, an upper or slip-cover  
flange zone, an intermediate or tearing-strip  
zone, the deep flange of said cover having par- 90  
allel scores or weakened lines, and a tongue-  
less tearing-strip provided with a transverse  
score extending across the same, and a key-  
insertion groove at the upper score of the  
tearing-strip adjacent to said transverse score, 95  
adapting the can to be opened by a sharp or  
chisel pointed key, the upper end of the can-  
body opposite the key-insertion groove being  
free to bend or yield inward as the key is in-  
serted through the cover-flange, and thus en- 100  
able the key to be inserted, substantially as  
specified.

3. A tongueless-tearing-strip key-opening  
can, having a deep flange-cover and a body 105  
fitting and projecting within the cover-flange,  
the deep flange of the cover comprising a  
lower or soldering zone, an upper or slip-  
cover flange zone, an intermediate or tearing-  
strip zone, the deep flange of said cover hav-  
ing parallel scores or weakened lines, and a 110  
tongueless tearing-strip provided with a  
transverse score extending across the same,  
and a key-insertion groove at the upper score  
of the tearing-strip adjacent to said trans-  
verse score, adapting the can to be opened by 115  
a sharp or chisel pointed key, the upper end  
of the can-body opposite the key-insertion  
groove being free to bend or yield inward as  
the key is inserted through the cover-flange,  
and thus enable the key to be inserted, the 120  
inward bend or notch at the upper end of the  
can-body produced by the insertion of the  
key receiving the inturned flange or shoulder  
at the lower edge of the slip-cover flange of  
the cover after the can has been opened and 125  
thus adapting it to be again closed by the  
cover as a slip-cover, substantially as specified.

4. In a can, a deep flange-cover, said flange

having a soldering belt or zone at its lower part, a slip-cover flange zone at its upper part, and an intermediate tearing-strip furnished with parallel scores or weakened lines, a transverse score or weakened line extending across the tearing-strip, and a key-insertion groove at the upper score of the tearing-strip

adjacent to said transverse score, substantially as specified.

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Witnesses:

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