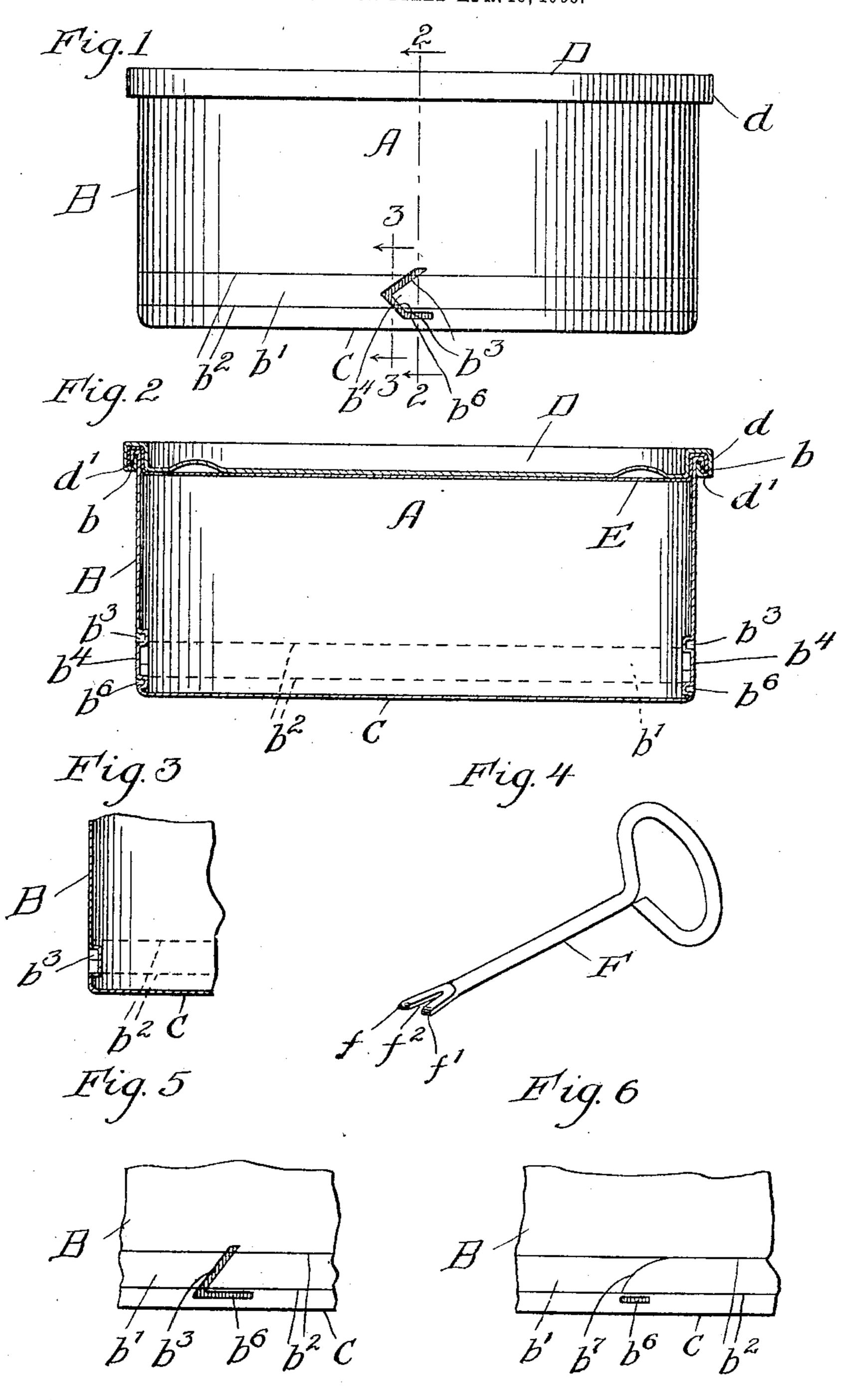
## W. H. WELLS. KEY OPENING CAN. APPLICATION FILED APR. 15, 1903.



Witnesses: Um Seiger AMMunday,

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## UNITED STATES PATENT OFFICE.

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## KEY-OPENING CAN.

No. 814,102.

strip.

Specification of Letters Patent.

Patented March 6, 1906.

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To all whom it may concern:

Be it known that I, William Hull Wells, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Key-Opening Cans, of which the following is a specification.

My invention relates to key-opening cans.

It consists in a key-opening can comprising a tongueless and preferably seamless
body provided with a tearing-strip formed
by scores or weakened lines and having a
transverse scored offset or weakened portion
or line extending between the parallel scores
or weakened lines and preferably sunken or
in the form of a groove to adapt the tearingstrip to be transversely severed to form a
free or tongue-like portion or beginning for the
winding of the tearing-strip about the key,
and further provided with a groove, depression, or offset for insertion of a sharp or chisel
pointed key parallel and adjacent to one of

It also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown or described.

the scores or weakened lines of the tearing-

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a seamless key-opening can embodying my invention. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a section on line 3 of Fig. 1. Fig. 4 is a detail view of the key, and Figs. 5 and 6 are side elevations showing different forms or applications of my invention.

In the drawings, A represents a key-opening can comprising a body B, preferably seamless and in one piece with its bottom or head C.

D is the cover united to the body, preferably by a double seam d, formed by interfolding the seaming-flange d' on the cover with the seaming-flange b on the body, a paper disk or other packing E being interposed to insure tightness of the seam.

The can-body B has a tearing-strip b', formed by parallel scores or weakened lines  $b^2$  and provided with a transversely-extending weakened portion  $b^3$ , preferably offset or sunken or in the form of a groove  $b^7$  and extending between the scores or weakened lines  $b^2$   $b^2$  to adapt the tearing-strip to be trans-

versely severed to form a beginning for the 55 winding of the tearing-strip about the key. The transverse weakened line or portion  $b^3$ preferably has two legs or branches meeting each other or extending at an angle to each other to form when severed a free or tongue- 60 like portion  $b^4$  as a beginning for winding the tearing-strip about the key. One of the legs, limbs, or branches of the offset or groove weakened line  $b^3$  is extended across the lower parallel score or weakened line of the tearing- 65 strip and parallel and adjacent thereto, thus forming a parallel groove or offset  $b^6$  for the initial insertion of a sharp or chisel pointed key, as F, having a sharp inclined cutting edge f, point f', and slot  $f^2$ , forming two forks 70 to fit astride the tearing-strip or its tonguelike portion or beginning  $b^4$ .

In Fig. 5 the relative position of the bent or angle transverse groove or weakened line  $b^3$   $b^3$  in respect to the tearing-strip is slightly 75 changed, so that one of the legs, limbs, or branches thereof extends at an angle between the parallel scores or weakened lines  $b^2$   $b^2$  of the tearing-strip, while the other extends parallel and adjacent to the lower score weakened line  $b^2$  of the tearing-strip and in line with the extension  $b^6$  of such leg or limb of the groove  $b^3$ .

In Fig. 6 the transverse weakened portion or line  $b^3$ , which extends across the tearing- 85 strip between the scores or weakened lines  $b^2$   $b^2$  thereof, is made in the form of an ordinary score or weakened line instead of in the form of an offset or groove weakened line, as shown in the other figures.

The groove or offset  $b^6$  may be termed a "weakened puncture-spot," as it is adapted to be punched through by the key F. While this offset  $b^6$  is preferably in the form of a sunken offset or countersink or groove, it 95 may be of any form adapted to hold the point of the key from slipping as it is forced through the tin plate at this point.

I claim---

1. A key-opening can comprising a seam- 100 less body provided with a tearing-strip formed by parallel scores or weakened lines, and having a transverse weakened portion or line extending between such parallel scores or weakened lines, and a depressed weakened 105 portion parallel and adjacent to one of the scores or weakened lines of the tearing-strip, substantially as specified.

2. A key-opening can comprising a canbody provided with a tearing-strip having a transversely-extending weakened portion or line, and a depression parallel and adjacent to one of the scores or weakened lines of the tearing-strip near the point of intersection therewith of said transversely-extending weakened portion or line, substantially as specified.

body furnished with a tearing-strip extending around the same and formed by parallel weakened lines, and furnished with a transversely-extending weakened line, and a depressed weakened portion parallel and adjacent to one of the parallel weakened lines of the tearing-strip near the point of intersection therewith of said transversely-extending weakened line, substantially as specified.

20 4. A key-opening can comprising a body provided with a tearing-strip formed by parallel weakened lines, and having a transverse weakened line or portion extending between the parallel weakened lines, and a depression adjacent to one of said parallel weakened lines for initial insertion of a key, substan-

tially as specified.

5. As a new article of manufacture, a keyopening can having a tearing-strip bounded
so by two generally parallel weakened lines and
a weakened line extending from one of said
generally parallel lines to the other, and provided contiguous to said line extending from
one parallel line to the other with a weaksened puncture - spot adapted to be punched
through.

6. As a new article of manufacture, a keyopening can having a tearing-strip bounded
by weakened lines and comprising an inte40 gral tongue or starting portion outlined by
said weakened lines and located wholly within the margins of the can-blank, and a weakened puncture-spot located contiguous to,
and outside of said tongue, as and for the pur-

45 pose set forth.

7. As a new article of manufacture, a key-

opening can having a tearing-strip bounded by two weakened lines, a weakened line extending transversely from one marginal line to the other thereof and outlining a tongue 50 and a weakened puncture-spot consisting of a countersunk and partially-separated spot of limited area arranged alongside of said tongue portion, substantially as described.

8. As a new article of manufacture, a key- 55 opening can provided with a tearing-strip bounded by weakened lines and a weakened puncture-spot formed adjacent to one of the said lines, said puncture-spot having the form of a countersink of relatively small area, sub- 60

stantially as described.

9. As a new article of manufacture, a keyopening can, provided with a tearing-strip
bound by two weakened lines, a curved weakened line extending from at or near one of 65
said other weakened lines in a diagonal direction to said other weakened line, and a weakened puncture-spot adjacent one of said
weakened lines near the juncture of the same
and the transverse weakened line.

10. A can having a tearing-strip part formed by separated weakened lines and a pointed tongue part forming a part of the body and a continuation of the tearing-strip part, the said tongue part being formed by a 75 weakened line shaped to bring the apex of the tongue nearer to one weakened tearing-strip

line than to the opposite line.

11. A can having a tearing-strip part formed by separated weakened lines and a 80 tongue part forming a continuation of the tearing-strip and a part of the can-body, said tongue being formed by a curved weakened line which line extends from one tearing-strip line diagonally forward to a point in close 85 proximity to the other weakened line and terminating in said other weakened line.

## WILLIAM HULL WELLS.

Witnesses:

H. M. Munday, Edmund Adcock.