

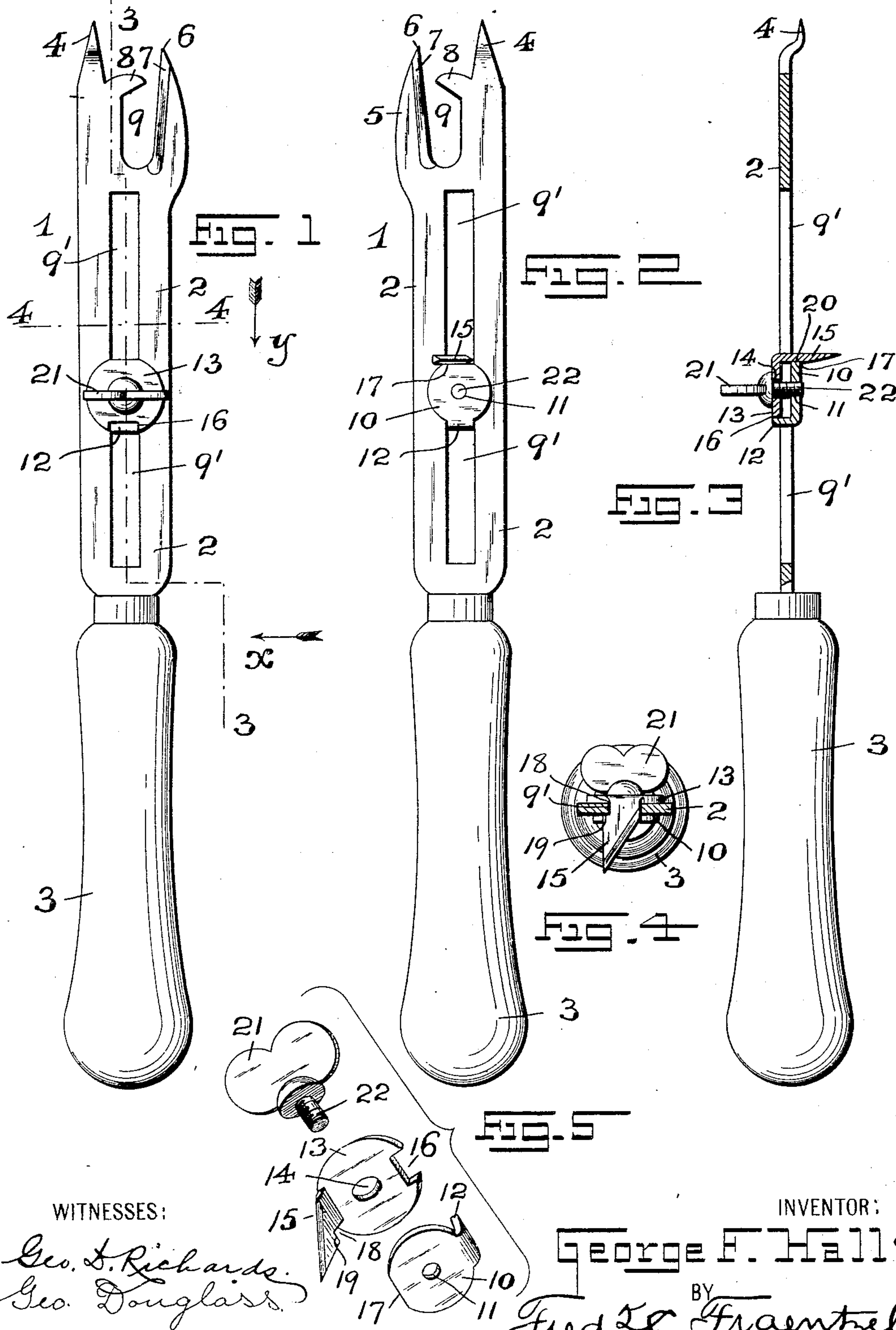
No. 733,194.

PATENTED JULY 7, 1903.

G. F. HALL.
CAN OPENER.

APPLICATION FILED NOV. 12, 1902.

NO MODEL.



UNITED STATES PATENT OFFICE.

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CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 733,194, dated July 7, 1903.

Application filed November 12, 1902. Serial No. 130,986. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. HALL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Can-Openers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention relates, primarily, to improvements in can-openers; and the invention relates more particularly to a novel construction of can-opener provided with a piercing end adapted to be inserted in the central portion of the head of a can and with a slidably-arranged cutter which can be moved back and forth upon the shank of the device according to the opening desired in the head of the can and whereby the device can be used for cutting the heads of different-sized cans.

The principal object of this invention is to provide a can-opener comprising a slotted shank, in which a blade-holder is free to slide without friction and can be locked in its adjusted position, the said blade-holder consisting, essentially, of a pair of screw-connected disks or plates embracing the opposite sides of the slotted shank, one of the said disks or plates being provided with a blade or cutter, and the said disks or plates being provided with interlocking means which retains the two disks or plates and the blade or cutter in their initial normal positions when the blade-holder is not in an immovably fixed or locked relation with the shank, so as to prevent any undue friction between the edges of the cutter and the inner marginal edges of the shank which surround the said slot.

Other objects of this invention not at this time more particularly specified will be clearly evident from the following specification.

The invention therefore consists in the novel construction of can-opener hereinafter set forth; and, furthermore, this invention consists in the several novel arrangements and combinations of the various devices and

parts described in detail in the following specification and then finally embodied in the clauses of the claim which are appended to and form a part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which—

Figures 1 and 2 are the two side or face views of a can-opener embodying the principles of this invention; and Fig. 3 is a longitudinal vertical section of the same, said section being taken on line 3 3 in Fig. 1 looking in the direction of the arrow X. Fig. 4 is a transverse section of the device, said section being taken on line 4 4 in Fig. 1 looking in the direction of the arrow Y; and Fig. 5 is a collective perspective view of the various members of the blade-holder and a thumb-screw before being arranged in their assembled positions upon the slotted shank of the device.

Similar characters of reference are employed in all of the said hereinabove-described views to indicate the corresponding parts.

Referring now to the said drawings, the reference character 1 indicates the complete can-opening device, the same comprising a main body or shank 2, which is preferably provided at one end with a handle 3 and at its other end with a piercing member or point 4. This piercing member or point 4 is slightly out of alinement with the plane of the said main body or shank 2, as will be clearly seen from an inspection of Fig. 3 of the drawings. The said main body or shank 2 may also be provided at its end which carries said piercing member or point 4 with a forwardly-extending finger or projection 5, having a point 6 and a knife or cutter edge 7, as illustrated, and directly opposite said finger or projection 5 the "piercing-point" member 4 may be provided with a lug or shoe 8, as illustrated in Figs. 1 and 2, these parts being arranged in such a manner that an open space 9 is formed between them, as illustrated. The purpose of this finger or projection 5 is to enable the device to be used for cutting the heads of square or other similar cans, such as sardine-cans, by forcing the point 6 of the finger or projection 5 through the metal and then by using the handle 3 as a lever and the

shoe 8 as a fulcrum forcing the knife or cutter 7 through the metal, and thereby readily cutting the head from the body of the can, as will be clearly evident.

5 To enable the device to be used with cylindrical cans of various diameters, I have provided the main body or shank 2 with a longitudinally-extending slot 9' and with a slidably-arranged cutter or blade holder.
 10 This cutter or blade holder consists, essentially, of a disk or plate 10, which is provided with a screw-hole 11 and an upwardly-extending lug or projection 12 at one edge of the said disk or plate 10 and a second disk or
 15 plate 13, which is provided with a hole 14, a downwardly-extending cutter or knife-blade 15 at one edge, and with a recess 16 in its edge, placed diametrically opposite the said cutter or knife-blade 15, as illustrated. The said
 20 disk or plate 10 is also made with a straight edge 17, and the cutter or blade is provided with an offset 18 and a shoulder 19, all of which will be more particularly seen from an inspection of Figs. 4 and 5. The various
 25 members are assembled in the manner illustrated, the plates or disks 10 and 13 being arranged against the opposite faces of the main body or shank 2, with the lug or projection 12 extending upwardly through the slot 9' and
 30 being snugly fitted in the recess 16 of the said disk or plate 13. The cutter or knife-blade 15 in turn extends in a downward direction through the said slot 9', with its flat surface 20 bearing directly against the
 35 straight edge 17 of the said disk or plate 10. The two disks or plates can then be secured in their adjusted positions upon the main body or shank 2 by means of a thumb-screw 21, the screw-threaded shank 22 of which is passed
 40 through the hole 14 in the disk or plate 13 and then screwed into the screw-hole 11 of the disk or plate 10. As will be seen from Fig. 4, the shoulder 19, connected with the cutter or knife-blade 15, bears directly
 45 against the under surface of the shank or main body 2 to prevent any displacement of the blade or knife when its cutter or knife edge is in its cutting operation with the metal head of the can. By slightly unscrewing the
 50 thumb-screw the blade or cutter holder can be slid along the main body or shank 2 and fixed in any adjusted position by again tightening up the thumb-screw, the lug or projection 12, which is in interlocking engagement
 55 with the recess 16 of the disk or plate 13, preventing any lateral displacement of the two disks or plates 10 and 13 when loosely arranged in their sliding relation upon the opposite sides of the slotted shank 2.
 60 The manner of employing the device for cutting out the heads of cylindrical cans is evident from an inspection of the drawings, the piercing member 4 being forced through the central part of the metal head and the
 65 blade being forced through the metal head near its rim where it is attached to the body of the can, the piercing member being used

as a pivot or fulcrum and the handle as a lever for drawing the blade or cutter through the metal. The said piercing member also
 70 acts to retain the detached metal of the can upon the tool and prevents it from dropping into the body of the can after it has been cut.

Having thus described my invention, what I claim is—

75 1. A can-opener, comprising a slotted shank, and a blade-holder slidably arranged upon said shank, consisting, essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said disks being provided
 80 with a recess and a cutter extending in a downward direction through the slot in said shank, and an upwardly-projecting lug upon the other disk extending through the slot in said shank and registering in locked engage-
 85 ment with the recess in the disk which is provided with the cutter, substantially as and for the purposes set forth.

2. A can-opener, comprising a slotted shank, and a blade-holder slidably arranged upon
 90 said shank, consisting, essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said disks being provided with a recess and a cutter extending in a
 95 downward direction through the slot in said shank, and an upwardly-projecting lug upon the other disk, extending through the slot in said shank and registering in locked engagement with the recess in the disk which is provided
 100 with a cutter, all combined with a piercing member at the free end of said shank, substantially as and for the purposes set forth.

3. A can-opener, comprising a slotted shank, and a blade-holder slidably arranged upon
 105 said shank, consisting, essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said disks being provided with a recess and a cutter extending in a
 110 downward direction through the slot in said shank, an upwardly-projecting lug upon the other disk extending through the slot in said shank and registering in locked engagement with the recess in the disk which is provided
 115 with said upwardly-extending lug having a diametrically-placed straight edge in close proximity to the inner surface of said cutter, substantially as and for the purposes set forth.
 120

4. A can-opener comprising a slotted shank, and a blade-holder slidably arranged upon
 125 said shank, consisting, essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said disks being provided with a recess and a cutter extending in a
 130 downward direction through the slot in said shank, an upwardly-projecting lug upon the other disk extending through the slot in said shank and registering in locked engagement with the recess in the disk which is provided
 with the cutter, said disk which is provided with said upwardly-extending lug having a diametrically-placed straight edge in close

proximity to the inner surface of said cutter, all combined with a piercing member at the free end of said shank, substantially as and for the purposes set forth.

5 5. In a can-opener, the combination, with a slotted shank, of a blade-holder, consisting, essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said disks having a screw-hole and the other disk
10 being provided with a correspondingly-arranged hole, a tightening-screw in the holes of said disks for securing said disks in adjustable relation upon the opposite sides of the shank, one of said disks being provided with
15 a recess and a cutter extending in a downward direction through the slot in said shank, and an upwardly-projecting lug upon the other disk extending through the slot in said shank and registering in locked engagement
20 with the recess in the disk which is provided with the cutter, substantially as and for the purposes set forth.

6. In a can-opener, the combination, with a slotted shank, of a blade-holder, consisting,
25 essentially, of a pair of disks arranged upon the opposite sides of said shank, one of said

disks having a screw-hole and the other disk being provided with a correspondingly-arranged hole, a tightening-screw in the holes of said disks for securing said disks in ad- 30 justable relation upon the opposite sides of the shank, one of said disks being provided with a recess and a cutter extending in a downward direction through the slot in said shank, an upwardly-projecting lug upon the 35 other disk extending through the slot in said shank and registering in locked engagement with the recess in the disk which is provided with the cutter, said disk which is provided with said upwardly-extending lug having a 40 diametrically-placed straight edge in close proximity to the inner surface of said cutter, substantially as and for the purposes set forth.

In testimony that I claim the invention set 45 forth above I have hereunto set my hand this 10th day of November, 1902.

GEORGE F. HALL.

Witnesses:

FREDK. C. FRAENTZEL,
GEORGE DOUGLASS.