No. 896,822. PATENTED AUG. 25, 1908.

F. P. GORIN.

CAN OPENER.

APPLICATION FILED NOV. 4, 1907.

Fig. 1.

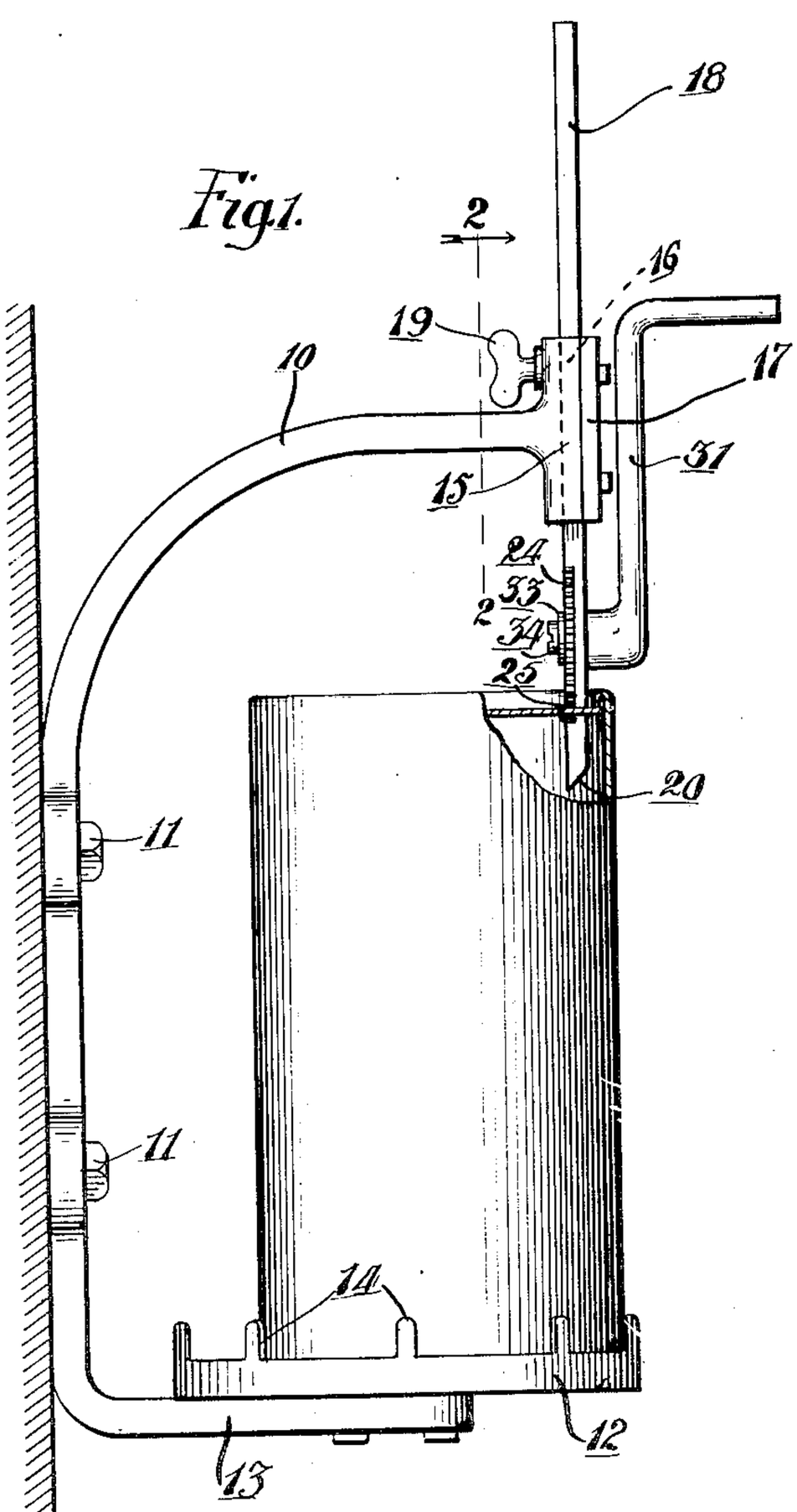
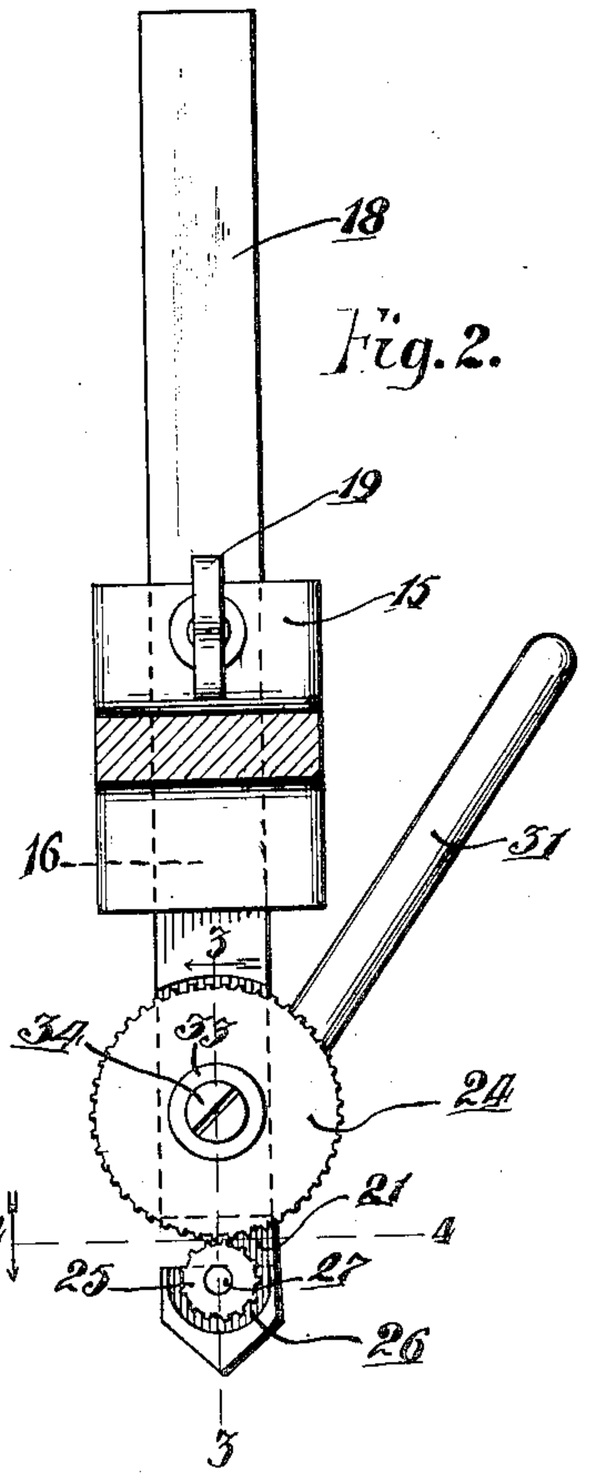


Fig. 2.



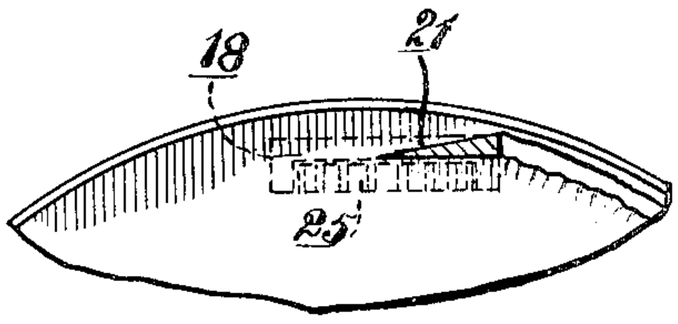
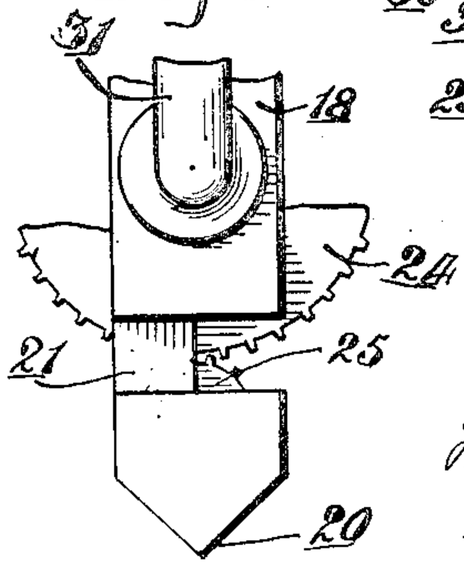


Fig. 4.

Fig. 5.



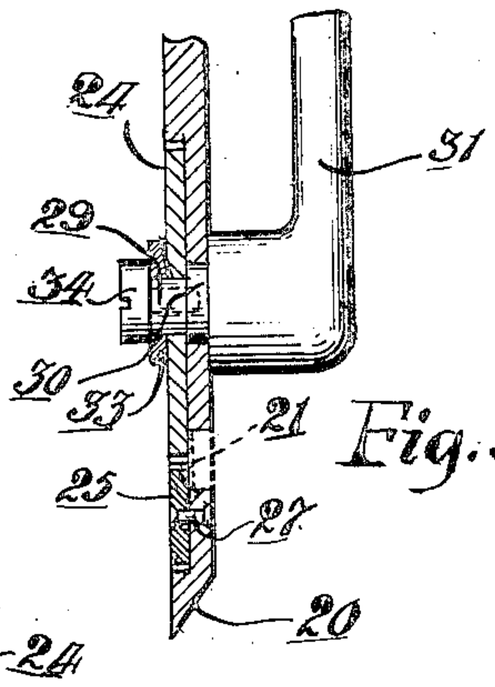


Fig. 3.

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UNITED STATES PATENT OFFICE.

FREDERICK P. GORIN, OF CHICAGO, ILLINOIS.

CAN-OPENER.

No. 896,822. Specification of Letters Patent. Patented Aug. 25, 1908.

Application filed November 4, 1907. Serial No. 400,574.

To all whom it may concern:

Be it known that I, FREDERICK P. GORIN, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Can-Openers, of which the following is a full, clear, and exact description.

The invention relates to can-openers and designs to provide an improved device which, when operated, will cause relative movement of the can and cutter to facilitate the opening operation and to make it unnecessary to manually manipulate the cutter to advance it over the can.

The invention further designs to provide a can-opener of improved construction and which may be conveniently operated without danger of injury to the hands of the operator.

The invention consists in the several novel features hereinafter set forth and more particularly defined by claim at the conclusion hereof.

In the drawings: Figure 1 is an elevation of a device embodying the invention. Fig. 2 is a section on line 2—2 of Fig. 1, on a larger scale. Fig. 3 is a section taken on line 3—3 of Fig. 2 and Fig. 4 is a horizontal section on line 4—4 of Fig. 2, illustrating the device in operation. Fig. 5 is an elevation viewed from the outer side, of the parts illustrated in Fig. 3.

A supporting frame 10 of any suitable form is provided which may be secured in any convenient position, *e. g.*, to a wall or table, by bolts 11. A can-support 12 is secured to a projecting arm 13 of the frame 10 and is usually of such size as to support the largest can to be opened. Lugs 14 are provided to guide the lower portion of the can against lateral movement during the operation of the opener. The supporting-frame 10 is provided with a bracket 15 having a vertical guide or channel 16 formed therein. A cutter supporting-bar 18 is held in channel 16 of bracket 15, by a cap 17 so it may be raised or lowered to bring the cutter into operative position or relation with respect to the tops of cans of different lengths. A set-screw 19 serves to secure the bar 18 in assigned position when desired.

The lower terminal of bar 18 is beveled or pointed as at 20 to form means for puncturing the can and which may be forced through the top thereof. A short distance above the lower terminal of the bar it is cut away to form a knife or cutter 21 which has an edge adapted to cut the metal of the can when relative movement is imparted to the cutter and can. Bar 18 is usually formed of suitable material, such as tool-steel, so that the cutter may be formed by an integral part thereof.

A pair of feed-rolls or wheels are journaled in bar 18. Said rolls are adapted to grasp the top of the can and feed it to the knife. The upper of these feed-rolls 24 is disposed in a recess formed in the cutter-support or bar 18 and is disposed above the can when in operation to engage the outer surface of the can-top. A small feed-wheel 25 is disposed in a recess 26 formed near the lower end of bar 18, being revolubly mounted on a stud 27. The peripheries of the feed rolls are disposed with respect to the cutter, so that the metal of the top or wall of the can to be opened will be within the bite of the feed-rolls, each of which is preferably provided with teeth to firmly hold and feed the material. These feed-rolls are disposed so that they will bite into the wall of the can to be cut, in advance of the knife, so that the feed-rolls will take hold of an unsevered portion of the wall of the can. The upper feed-roll 24 is journaled on the reduced portion 29 of a stud 30 of a crank 31, which is journaled in the cutter-support or bar 18, the crank being secured to said stud 30 or integrally formed therewith. The reduced portion 29 of the stud is suitably connected to the feed-roll 24 so that it will rotate with the crank. A washer 33 and screw 34 connect the crank and feed-roll 24 against lateral movement in supporting-bar 18, the crank forming a shoulder for one side of the support and the roll fitting against the other side so that the journal-portion 30 will be free to revolve in the support.

The operation of the device will be as follows: The can to be opened is placed on the support 12, the outer lug 14 being disposed so that the edge of the can will be properly positioned to cause the cutter to penetrate the top near the edge of the can. Bar 18 will then be lowered or driven to cause the terminal 20 to puncture the can and penetrate it to bring the top of the can substantially in the place of the cutter 21 and between the feed-rolls. The can will then be turned slightly to bring the edge around the punctured portion into the bite of and between the rollers. The support 18 may be held in

proper elevation to cause the cutter to remain in the plane at the top of the can by screw 19. By turning the crank 31 the feed-rolls will be operated to feed the can to the knife until the entire top or so much thereof as may be desired, has been cut.

Manifestly, the invention provides a can-opener of simple construction which may be conveniently operated without danger of injury to the hands and in which feed-rolls are provided for effecting the relative movement of the cutter and the can during operation.

The invention is not to be understood as restricted to the details set forth since these may be modified within the scope of the appended claims without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a can-opener, the combination of a cutter, feed-rolls for effecting relative movement of the cutter and can, said rolls being relatively disposed to impinge against the inner and outer surfaces respectively of that wall of the can which is severed by the cutter, and operating-means for one of said rolls.

2. In a can-opener, the combination of a cutter, feed-rolls for effecting relative movement of the cutter and can, said rolls being disposed to impinge against the inner and outer surfaces respectively of that wall of the can which is severed by the cutter and being disposed to impinge against said wall in advance of the cutter, and operating-means for one of said rolls.

3. In a can-opener, the combination of a cutter, feed-rolls for effecting relative movement of the cutter and the can, said rolls being disposed to impinge against the inner and outer surfaces of the can-top respectively and operating-means for one of the rolls.

4. In a can-opener, the combination of a cutter, feed-rolls for effecting relative movement of the cutter and the can, said rolls being disposed to impinge against the inner and outer surfaces of the can-top respectively, means for puncturing the can so the lower roll can pass into it, and operating-means for one of the rolls.

5. In a can-opener, the combination of a cutter, feed rolls for effecting relative movement of the cutter and can, said rolls being disposed to impinge against the inner and outer surfaces of that wall of the can which is severed by the cutter, means for puncturing the can so one of the rolls can pass into it, and operating-means for one of the rolls.

6. In a can-opener, the combination of a support, a cutter sustained by said support, a pair of feed-rolls on said support, said rolls being disposed to impinge against the inner and outer surfaces of the can-top respectively, and operating-means for one of the feed-rolls.

7. In a can-opener, the combination of a support a cutter sustained by said support, a pair of feed-rolls mounted on said support, said rolls being disposed to impinge against the inner and outer surfaces respectively of that wall of the can which is severed by the cutter, and operating-means for one of said feed-rolls.

8. In a can-opener, the combination of a supporting-bar, a pair of coöperating feed-rolls revolubly sustained by said bar, a cutter sustained by said bar, means at the lower end of said bar for puncturing the can, said rolls being disposed to engage the inner and outer surfaces of the can-top respectively and a crank for operating one of said rolls.

9. In a can-opener, the combination of a supporting-bar, a pair of coöperating feed-rolls revolubly sustained by said bar, a cutter sustained by said bar, means at the lower end of said bar for puncturing the can, said rolls being disposed to engage the inner and outer surfaces of the can-top respectively, said bar having a recess therein in which the lower roll is held, and a crank for operating one of said rolls.

10. In a can-opener, the combination of a supporting-frame, a can-support, a cutter, a pair of coöperating feed rolls adjacent the cutter for engaging the inner and outer surfaces of the can-top to feed the can to the knife, and operating-means for one of the feed-rolls.

11. In a can-opener, the combination of a supporting-frame, a supporting-bar held in said frame, a pair of feed-rolls on said bar, a cutter on said bar adjacent the feed-rolls, and a crank for operating one of said rolls.

12. In a can-opener, the combination of a supporting-frame, a supporting bar held in said frame, a pair of feed-rolls on said bar, a cutter on said bar adjacent the feed-rolls, means at the lower end of said bar for puncturing the can, and a crank for operating one of said rolls.

13. In a can-opener, the combination of a supporting-frame, a supporting-bar held in said frame, a pair of feed rolls on said bar, a cutter on said bar adjacent the feed-rolls, said bar having a recess therein in which the lower roll is held, and a crank secured to the other roll.

14. In a can-opener, the combination of a supporting-frame, a supporting-bar held in said frame, a pair of feed-rolls on said bar, a cutter on said bar adjacent the feed rolls, said bar having a recess therein in which the lower roll is held, said bar having a cutting-edge at its lower end, and a crank operatively connected to the upper roll.

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