No. 679,605.

Patented July 30, 1901.

T. A. DARLING.

CAN OPENER.

(Application filed Jan. 9, 1901.)

(No Model.)

Fig. 3

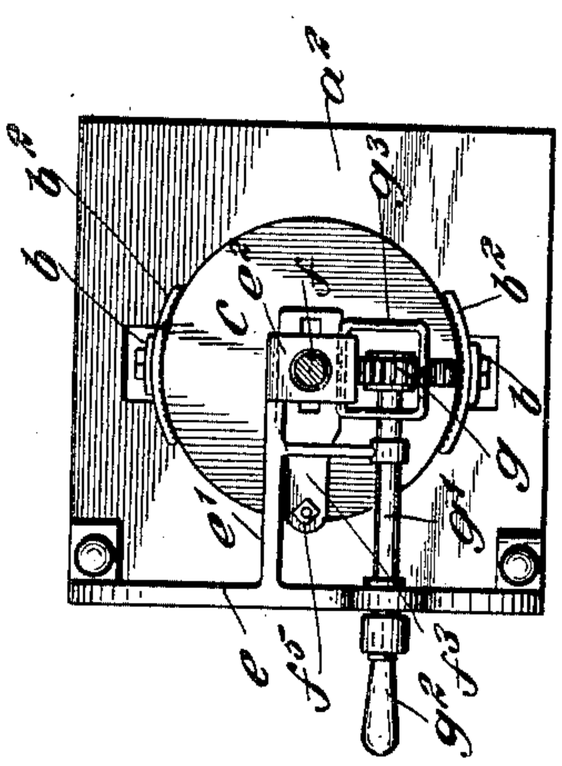

Fig. 4

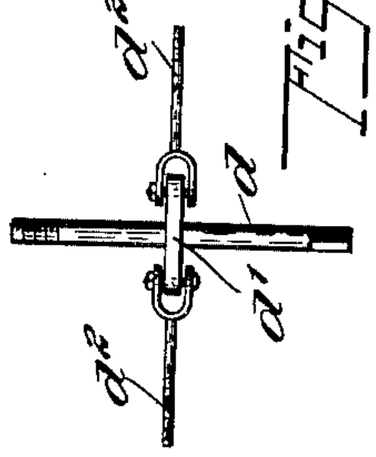

Fig. 2

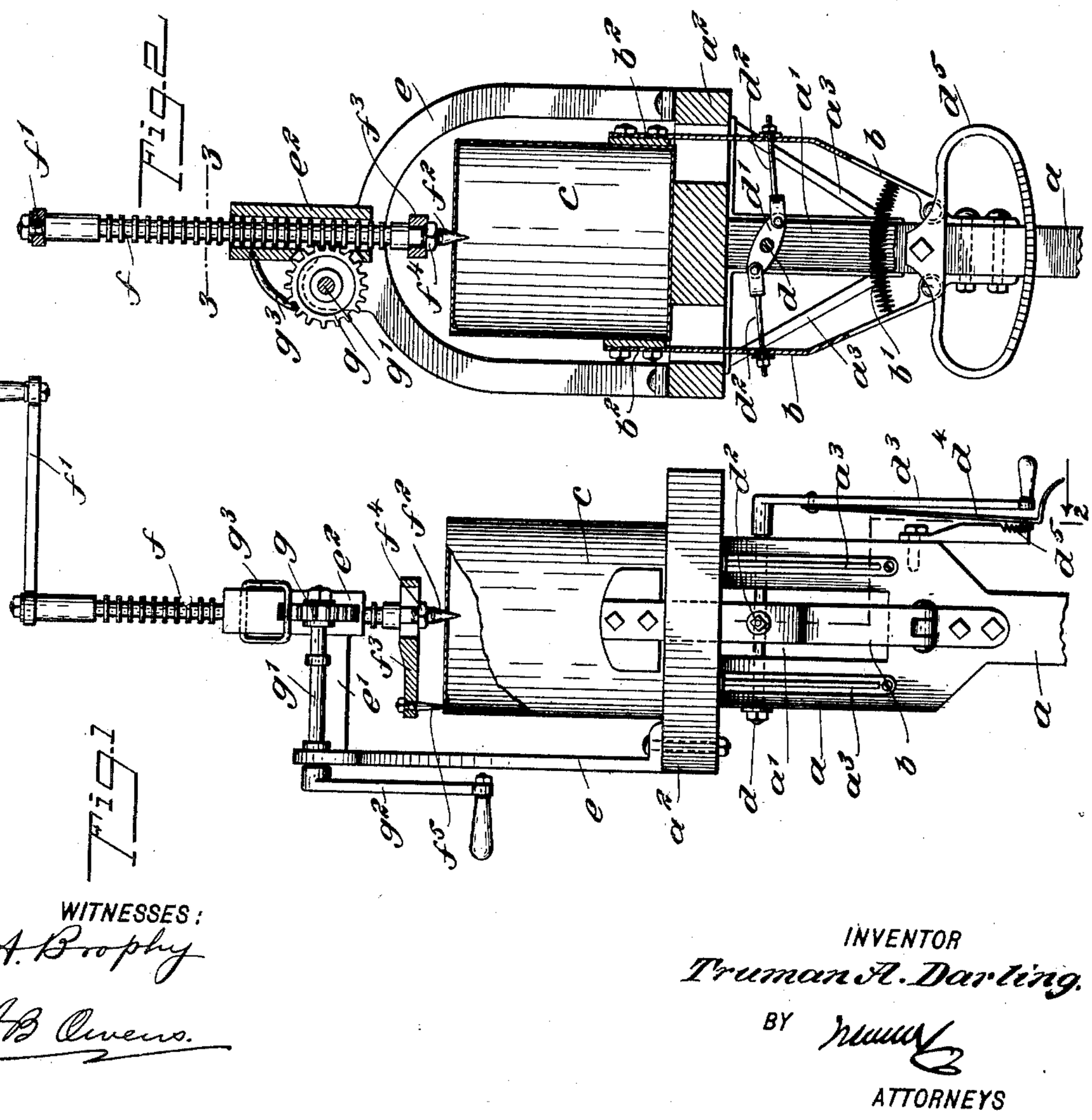

Fig. 1

WITNESSES:

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TRUMAN A. DARLING, OF ANAHEIM, CALIFORNIA.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 679,605, dated July 30, 1901.

Application filed January 9, 1901. Serial No. 42,632. (No model.)

To all whom it may concern:

Be it known that I, TRUMAN A. DARLING, a citizen of the United States, and a resident of Anaheim, in the county of Orange and State of California, have invented certain new and useful Improvements in Can-Openers, of which the following is a full, clear, and exact description.

This invention relates to a machine for opening cans by cutting the ends out of them and which comprises a suitable framing on which are mounted jaws for holding a can, together with a cutting tool, which is caused to move circularly around the head of a can to cut the same, these parts being constructed and combined in a certain novel manner, as will be hereinafter pointed out.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front view of the invention. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a sectional plan looking downward from the line 3 3 of Fig. 2, and Fig. 4 is a detail view of the device for actuating the jaws.

A standard or other suitable framing a is provided, and this is formed with an opening a' in its upper part. On top of the standard a is mounted a platform a^2 and strengthened in its place by brackets a^3, extending between the standard and the platform. Two arms b are pivotally mounted on opposite sides of the standard a and are pressed apart by a spring b', which passes through the opening a' in the standard and bears against the arms. These arms b extend upward, respectively, through openings in the platform a^2 and carry jaws b^2, which are designed to engage opposite sides of the can (indicated at c in the drawings) to hold the can in place. The arms b are drawn toward each other to clamp the can by means of links d^2, connected, respectively, to the arms b and to a lever d', fastened on a rockable shaft d, which shaft forms the fulcrum of the lever and is loosely mounted in the upper part of the standard a, the lever d' lying in the recess a' of the standard. The shaft d has a crank-handle d^3 attached, and this crank-handle carries a spring-pawl d^4, which works with a ratchet-bar d^5, fastened to the standard a. By means of the spring-pawl d^4 and the ratchet d^5 the crank d^3 may be held in any desired position. By properly moving the crank d^3 the lever d' may be thrown to draw the arms b together and engage the clamps b^2 with a can, and by throwing the crank d^3 in the opposite direction the arms b may be released and the spring b' allowed to assert itself to throw the clamps b^2 to open position.

Erected on the platform a^2 is an arch-shaped framing e, having a transverse arm e', carrying at its outer end a vertically-disposed sleeve e^2, this sleeve being coincident with the point intermediate the clamps b^2. Vertically movable in the sleeve e^2 is a bar f, formed with a number of annular teeth thereon, and these teeth are engaged by a pinion g, which passes through an opening in the sleeve e^2 and which is fastened on the shaft g', mounted in suitable bearings in the arm e', and having a crank-handle g^2 to facilitate the rotation of the shaft. A pawl g^3 is mounted on the sleeve e^2 and engages with the pinion g to hold it in the desired position. The bar f is provided at its upper end with a crank-handle f' to facilitate the rotation thereof, and the lower end of the bar f is formed with a point f^2, which is adapted to pierce the center of the upper end or head of the can. A transversely-disposed arm f^3 is adjustably held on the lower end of the bar f by means of a nut f^4, and the outer end of this arm f^3 carries a knife f^5, which is adapted to engage the periphery of the head of the can to cut the same, which cutting is effected by the rotation of the bar f.

In using the device the can is placed on the platform a^2 and the jaws b^2 are engaged with the can to hold it. The shaft g' is now rotated to move the bar f downward and engage the point f^2 with the head of the can. This movement also causes the knife f^5 to be engaged with the can, as shown in the drawings. Then by throwing the pawl g^3 down into engagement with the gear g to hold said gear immovable and by imparting a single turn to the bar f the knife f^5 will be caused to

cut out the head of the can. It should be noted that the bar *f* is formed with annular teeth or ribs which are not in the nature of a thread. Therefore the rotation of the bar *f* will not cause the bar to be moved accidentally, owing to the engagement of the teeth on the bar with the pinion *g*.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A can-opener, comprising a support, hinged jaws adapted to engage a can, a lever connected with the jaws for actuating the same, and a cutting device mounted over the jaws and arranged to engage the upper end of the can to cut the same.

2. A can-opener, comprising a support, hingedly-mounted arms carried thereby and provided at their upper end with jaws adapted to engage a can, a rock-shaft, a lever mounted on said shaft and having its ends respectively in connection with the arms, and cutting devices arranged over the arms to engage the upper end of the can.

3. A can-opener, comprising a support, arms hingedly mounted thereon, a rock-shaft having connection with the arms to operate the same, a handle attached to the shaft, a pawl carried by the handle, a ratchet fastened on the support and engaged by the pawl, and cutting devices mounted over the arms to work with the upper end of the can.

4. A can-opener, comprising a support with means for holding a can, a revoluble bar having annular teeth thereon, a knife carried by the bar to engage the can, and a pinion engaging the teeth of the bar, whereby to raise or lower the bar.

5. A can-opener, comprising a support with means for holding a can, a revoluble bar having annular teeth thereon, and provided with a point at its lower end to engage the center of the head of a can, an arm carried by the bar near its lower end, a knife at the end of the arm, and a pinion engaging the teeth of the bar.

6. In a can-opener, the combination of a support, with means for holding a can, a frame erected on the support, a vertically-disposed sleeve sustained on the frame, a bar movable vertically in the support and revoluble thereon and formed with annular teeth thereon, a revoluble shaft supported by the frame, a pinion mounted on the shaft and engaging the teeth of the bar, and a pawl for holding the pinion stationary.

7. A can-opener, having a support with means for holding a can, a revoluble bar formed with annular teeth and provided with a handle at its upper end, and having a point at its lower end to engage a can, an arm carried by the bar near its lower end and provided with a knife, a shaft mounted to turn and provided with a pinion engaging the teeth of said bar, to raise and lower the bar, and means for holding the pinion stationary.

8. A can-opener, comprising a standard, a platform supported on said standard, jaws adapted to engage opposite sides of a can and provided with arms extending through openings in the said platform and pivoted at their lower ends on opposite sides of the standard, a spring extending through an opening in the standard and engaging said arms to press the jaws apart, a shaft mounted to turn in the standard below the platform, a lever carried by said shaft, links connected to the said arms and to the lever, a handle connected with said shaft, means for holding the handle in the desired position, and a cutting device for engaging the upper end of the can.

9. A can-opener, comprising a support having a platform for the can, means for holding the can in position on the platform, an arch-shaped framing erected on the platform and having a transverse arm carrying a vertically-disposed sleeve at its outer end, a bar movable vertically in the said sleeve and mounted to turn therein, the said bar being formed with a series of annular teeth, a revoluble shaft mounted in the framing, a handle connected with the said shaft, a pinion carried by said shaft, the teeth of the pinion extending through an opening in the said sleeve and engaging the teeth of the said bar, means for holding the pinion stationary, and a cutting device carried by the said bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TRUMAN A. DARLING.

Witnesses:
RICHARD MELROSE,
M. NEBELUNG.