

No. 690,418.

Patented Jan. 7, 1902.

G. W. GOMBER.
CAN OPENER.

(Application filed May 13, 1901.)

(No Model.)

Fig. 1.

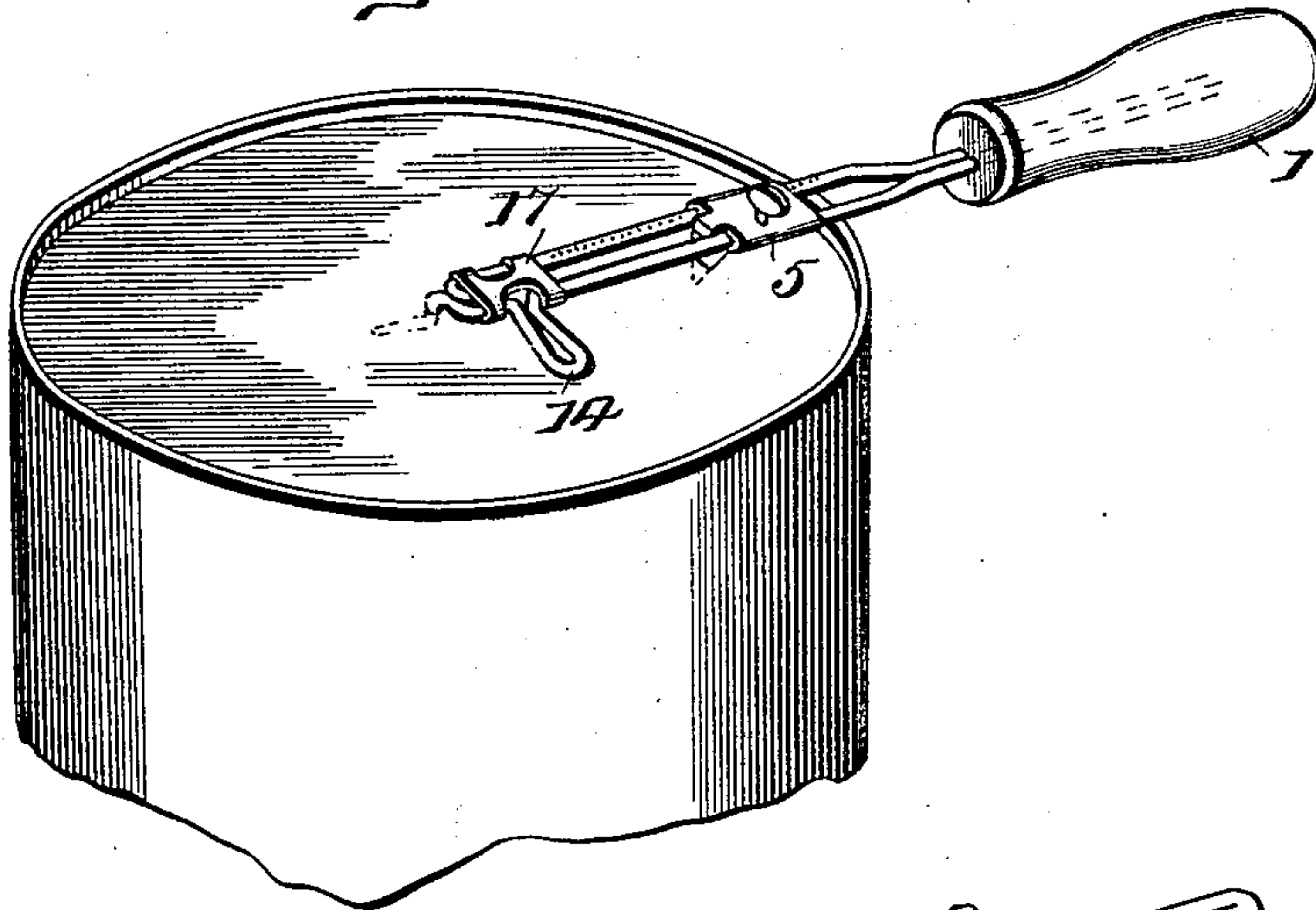


Fig. 2.

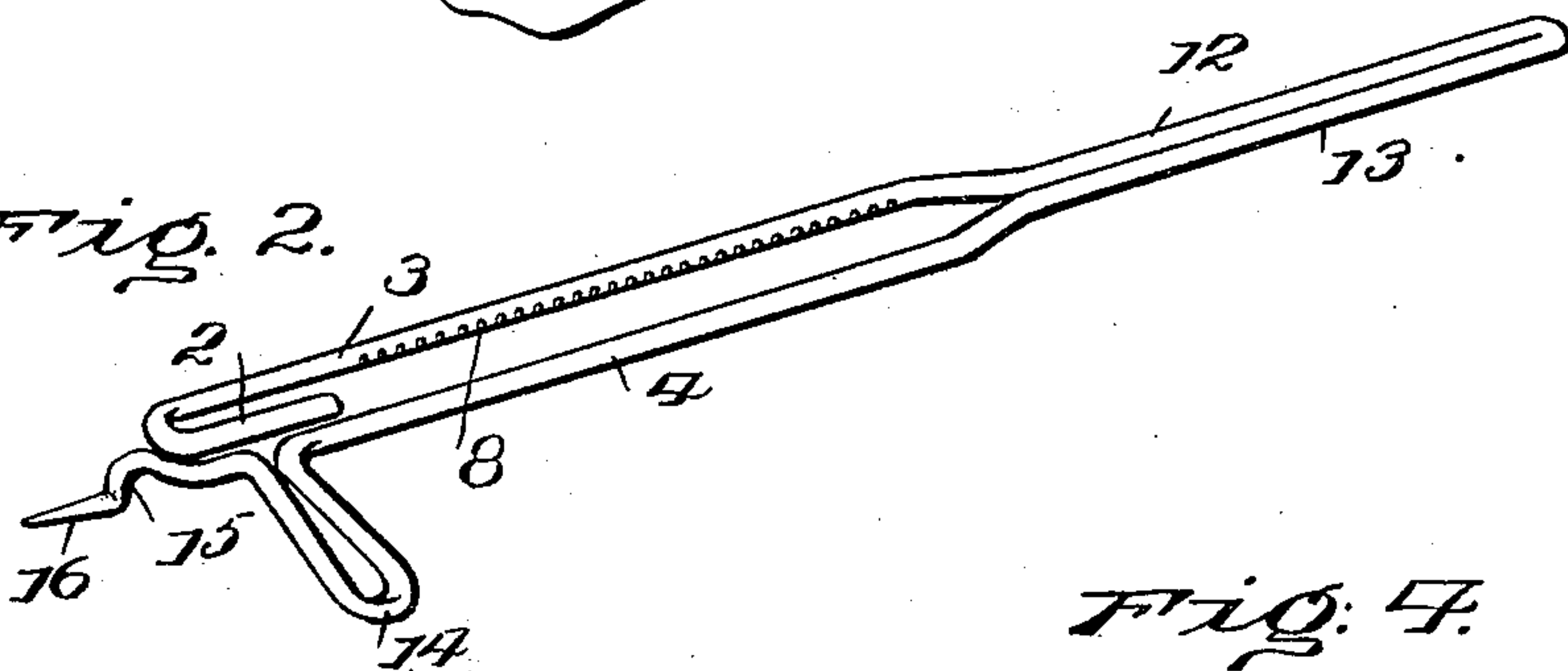


Fig. 3.

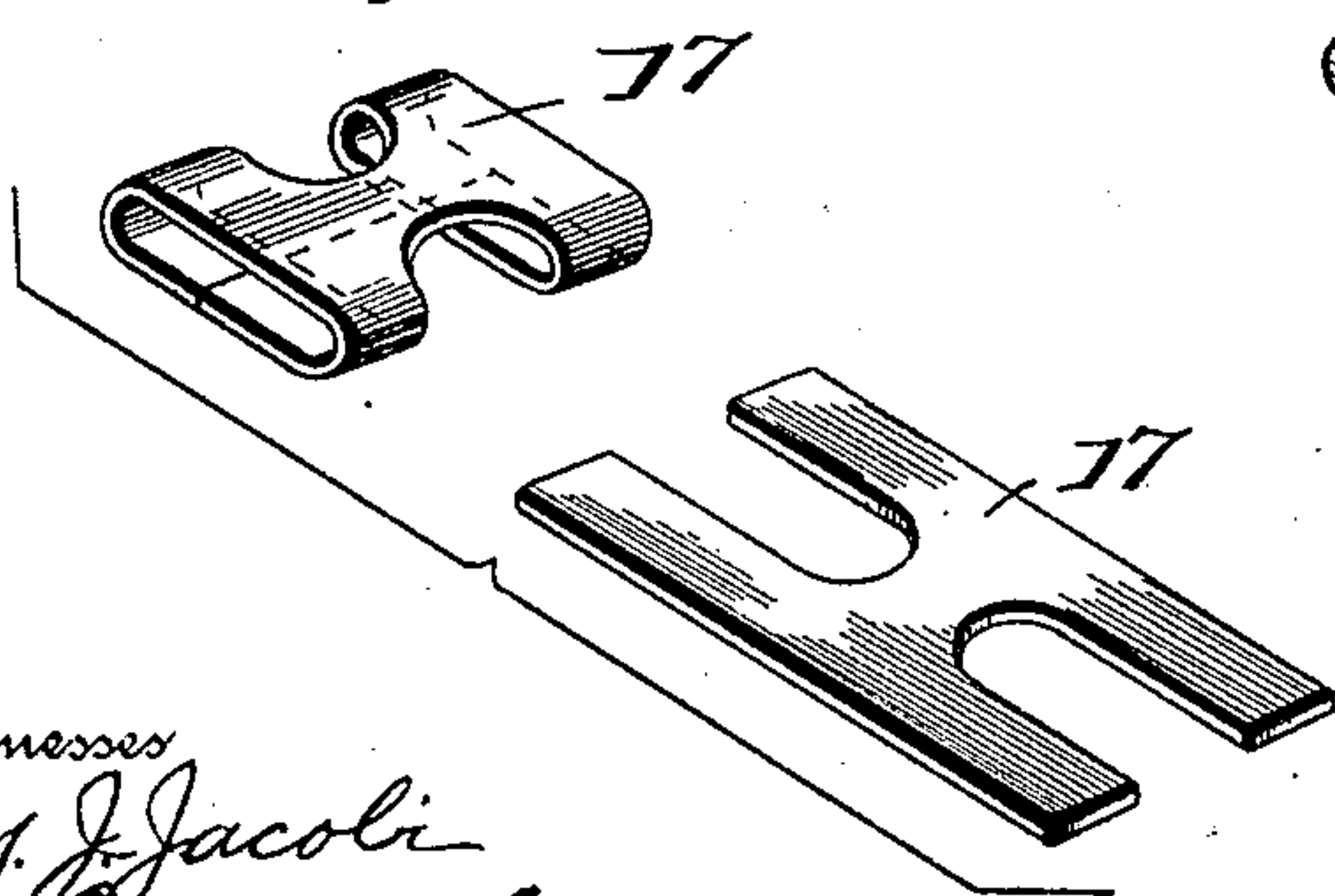


Fig. 4.

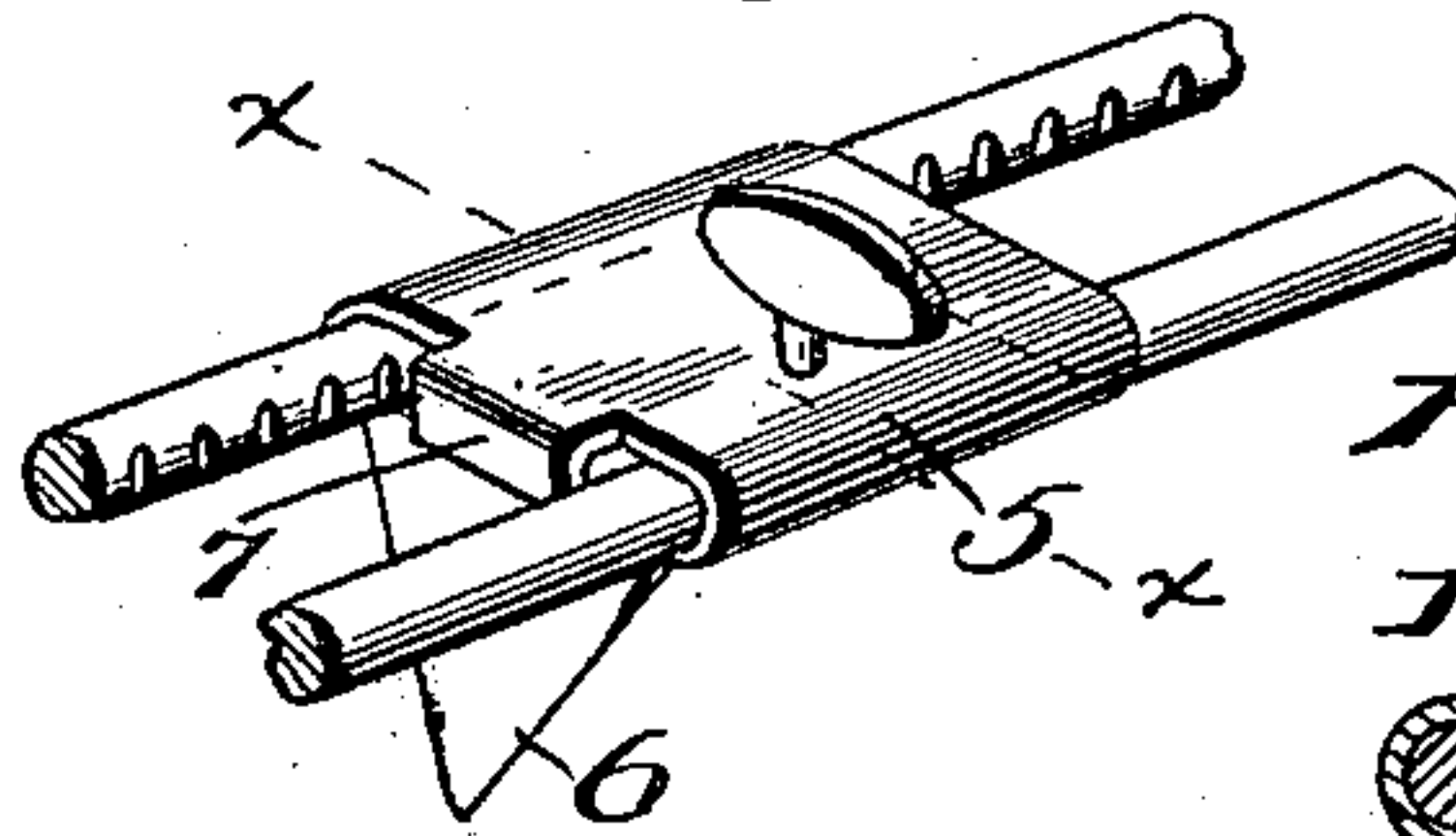
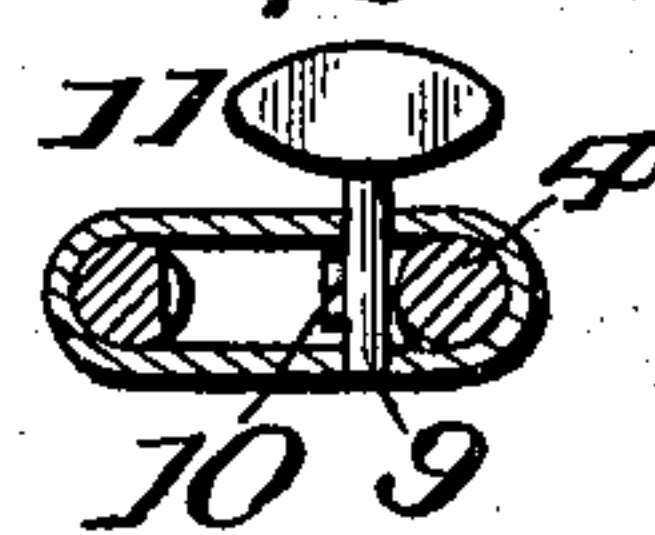


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE W. GOMBER, OF CONYNGHAM, PENNSYLVANIA.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 690,418, dated January 7, 1902.

Application filed May 13, 1901. Serial No. 59,963. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GOMBER, a citizen of the United States, residing at Conyngham, in the county of Luzerne and State of Pennsylvania, 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.

My invention has for its object the provision of a can-opening device, my special object being to provide an instrument of the characters specified which may be very cheaply and expeditiously manufactured and which will comprise means for anchoring a device upon the end of a can, whereby an opening of any desired size may be cut therein and bodily removed therefrom.

Other objects and advantages will be made fully apparent from the following specification, considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of my invention as applied to use upon the end of an ordinary tin can. Fig. 2 is a perspective detail view showing how the main or body portion of my device is formed of a single piece of wire. Fig. 3 shows a binding clip or collar for holding the contiguous portions of the wire in operative relationship to each other. Fig. 4 shows the adjustable cutting-blade and contiguous parts. Fig. 5 is a transverse section of Fig. 4 on line *x x*.

In order to conveniently designate the details of my invention and the parts provided to coöperate therewith, numerals will be employed, of which 1 indicates the handle portion of my can-opener, which may be of any preferred construction and provided with a suitable bore adapted to receive the end of the body portion proper of my can-opener, which latter is formed of a single piece of wire, as will be seen by reference to Fig. 2, said wire being first bent upon itself to provide the terminal 2, which lies parallel with the sections 3 and 4, which latter comprises, essentially, the main or body portion of my device and upon which I adjustably mount the movable collar or member 5, to which is

attached or with which is integrally formed the cutting blade or knife 6.

Upon the upper side of the collar 5 I form, upon the forward edge thereof, the depending tongue 7, which is of sufficient width to lie between the parallel sections 3 and 4, it being understood that the inner face of each of said sections may be vertically corrugated, as indicated by the numeral 8, said corrugations being designed to receive the end of the downwardly-extending tongue or lip 7, whereby the knife will be held against casually slipping from an adjusted position. Additional means may be provided for the collar 5 to hold it in an adjusted position, said means preferably comprising the locking device (illustrated in Figs. 1 and 5) consisting of the cam-shaft 9, rotatably mounted in suitable apertures in the collar 5 and provided upon one side with the cam extension 10, which latter is designed to engage the contiguous member or section 4 of the body portion, and it is obvious that since said shaft is provided with the thumb-piece 11 it may be freely turned by the operator so as to bring the cam extension 10 securely into engagement with the contiguous corrugated face of the member 4 and insure that the collar will be secured at any point desired upon said section.

The parallel sections 3 and 4, comprising the main or body portion of my can-opener, form an integral part of each other, inasmuch as the handle extension is formed from the same wire by bringing the members 3 and 4 snugly into engagement with each other, as indicated by the parallel sections designated by the numerals 12 and 13.

After the section 4 has been formed, it is continued and properly shaped so as to provide the laterally-extending loop-section 14, the wire being continued outward after said loop-section is formed, so as to parallel the section 2 to the outer end thereof, when the wire is bent slightly downward, as indicated by the numeral 15, and thence at right angles, so as to provide the terminal 16, which latter is sharpened, so as to readily enter the lid of the can when it is desired to use the device.

In order that the outer end of the section 3, the terminal 2, and the outer end of the

section 4 may be bound firmly in union with each other and said parts held against buckling or spreading, I provide the collar 17, (illustrated in detail in Fig. 3,) consisting of a suitable piece of sheet metal properly shaped so as to enable the same to be bent to inclose said parts, as illustrated in Fig. 1.

The several parts of my invention being formed of very cheap material, mainly of sheet metal and wire, may be produced at a very low cost, and since said parts may be shaped by suitable machinery it follows that large quantities thereof may be produced by a single machine controlled by a single operator, leaving little additional work to be done except that of assembling the parts, as above set forth.

It is thought that for all ordinary practical purposes the locking cam-shaft 9 may be dispensed with and dependence alone placed upon the lip 7 for holding the knife in an adjusted position upon the members 3 and 4, though I may in some instances find it desirable to employ said locking device in addition to said tongue, and I therefore reserve the right to manufacture the device either with or without said cam-shaft, as I may consider most desirable.

It is thought from the foregoing description that the use of my invention will have been made clearly apparent, though it may be stated that after the parts have been properly assembled in their respective operative places and the point 16 properly sharpened said point may be forced through preferably the center portion of the can-lid, when the sections 3 and 4, comprising the main or body section of the can-opener, may be brought downward substantially parallel with the lid, which will incidentally force the point of the knife 5 through a contiguous portion of said lid, when the handle may be moved laterally, causing the blade to cut out a section of the lid, which will still adhere to the point 16, and thereby enable the severed portion to be lifted out without soiling the fingers or without other means being employed to remove the same. The loop-section 14 is designed to prevent the body portion of the device from turning or rocking while the knife is being moved laterally.

Believing that the construction and manner of using my device will be fully understood I will dispense with further reference to the details thereof.

What I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described can-opener comprising the body portion formed of a piece of wire and bent to form the parallel sections 2, 3, 4, 12 and 13 and the laterally-extending loop-section 14, the downwardly-curved section 15 and the pointed sphere-section 16, in combination with a cutting-blade and means to adjustably secure said blade upon the sections 3 and 4 and a suitable handle adapted to receive the members 12 and 13, all combined substantially as specified and for the purpose set forth.

2. In a can-opener, a suitable body portion and a knife-section having a collar 5 attached thereto adapted to receive said body portion and a cam-shaft carried by said collar and adapted to engage said body portion, all substantially as specified and for the purpose set forth.

3. The herein-described can-opener comprising a main or body portion formed of the parallel members 3 and 4; a suitable handle-section connected to said members and a loop-section 14 forming an integral part of the section 4, the wire forming said section being shaped to form the pointed terminal 16 in combination with a cutting-blade and means to adjustably secure said blade in its operative position and additional means to hold the sections 3 and 4 in union with each other, all substantially as specified and for the purpose set forth.

4. The herein-described can-opener consisting of the main or body portion formed of a single piece of wire and comprising the parts 3, 4, 12, 13, 14, 15 and 16, all integral and formed substantially as described, in combination with an adjustable collar carried by the sections 3 and 4; a knife carried by said collar and a locking-cam rotatably mounted in suitable apertures in said collar and adapted to engage one of the members 3 and 4 whereby the collar may be secured in any desired position thereon and the knife sustained against casual displacement, all substantially as specified and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. GOMBER.

Witnesses:

G. F. DRUM,
HARRY F. GOMBER.