

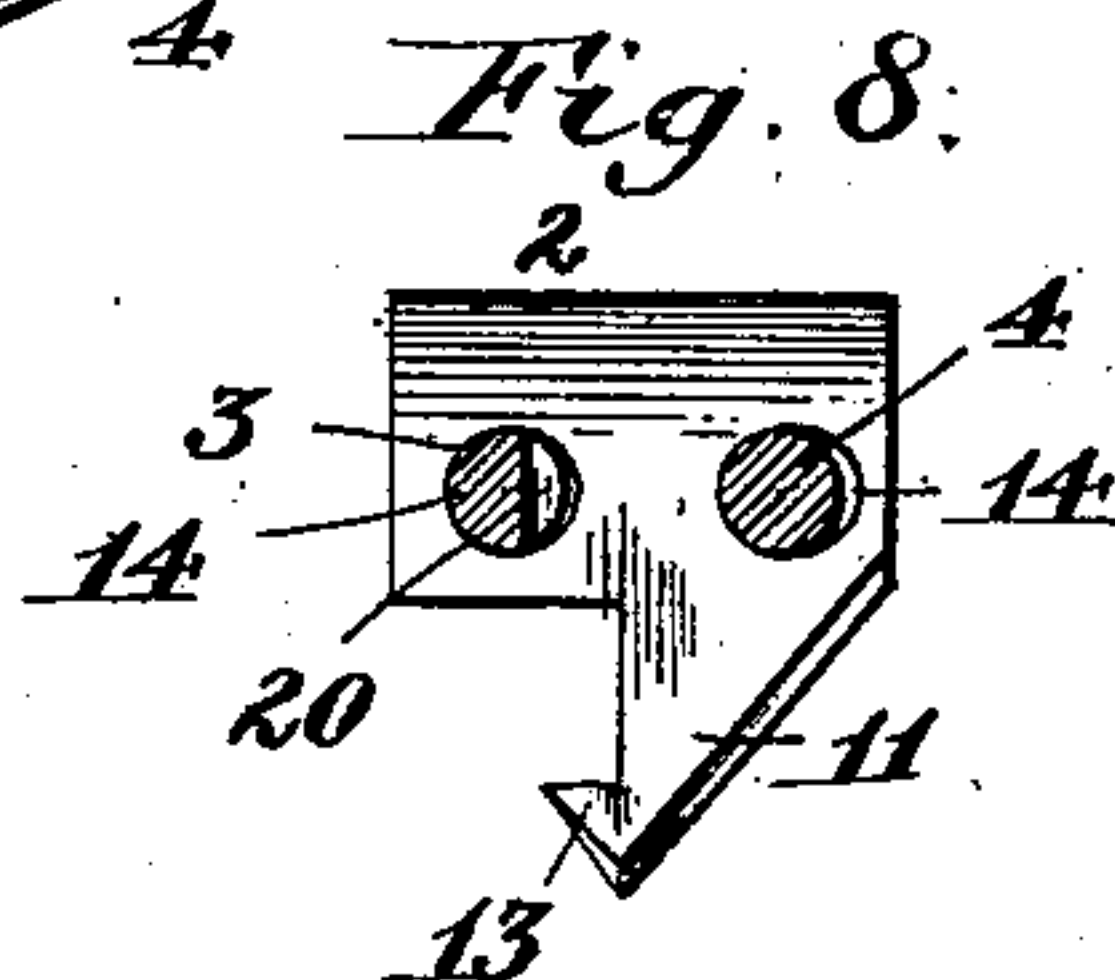
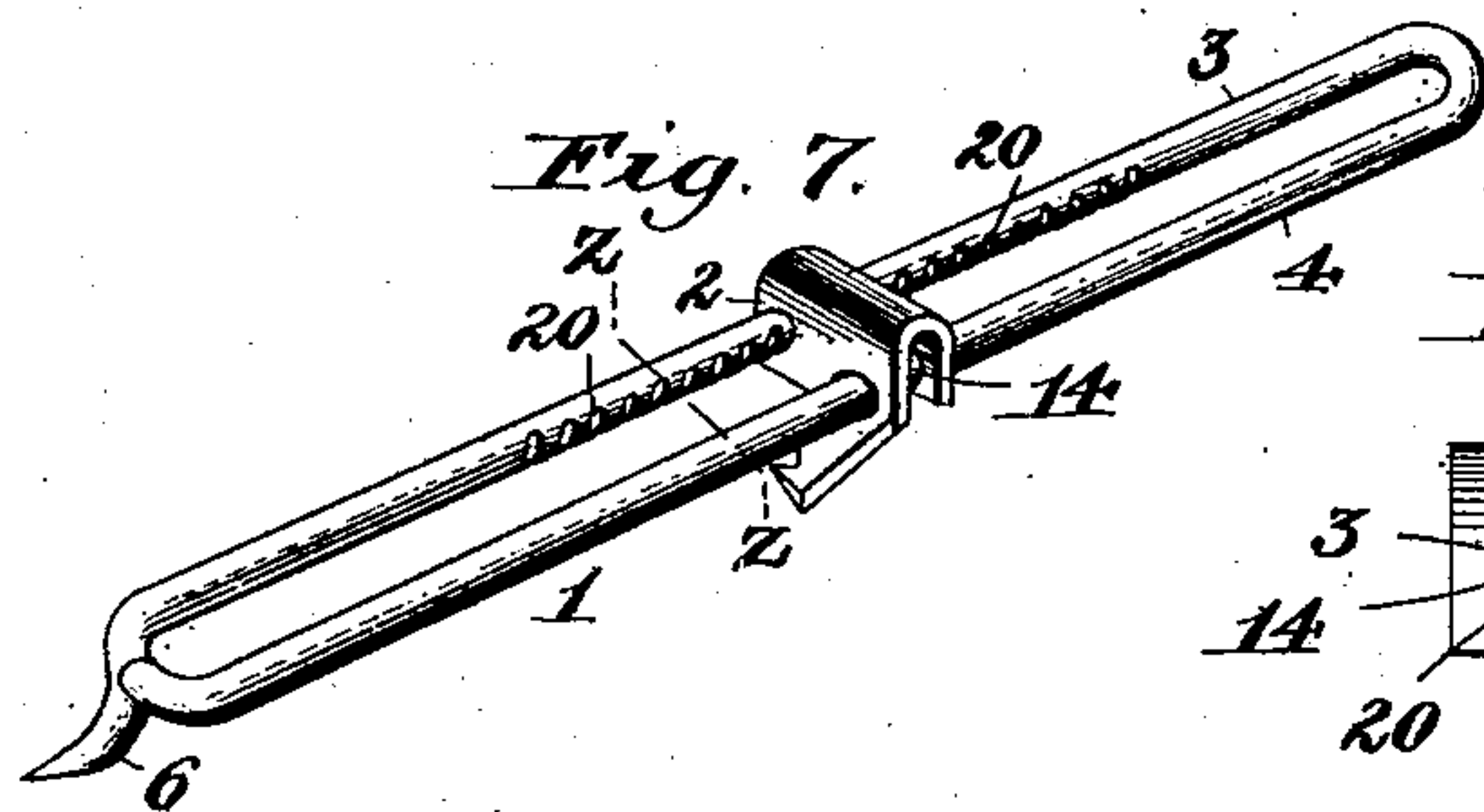
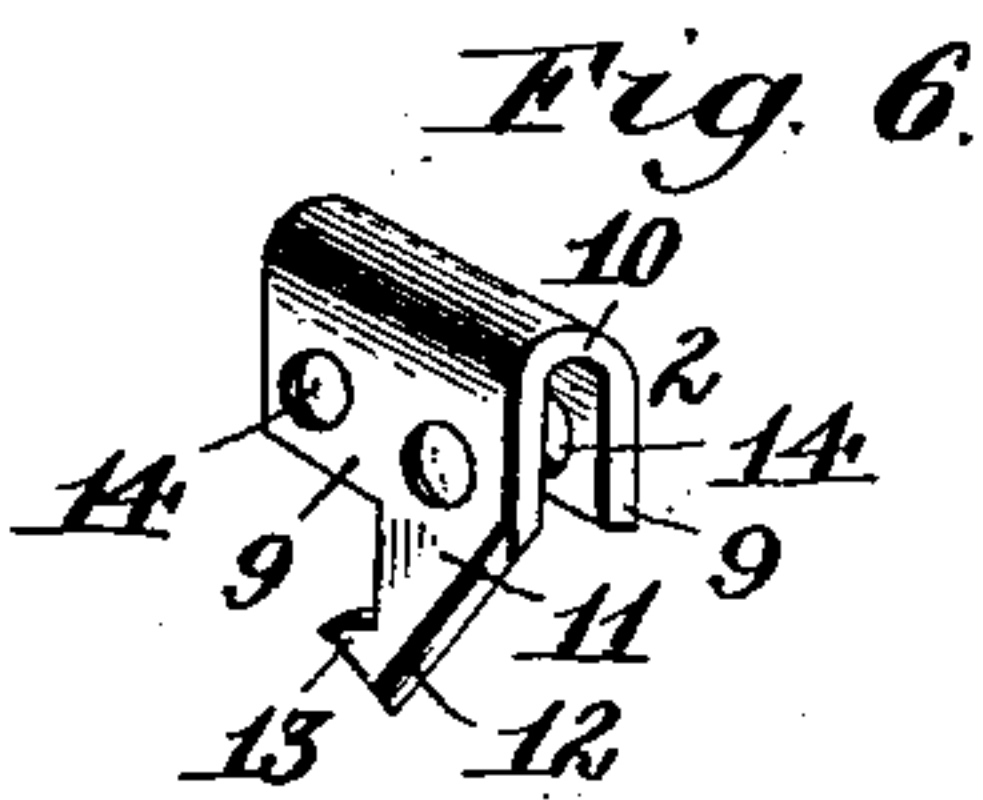
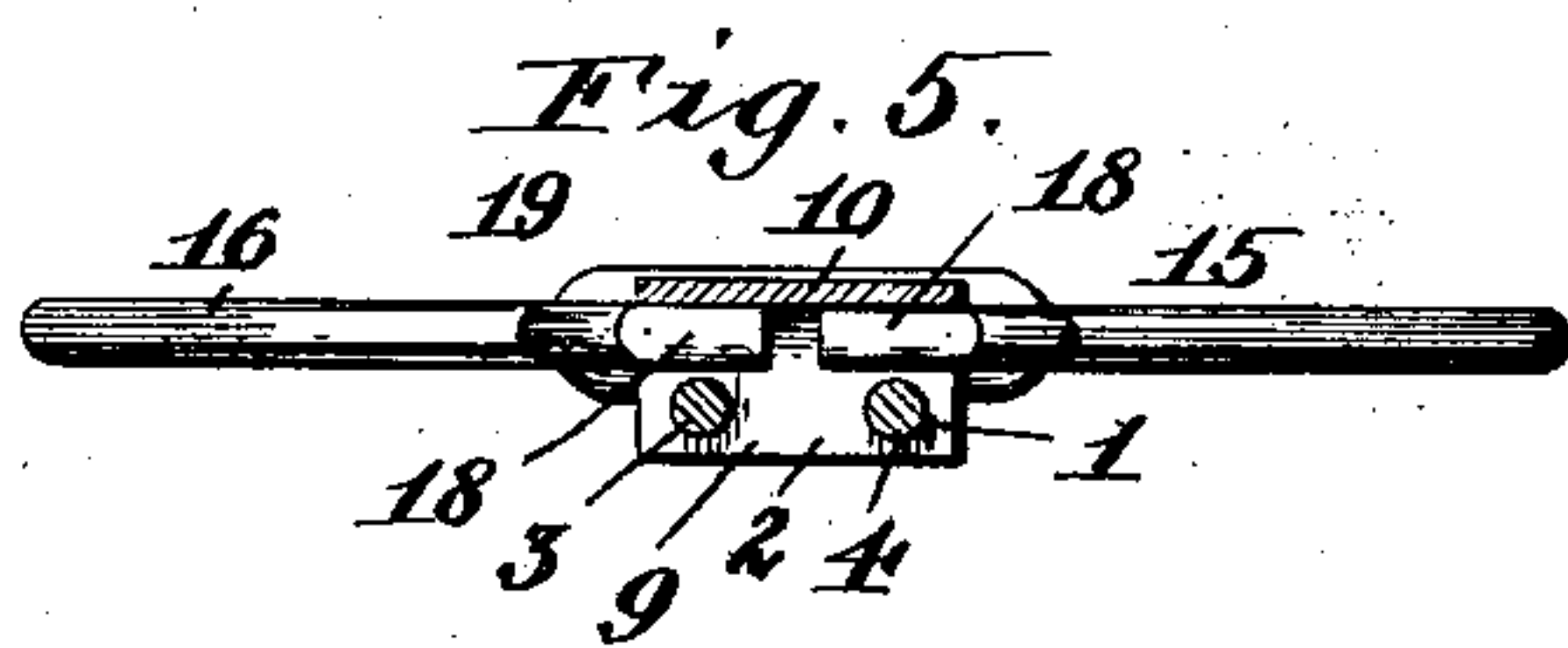
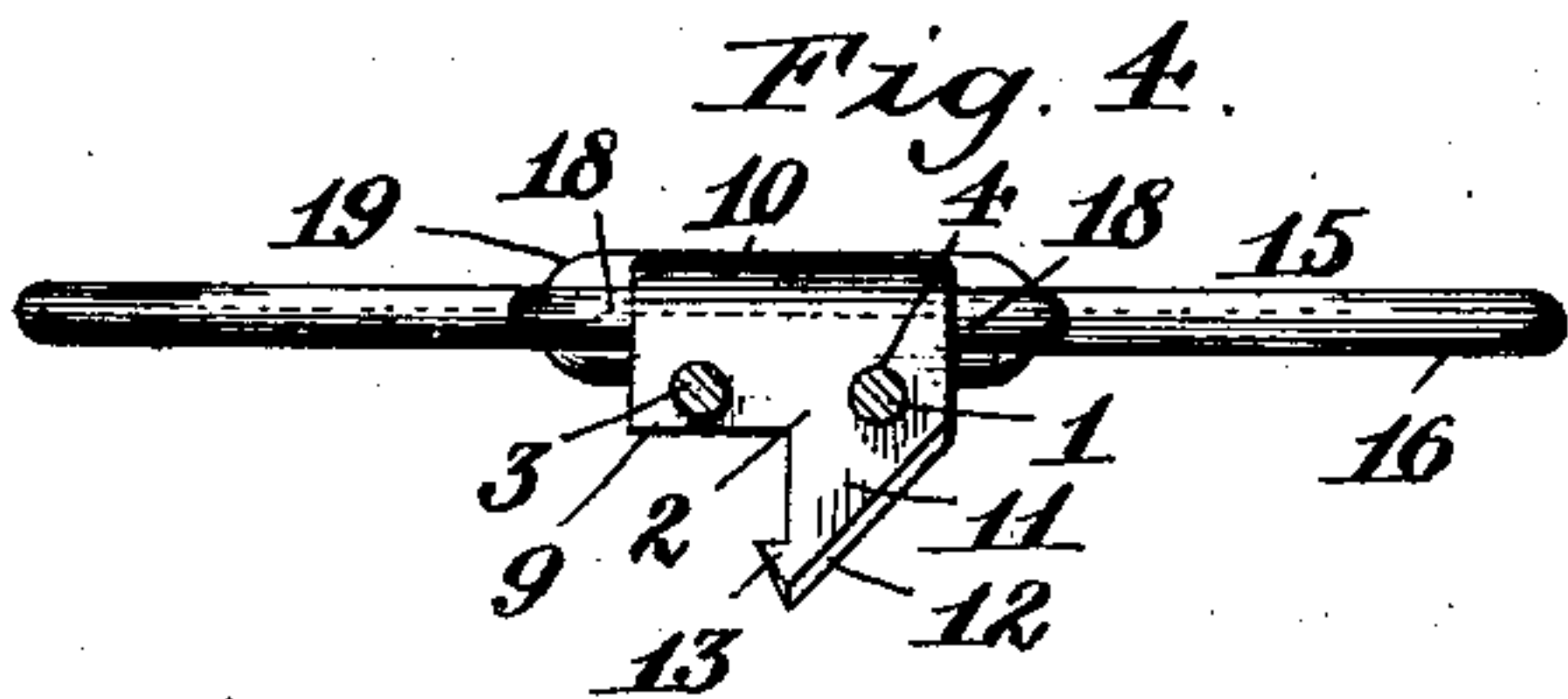
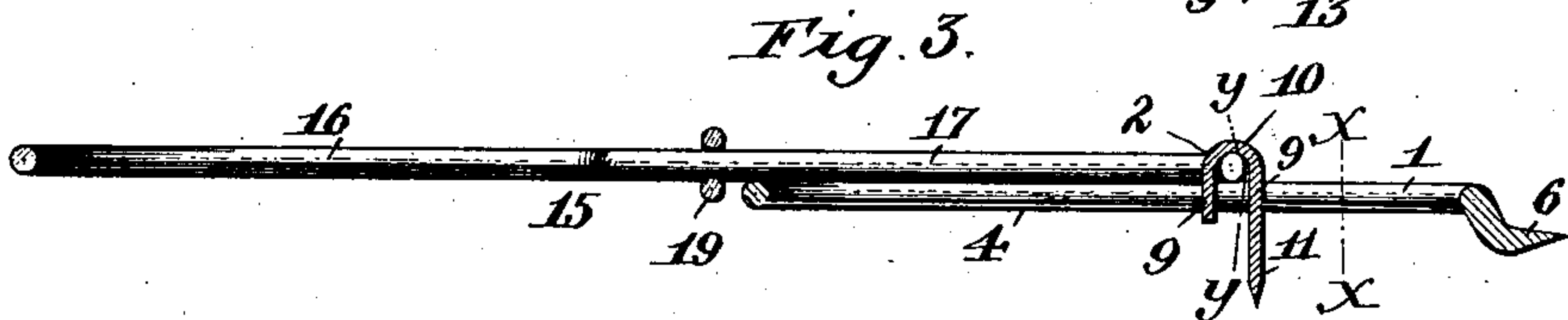
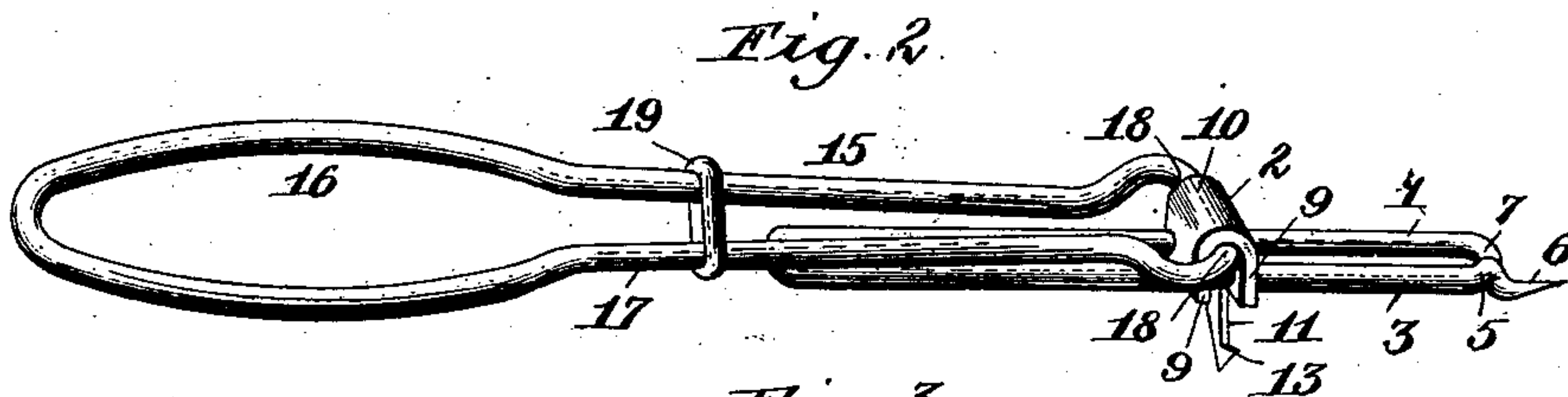
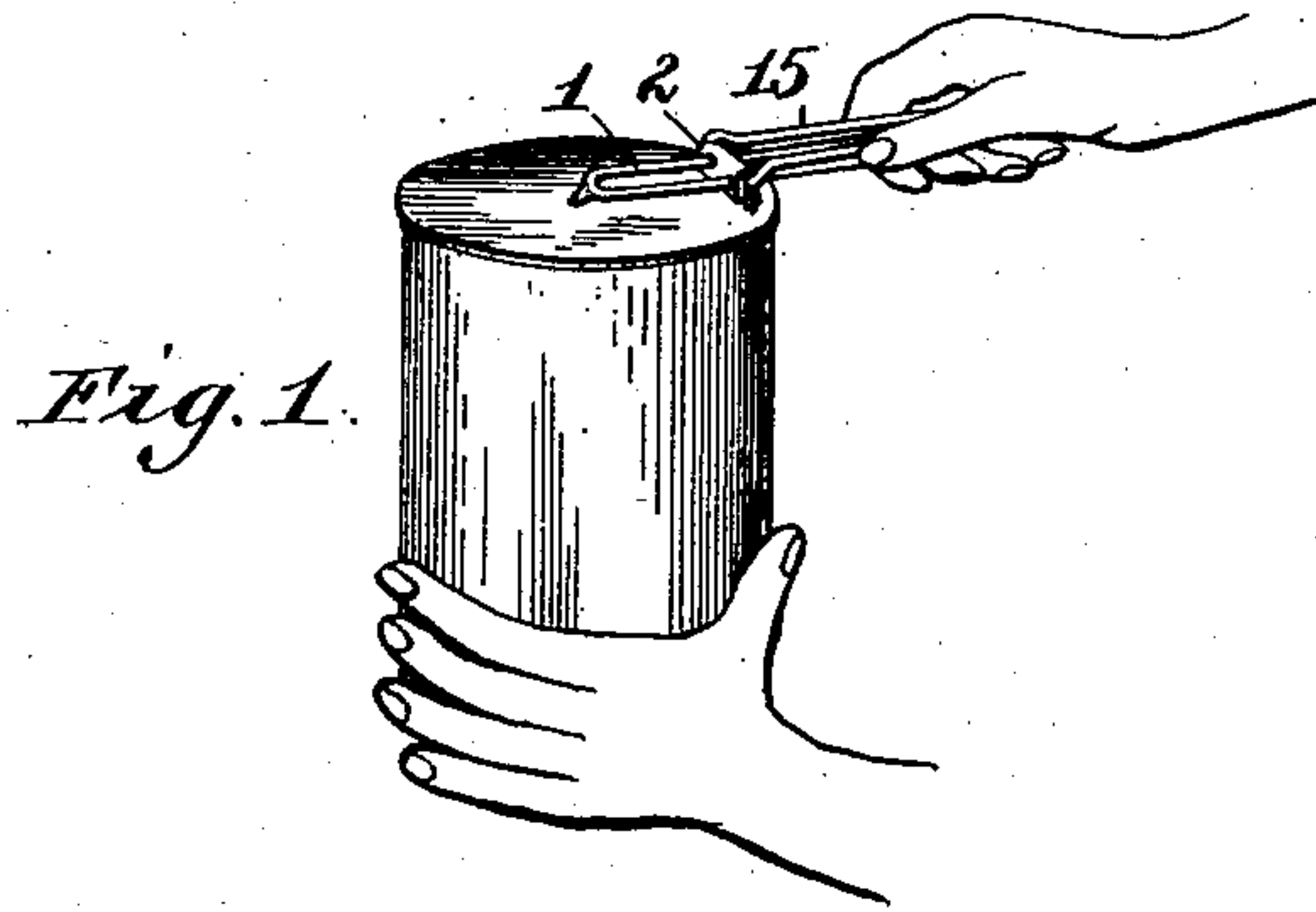
No. 742,418.

PATENTED OCT. 27, 1903.

R. O. HAMMOND.
CAN OPENER.

APPLICATION FILED FEB. 9, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT O. HAMMOND, OF BUFFALO, NEW YORK, ASSIGNOR OF TWO-THIRDS TO WILLIAM D. SCOTT AND ROBERT B. ROPE, OF BUFFALO, NEW YORK.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 742,418, dated October 27, 1903.

Application filed February 9, 1903. Serial No. 142,450. (No model.)

To all whom it may concern:

Be it known that I, ROBERT O. HAMMOND, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Can-Openers, of which the following is a specification.

My invention relates to can-openers of that type having a placer or fulcrum-pin and a knife adjustable toward and from said pin or placer around which it is designed to rotate and cut out a circular piece from the head of a can.

The object of this invention is to provide a simple, durable, and inexpensive can-opener of this type which can be quickly and conveniently adjusted to any size can and which can be formed entirely of wire, with the exception of the knife, which latter, however, can be conveniently stamped and formed with dies with but little expense.

Further objects are to provide a can-opener with an auxiliary handle and connect the same with the knife-bar, so that the knife of the can-opener is held firmly in any adjusted position when the auxiliary handle is swung against the knife-bar or handle proper.

To this end the invention consists of the new and novel construction, arrangement, and combination of parts, as will be hereinafter described, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of my improved can-opener, showing the same in the act of opening a can. Fig. 2 is a perspective view of my improved can-opener on an enlarged scale from that shown in Fig. 1. Fig. 3 is a central longitudinal section of the same. Fig. 4 is a transverse section taken on line *x x*, Fig. 3. Fig. 5 is a transverse section taken on line *y y*, Fig. 3. Fig. 6 is a detached perspective view of the adjustable knife. Fig. 7 is an enlarged perspective view of a modified form of my invention. Fig. 8 is an enlarged transverse section taken on line *z z*, Fig. 7.

Referring to the drawings in detail, like numerals of reference refer to like parts in the several figures.

The reference-numeral 1 designates the

knife-bar or handle proper of the can-opener, on which the knife 2 is slidably held, and it is formed from a single piece of wire bent upon itself slightly to one side of the center of its length to form two parallel slide-bars 3 4. The slide-bar 3 is somewhat longer than the slide-bar 4 and has its end curved inwardly, as at 5, thence downwardly and outwardly, to terminate in a placer or fulcrum-pin 6, adapted to be thrust into the center of the head of a can and act as a fulcrum on which the handle is swung, while the end of the slide-bar 4 is curved outwardly, as at 7, and abuts against the slide-bar 3 at the inner end of the fulcrum-pin. At this point the two slide-bars are soldered or otherwise connected together to form a secure connection.

The knife or cutter, which is held slidably on the two parallel slide-bars 3 4, is preferably formed from sheet-steel cut to the desired outline and bent to conveniently fit the said slide-bars. The said knife is formed by bending the blank upon itself to provide two cross-bars 9, connected at their upper ends by a curved bridge portion 10. The outer cross-bar has a downwardly-directed knife or cutter-blade 11, provided with an inwardly-inclined cutting edge 12 and a laterally-bent retaining extension 13 at the rear edge thereof, adapted to prevent the displacement of the knife from the head when in the act of cutting the same. It is of course apparent that after a circular portion is cut out of the head of the can the knife can be easily removed. The cross-bars of the knife are provided with aligned apertures 14, and the parallel slide-bars 3 4 are passed through the same before the ends thereof are united.

15 designates an auxiliary handle formed from a single piece of wire curved mid-length into a circular loop 16 and having both ends arranged to converge to form the shank 17 and the extremities 18 of the wire bent inwardly, so as to enter the space between the cross-bars of the knife, the bridge portion thereof, and the slide-bars of the handle. A wire clip 19 encompasses the shank of the auxiliary handle and is adapted to be moved lengthwise thereon, so as to clamp the ex-

tremities of the wire forming the said auxiliary handle to the knife. The extremities 18 of the wire forming the auxiliary handle are flattened to serve as cams when the said 5 handle is swung against the knife-bar, as shown in Figs. 3 and 5, which causes the knife to bind against the latter and be securely held in any adjusted position. When the auxiliary handle is swung up away from 10 the knife-bar, the knife can move freely on the latter and be adjusted to describe any size circle within certain limits.

In Figs. 7 and 8 my invention is shown without the auxiliary handle. In this case 15 the apertures 14 in the cross-bars of the knife are elongated slightly to permit of a slight lateral movement of the knife on the handle and the slide-bar 3 is provided on its inner side with notches 20, which the edges of two 20 alined apertures 14 are adapted to engage when the knife is in the act of cutting. It is apparent that these features of my invention can also be applied to a can-opener having the auxiliary handle without departing from 25 the spirit of my invention.

Having thus described my invention, what I claim is—

1. A can-opener comprising a knife-bar or handle having two parallel slide-bars, a knife 30 movable lengthwise on said handle and an auxiliary handle secured to said knife, and being adapted to cause the latter to bind against the knife-bar and be held in any desired position thereon.
- 35 2. A can-opener comprising a handle or knife-bar constructed of wire arranged to form two parallel slide-bars, and having a downwardly and forwardly directed pointed placer at one end thereof, and a knife mov- 40 able on said handle and consisting of two perforated cross-bars connected together at their upper ends and a downwardly-directed cutting-blade extending from one of said cross-bars.
- 45 3. A can-opener comprising a knife-bar or handle constructed of wire arranged to form two parallel slide-bars and having a downwardly and forwardly directed placer at one end thereof, a knife consisting of two cross- 50 bars connected together at their upper ends by a bridge portion and having alined per-

forations through which said slide-bars pass and a downwardly-projecting cutting-blade, an auxiliary handle formed from wire bent between its ends to form a contractible loop 55 and having converging outstanding strands provided with inwardly-extending flattened ends adapted to enter the space between the two cross-bars of the knife, the bridge portion connecting said cross-bars and the slide- 60 bars of the handle, said flattened ends being adapted to cause the knife to bind against the said slide-bars when the auxiliary handle is swung against the knife-bar.

4. A can-opener comprising a knife-bar or 65 handle having two parallel slide-bars and a placer at one end thereof, a knife movable lengthwise on said knife-bar, and an auxiliary handle connected to said knife and having means to cause said knife to bind against 70 the said slide-bars when swung against the knife-bar.

5. A can-opener comprising a handle, and a depending knife-blade movable on said handle and having a lateral retaining exten- 75 sion at the rear edge thereof.

6. A can-opener comprising a knife-bar or handle formed of wire and having two paral- 80 lel slide-bars connected at their ends, one of said slide-bars terminating in a downwardly and forwardly directed pointed placer, a knife movable on said slide-bars, and an auxiliary handle pivoted to swing toward and from the knife-bar, and being adapted to clamp said knife in any position on the knife- 85 bar when the auxiliary handle is swung against the latter.

7. A can-opener comprising a handle or knife-bar constructed of wire arranged to form two slide-bars, and a knife adjustable 90 on said handle and consisting of two perforated cross-bars connected together at the upper ends and a downwardly-directed cutting-blade extending from one of said cross-bars.

In testimony whereof I have affixed my signature in the presence of two subscribing 95 witnesses.

ROBERT O. HAMMOND.

Witnesses:

EMIL NEUHART,
CHAS. F. BURKHART.