

No. 657,512.

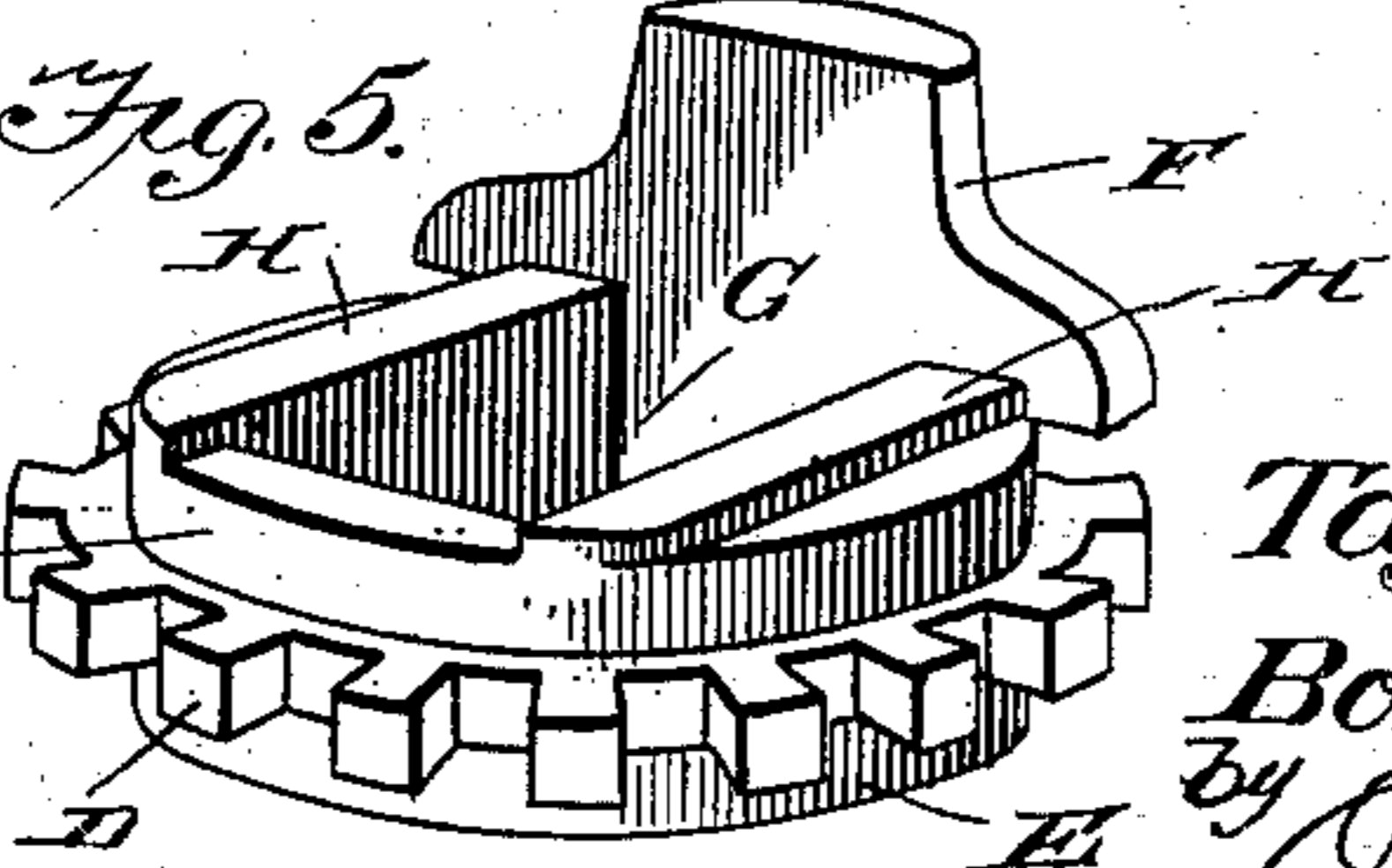
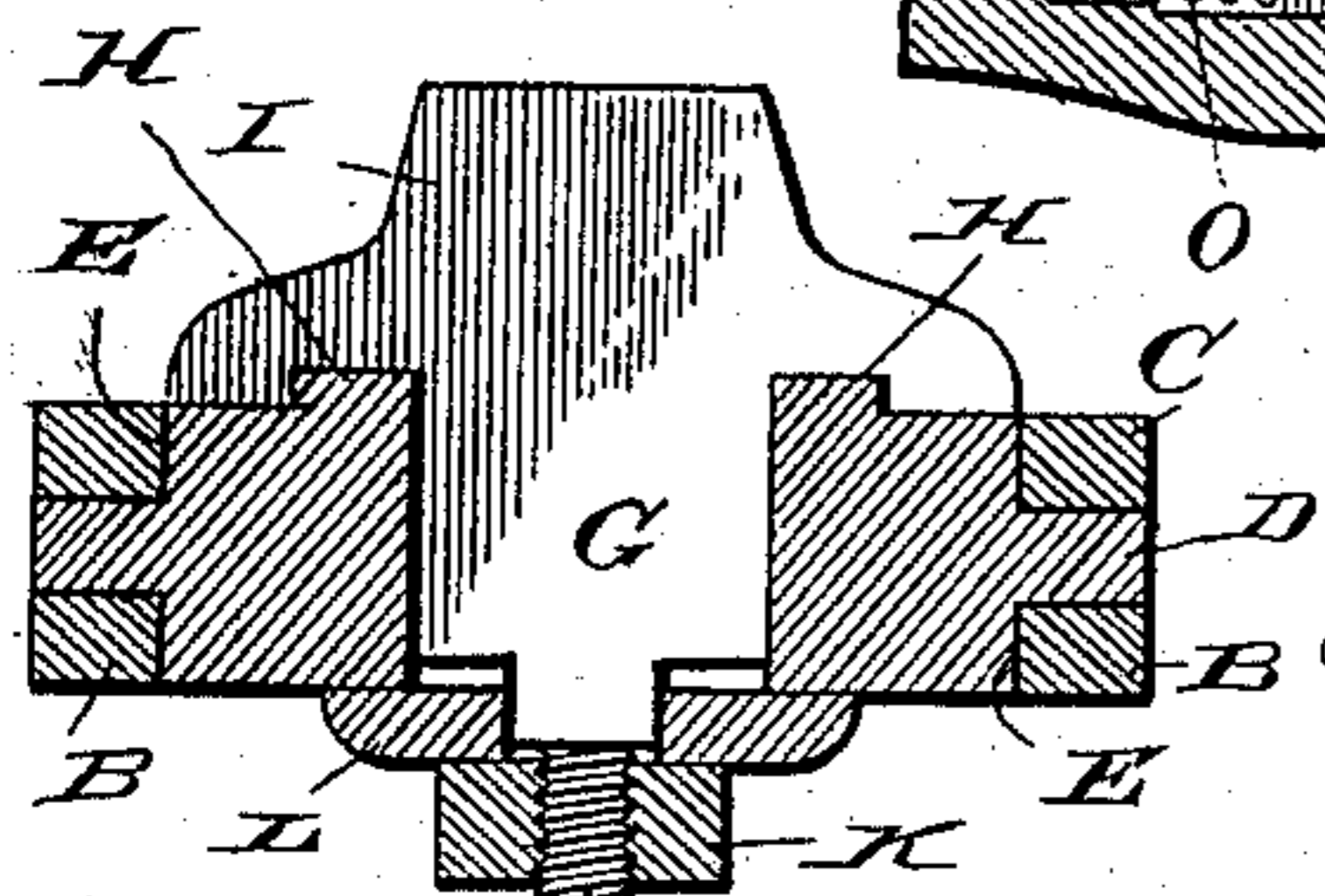
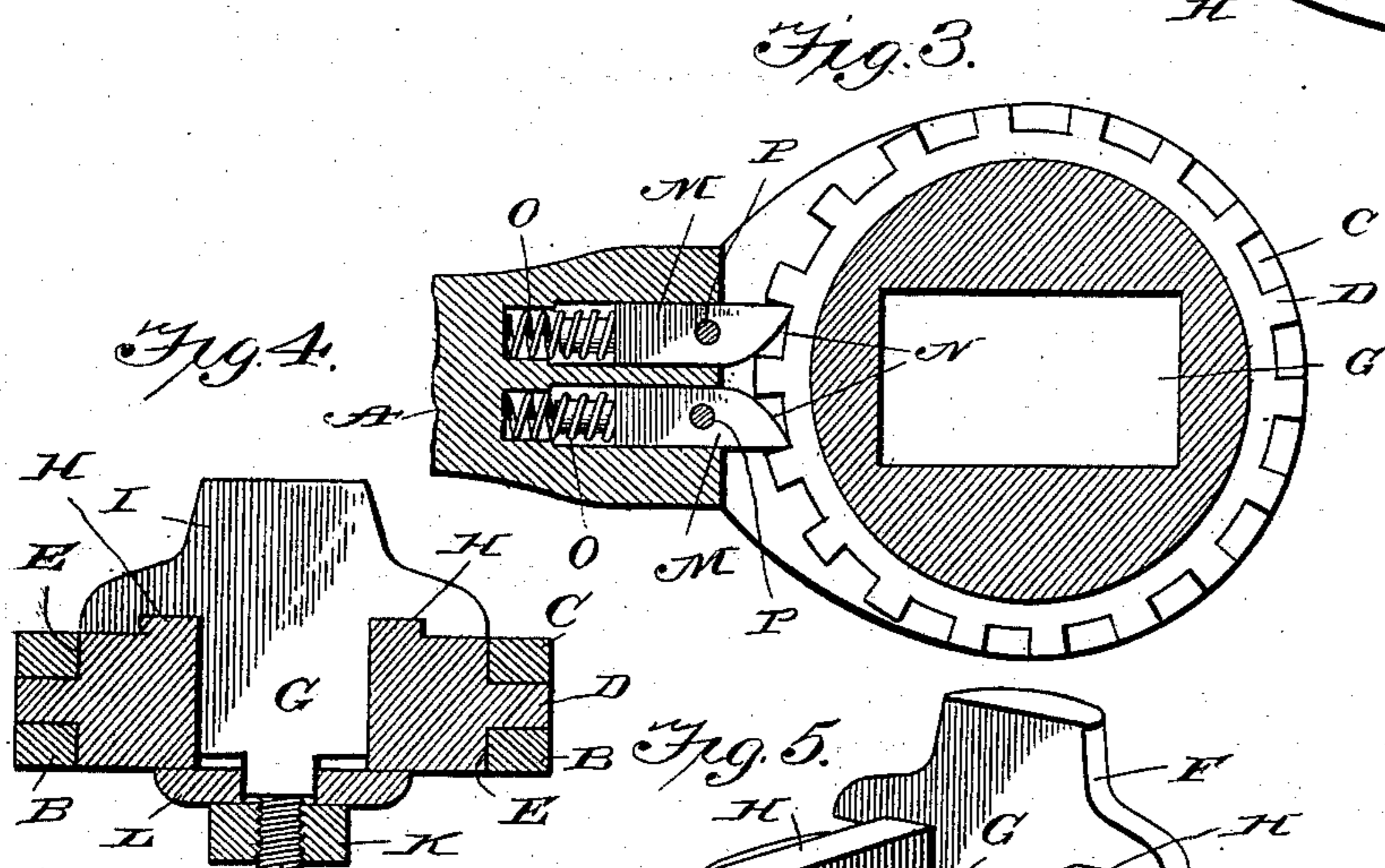
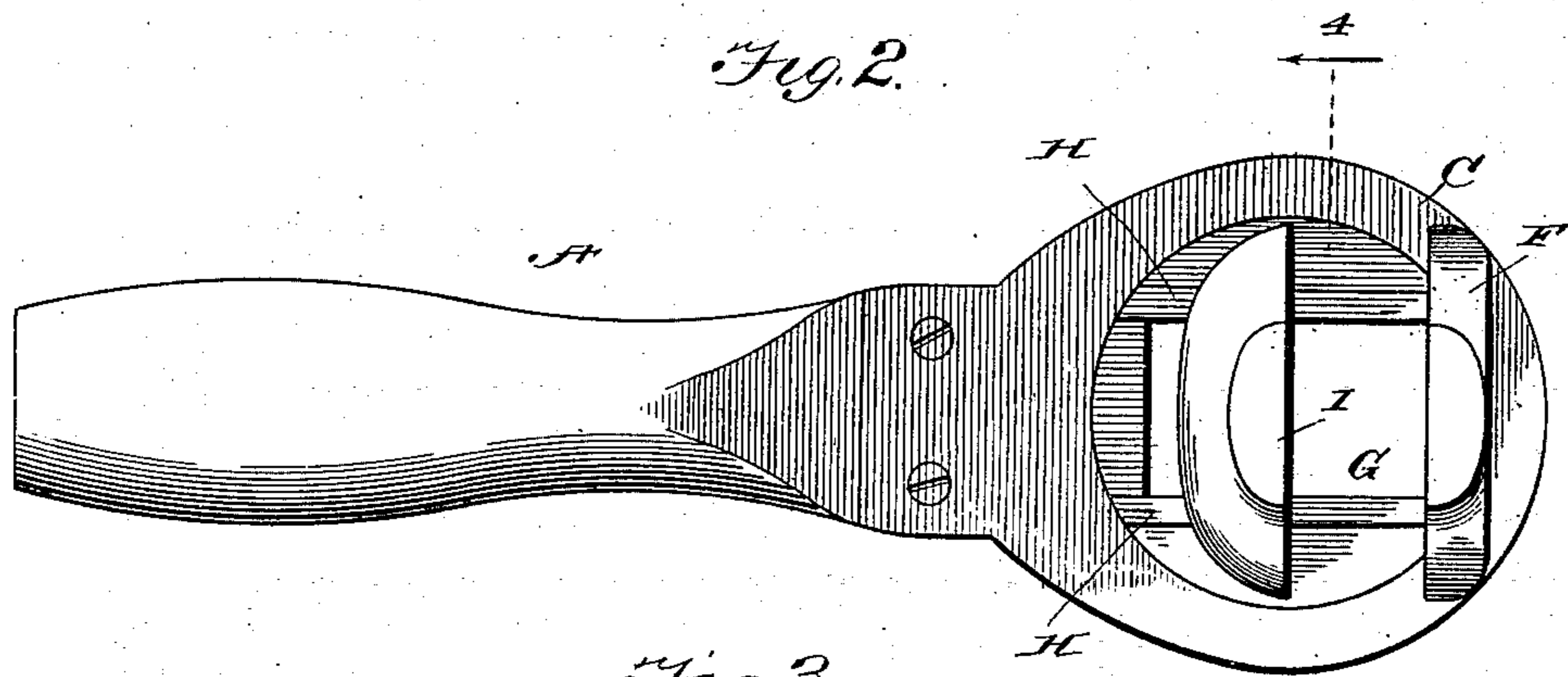
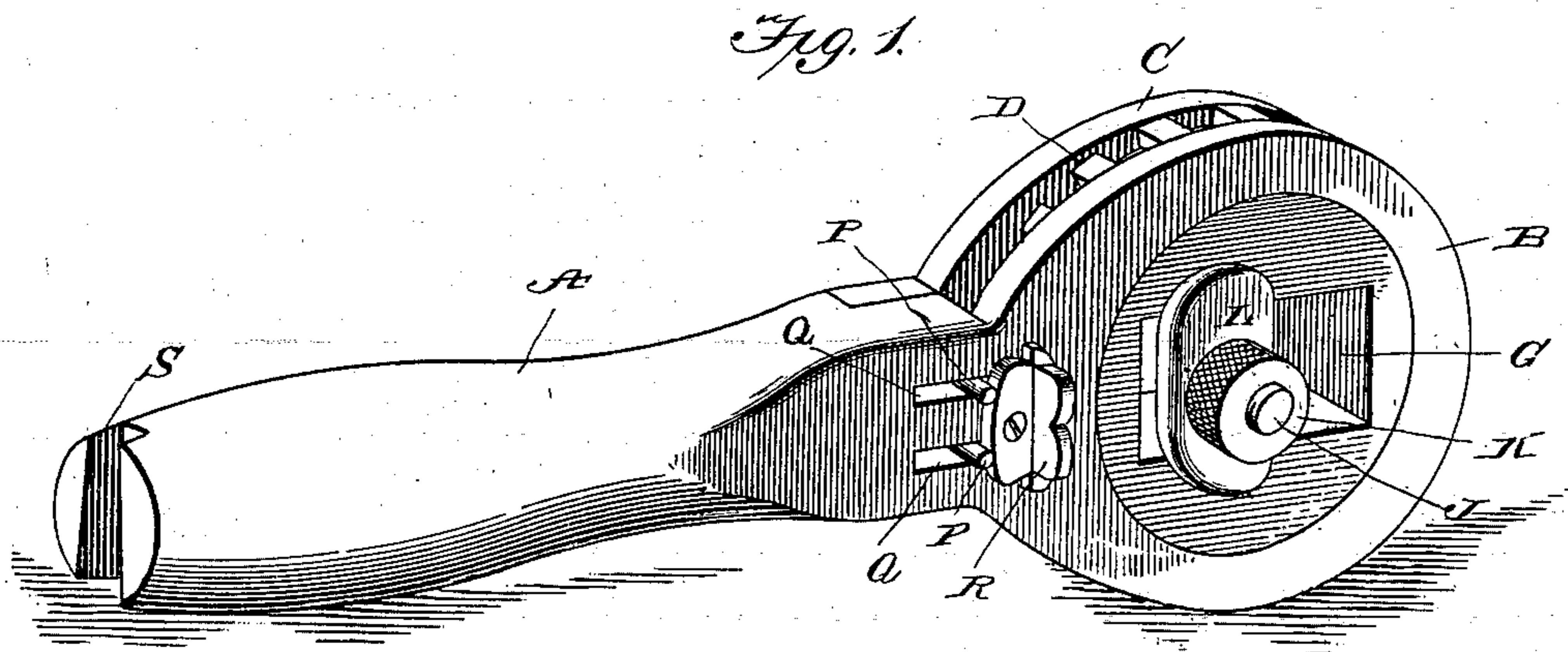
T. CARTER & B. HENRY.

Patented Sept. 11, 1900.

RATCHET WRENCH.

(Application filed Feb. 27, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

TAYLOR CARTER AND BOWEN HENRY, OF FRANKFORT, KENTUCKY.

RATCHET-WRENCH.

SPECIFICATION forming part of Letters Patent No. 657,512, dated September 11, 1900.

Application filed February 27, 1900. Serial No. 6,745. (No model.)

To all whom it may concern:

Be it known that we, TAYLOR CARTER and BOWEN HENRY, citizens of the United States, residing at Frankfort, in the county of Frank-
lin and State of Kentucky, have invented a
new and useful Ratchet-Wrench, of which
the following is a specification.

This invention relates to improvements in
wrenches, and particularly to that class
known as "ratchet-wrenches."

An object of the invention is to produce a
wrench of this character which may be quickly
and readily adjusted to be operated either
right or left.

Another object is to provide a wrench which
may be quickly adjusted to nuts of various
sizes.

A further object is to construct a wrench
which may be conveniently used upon rods
or pipes.

A still further object is to construct a
wrench of a minimum number of parts, thus
simplifying the same and reducing the cost of
production.

With the above objects in view the inven-
tion consists of a handle or stock having a
head formed thereon, a disk rotatable in said
head and formed with a ratchet and a sta-
tionary jaw, an adjustable jaw carried by said
disk, dogs having oppositely-disposed ratchet-
faces adapted to engage said ratchet, and an
eccentrically-mounted thumb-piece adapted
to disengage either of said dogs from the
ratchet.

The invention also consists in the novel de-
tails of construction hereinafter fully de-
scribed in the specification, particularly
pointed out in the claims, and illustrated by
the accompanying drawings, in which—

Figure 1 is a perspective view of my inven-
tion. Fig. 2 is a side elevation of the same.
Fig. 3 is a longitudinal sectional view. Fig.
4 is a transverse section taken on the line 4 4
of Fig. 2. Fig. 5 is a perspective view of the
ratchet-disk.

Referring now more particularly to the ac-
companying drawings, A designates the han-
dle or stock of the wrench, having formed in-
tegrally therewith the circular plate B, formed
with a circular slot or opening, and C a simi-
lar plate detachably secured to said handle,
said plates being removed from each other,

so as to leave a space therebetween, and con-
stituting the head of the wrench receiving
the ratchet-disk. This ratchet-disk is formed
about its periphery with the ratchet-teeth D,
which occupy the space between said plates,
and on each side of said ratchet-teeth with
the flanges E, which extend into the circular
slots of the plates. Formed on said disk and
extending laterally of the wrench is a station-
ary jaw F. Said disk is slotted, as illustrated
at G, and formed on the sides of said slot with
the flanges or track H. Movable in said slot
is an adjustable jaw I, having suitable grooves
formed therein to receive said track upon
which it moves and formed with the threaded
stem J, which projects from said disk and re-
ceives a suitable clamping-nut K and washer
L. Thus this movable jaw may be adjusted
to and from the stationary jaw, so that the
wrench may be made to accommodate nuts of
various sizes. The jaw F stands at one end
of the slot G, with its inner face even with
the end wall of the slot, and the jaw I pro-
jects from some intermediate portion of the
slot, so that there is always a hole or opening
through the disk equal to the distance between
the two jaws, thereby permitting of the wrench
being used on pipes or bolts where it is nec-
essary for them to project through the wrench.

Positioned in suitable recesses in the han-
dle or stock are the dogs M, formed on their
outer ends with oppositely-disposed ratchet-
faces N, said jaws being normally held in
engagement with the ratchet of the disk by
the coil-springs O. A pin P is carried by
each dog, the same extending laterally there-
from and movable in a slot Q, formed in said
handle. Said pins project through the slots
of the handle, and pivoted upon the exterior
of plate B by a screw passing intermediately
therethrough is a thumb-piece R, which is
adapted when moved in one direction to dis-
engage one of the dogs from the ratchet and
hold the same therefrom and when moved in
the opposite direction to effect a similar
movement of the other dog. By moving either
one of said dogs out of engagement with the
ratchet it will be understood that the wrench
may be operated either right or left, as may
be desired. It will be noticed that the clamp-
ing-nut for the adjustable jaw and the thumb-
piece for shifting the dogs are both located

on the same side of the wrench, where they may be conveniently operated. The stock or handle is formed in its end with the wrench portion S, adapted to engage nuts of various sizes.

By forming one of the plates of the head integrally with the stock or handle and the stationary jaw integrally with the ratchet-disk it will be understood that the number of parts employed in the wrench is reduced and the construction thus simplified and a reduction effected in the cost of production.

The wrench may be conveniently positioned upon a pipe or rod by inserting the same thereon, the pipe or rod passing through the slot of the ratchet-disk.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a wrench, the combination, with a head provided with a circular opening, of a slotted ratchet-disk journaled therein, one side of which is provided with a jaw, the inner face of which is even with the end wall of the slot, a movable jaw provided with a

threaded stem which projects through the slot and with shoulders which bear against the disk upon opposite sides of the slot, a washer and a nut on the stem, and means for locking the disk against rotation, substantially as described.

2. In a wrench, the combination, with a slotted head, of a slotted ratchet-disk journaled therein, one side of which is provided with a jaw at one end of the slot, a movable jaw in the slot provided with a threaded stem, a nut and a washer on the stem, two spring-actuated dogs in the handle, each of which is provided with a pin that projects through the side of the handle, and thumb-pieces pivotally secured to the side of the handle in position to engage with said pins, said thumb-piece and nut being upon the same side of the stem.

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Witnesses:

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