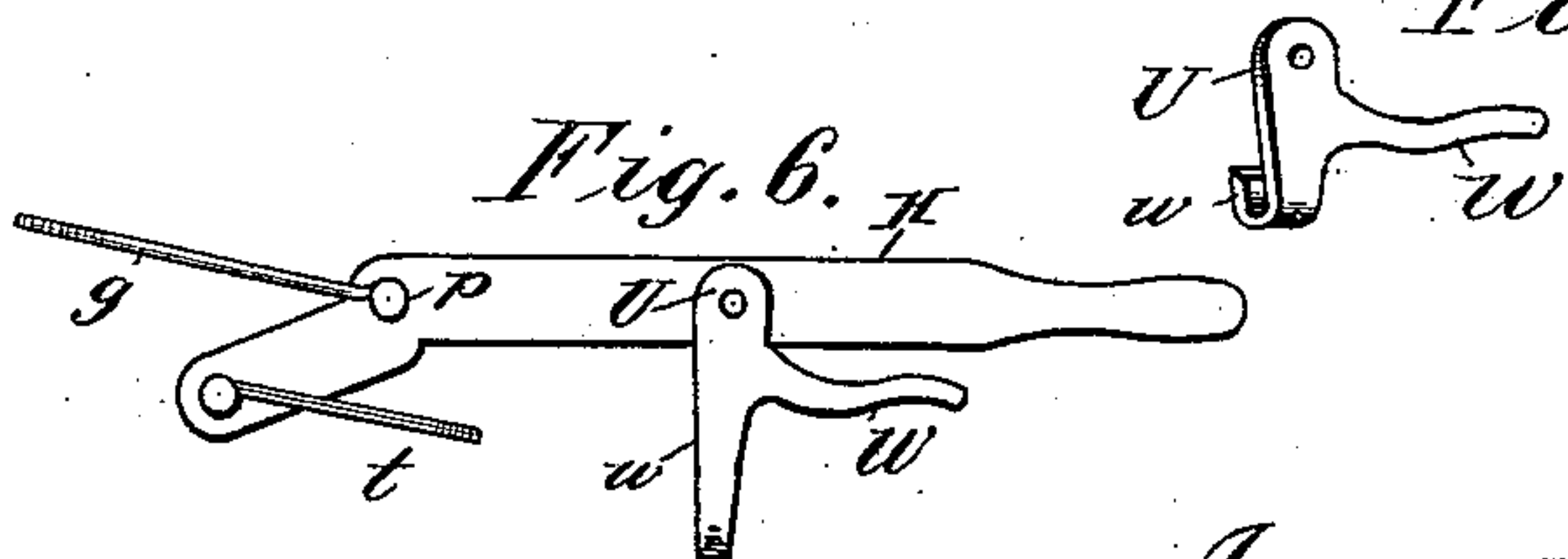
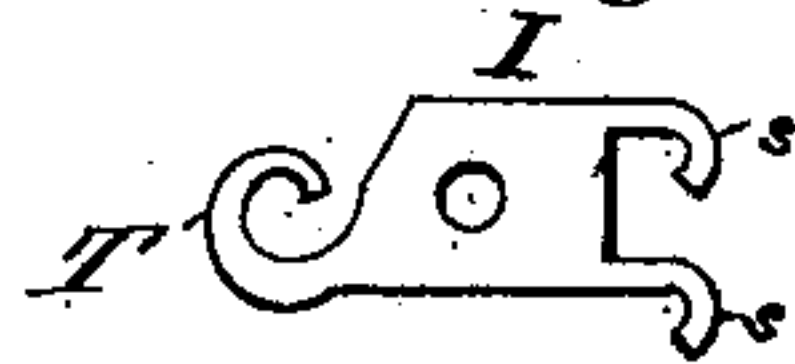
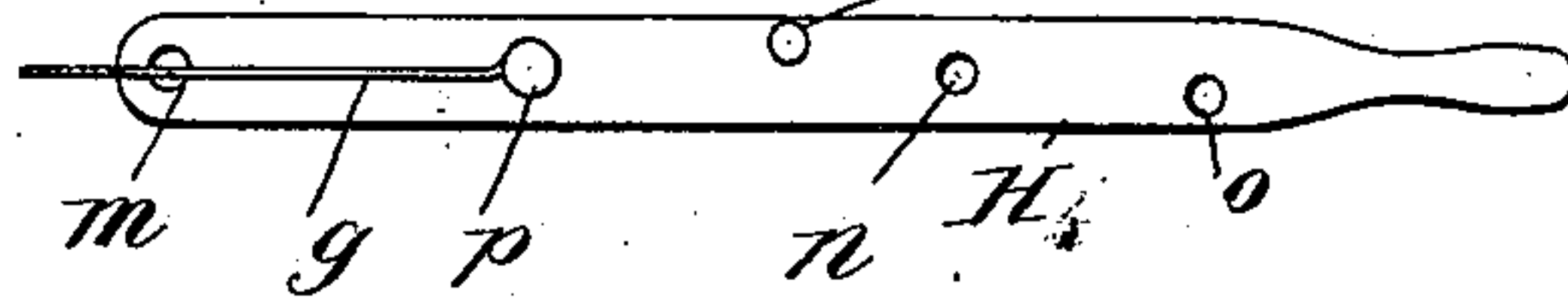
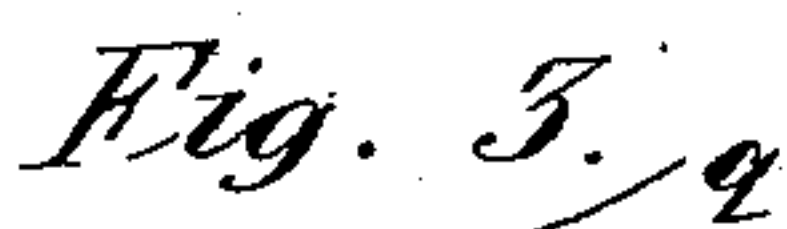
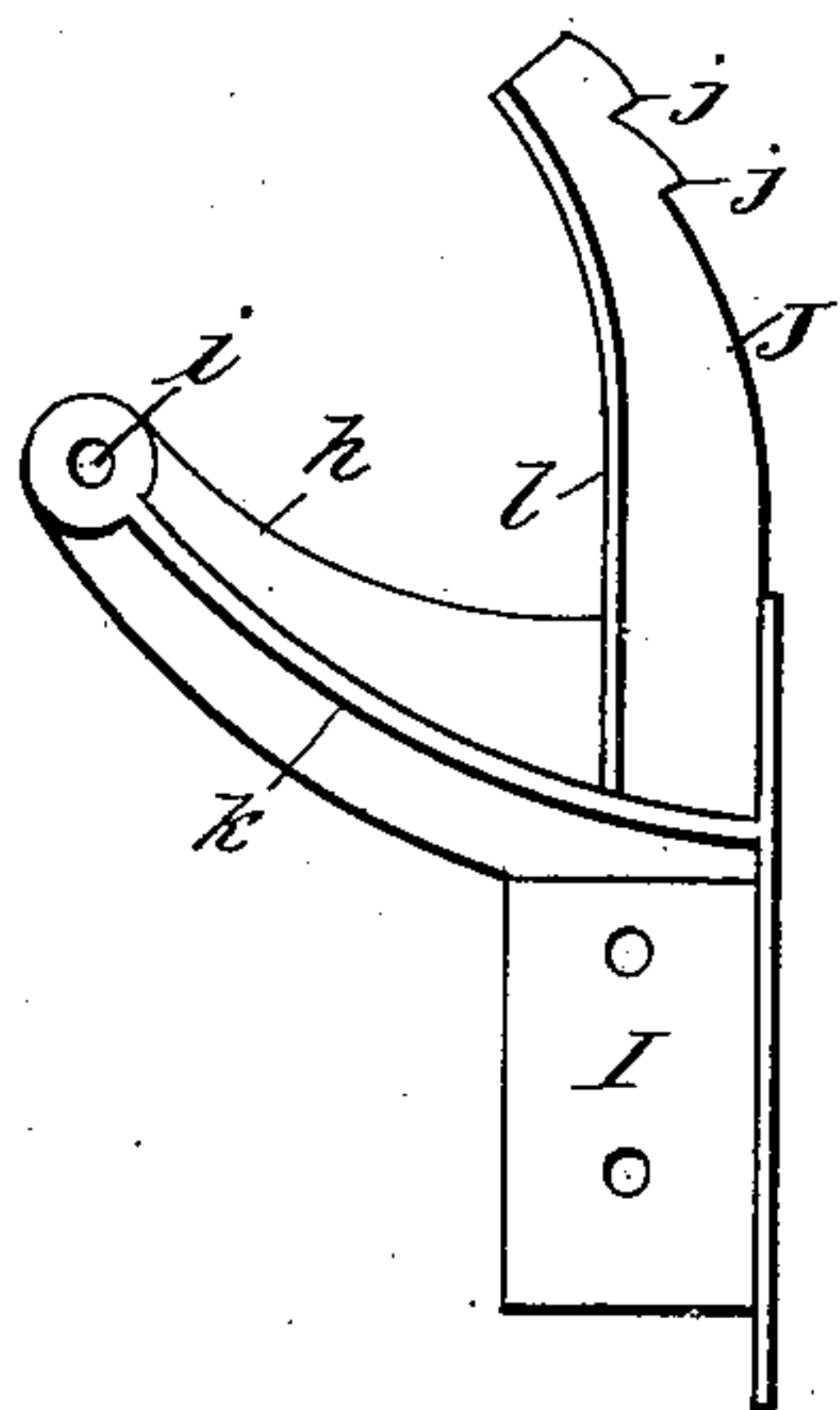
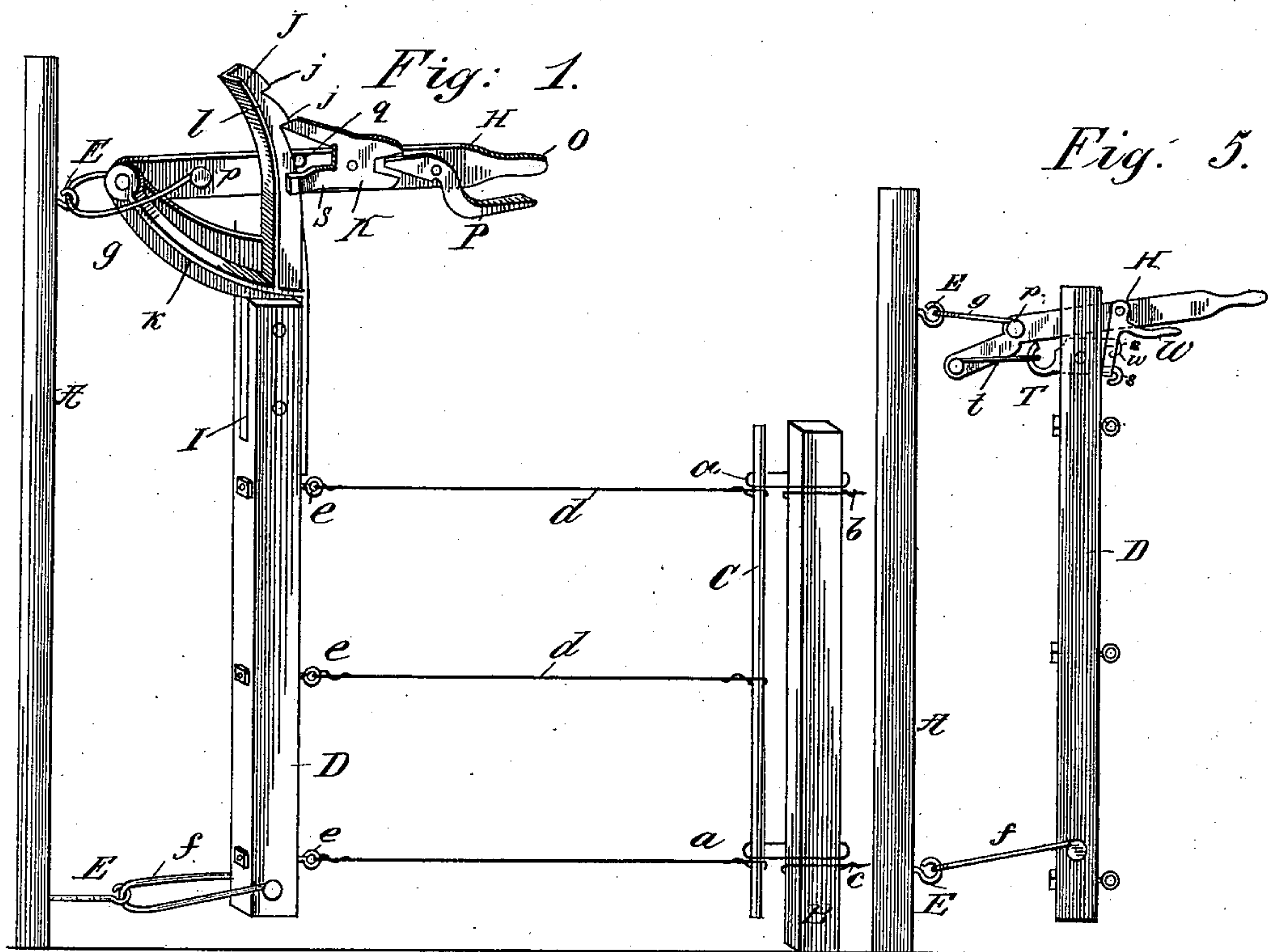


(No Model.)

G. ROTH.
WIRE GATE.

No. 564,162.

Patented July 14, 1896.



Attest:
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att'y

UNITED STATES PATENT OFFICE.

GEORGE ROTH, OF ST. SEBALD, IOWA.

WIRE GATE.

SPECIFICATION forming part of Letters Patent No. 564,162, dated July 14, 1896.

Application filed November 26, 1895. Serial No. 570,151. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ROTH, a citizen of the United States, residing at St. Se-
bald, in the county of Clayton and State of
5 Iowa, have invented certain new and useful
Improvements in Wire Gates; 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
10 it appertains to make and use the same.

My invention belongs to the class known as
"wire gates," and the leading object is to pro-
vide means for locking the gate and at the
same time to stretch the wire of which the
15 gate is formed and keep it always taut when
the gate is shut and locked.

In explaining the invention I shall refer to
certain drawings which accompany this speci-
fication and form a part hereof, in which—

20 Figure 1 is a perspective of the gate closed
and locked. Fig. 2 is a side elevation of part
of the lock. Fig. 3 is a side view of the lever.
Fig. 4 is a side view of the latch and means
for operating the same. Fig. 5 is a modified
25 form of Fig. 1, having a flexible fulcrum.
Fig. 6 is a modified form of Fig. 3. Fig. 7 is
a modified form of the catch. Fig. 8 is a side
view of the latch shown in Figs. 5 and 6.

Like letters denote corresponding parts in
30 all of the drawings.

An inexpensive mode of constructing my
improved gate, together with the lock and
the means for fastening the same, consists in
setting firmly two gate-posts A and B, the
35 post A being somewhat longer than the post B.
Around the post B are hung two elliptical
rings *a a*, the upper one prevented from slid-
ing down the post B by the fence-wire *b* and
the lower ring by the fence-wire *c*. Into these
40 rings *a* is set a bar C, to which are loosely
attached the wires *d d*, forming the gate. The
bar C may be grooved where the wires *d* sur-
round it or other convenient means employed
to prevent the wire *d* from sliding down the
45 bar C, and which will allow the bar to be
readily withdrawn. The other end of the
wire engages with staples or bolts *e e*, secured
to the post D, presently to be described. Into
the post A are fastened hooks E, which en-
50 gage at the upper end with a loop *g* on the
arm of the lever presently to be described,

and at the lower end with a loop *f*, attached to
the post D.

The lock whereby the wire of the gate is
stretched and the gate is locked is prefer- 55
ably constructed by securing into the head
of the post D an iron plate I. (Shown in Fig. 2.)
This plate is preferably cast in one piece with
an extending arm *h*, provided with a pivot
hole *i* in its outer end, in which is pivoted- 60
one end of a lever H. The other arm J is
formed into a rack-bar with notches or teeth
j j. There is also cast integral with said arm
h, along the central portion thereof, the
strengthening or staying rib *k*, and the rib *l* 65
is cast along the rear of the arm J. Instead
of making the plate I as shown in Fig. 2 it
may be made as shown in Fig. 7, the hooks
s serving for the teeth *j* of the rack-bar, and
instead of the rigid arm *h* there is substi- 70
tuted the hook T and link *t*.

The lever H (shown in Fig. 3) is preferably
a straight bar with a pivot-hole *m* at its outer
end, by which it is pivoted to the arm *h*, and
the pivot-holes *n* and *o*, a pin *p*, to which the 75
loop *g* is pivoted, and pin *q*, which serves as
a guide for the ratchet K.

The ratchet K (shown in Fig. 4) is pivoted
at *n* to the lever and consists of a pawl *r*,
which engages with the teeth *j* of the rack- 80
bar J, and the arm S, which is bent out
slightly to allow the rack-bar J to slide be-
tween it and the lever H and act as a guide
to keep the pawl *r* always in the same plane
with the rack-bar J. The opposite end of 85
the ratchet K is V-shaped for the purposes
hereinafter explained. There is also pivoted
to the lever H, at *o*, another lever P, which
engages in the V of the ratchet K and oper-
ates the pawl *r*. Instead of the ratchet K 90
and lever P, (shown in Fig. 4,) there may be
used the pawl or hook U, (shown in Figs. 5,
6, and 8,) which is pivoted to the lever and
having the handle W, with a catch *w* to en-
gage with the hooks *s*. (Shown in Fig. 7.) 95

It is manifest that other convenient means
may be used to operate the ratchet K with-
out departing from the spirit of my invention.

In operating my invention, if the gate be
locked, the operator grasps the lever P and 100
presses it up toward the lever H, which dis-
engages the pawl *r* from the teeth *j* of the

rack-bar J, and at the same time lifts the lever H by the handle O till the loop *g* is slackened. Then the loop *g* is disengaged from the hook E and the loop *f* from the lower
 5 hook E and the operator either carries the gate around or folds it up against the post B. If the modified form of lock is used, the operator grasps the lever H and the handle W, which disengages the catch *w* from the hooks
 10 *s* and operates as above described.

In closing the gate, the loops *f* and *g* are caught upon their respective hooks E, and the lever H is pulled down till the wires *d d* of the gate are taut and the pawl *r* engages
 15 with some one of the notches *j* and locks the gate, or the catch *w* engages some one of the hooks *s*.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—
 20 ent, is—

1. In combination with a wire gate, having removable bars C, D, hooks E, secured to a stationary post, and the loop *f* at the foot of bar D, a locking device consisting of a plate
 25 secured to said bar D, and an operating-lever pivoted to said plate, loop *g* carried thereby, catches on said plate, and a pawl attached to said lever and adapted to engage said catches, as and for the purpose described.

30 2. The combination of a gate having a removable bar C, wires *d* bar D, loop *f*, at the foot of bar D, for attachment to the station-

ary post of the fence, and a locking device attached to the bar D, consisting of a plate I, with arm *h*, and rack-bar J, a lever pivoted
 35 to the arm *h*, and carrying a pawl adapted to engage notches on the rack-bar J, and loop *g* carried by the lever H as and for the purpose shown.

3. In combination with a wire gate, having the bars D, C, a locking device secured to the gate-bar consisting of a plate I, having the arm *h*, and rack-bar J, a lever H, carrying a pawl *r*, lever P, and loop *g*, and means for
 40 removably securing said gate to the fence-post A, as and for the purposes shown.

4. A gate-fastener consisting of a plate I, having an arm *h*, and rack-bar J, lever H, carrying a pawl to engage with said rack-bar, and link *g*, all combined and arranged sub-
 45 stantially as described and shown.

5. A gate-fastener consisting of a supporting-plate, combined with a lever pivoted upon the plate, means pivoted upon the lever for
 50 holding it in any desired position, and a suitable link connected to the lever for attaching the fastening to the fence-post, substantially as specified.

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

GEORGE ROTH.

Witnesses:

H. L. WING,
 M. A. HOAG.