

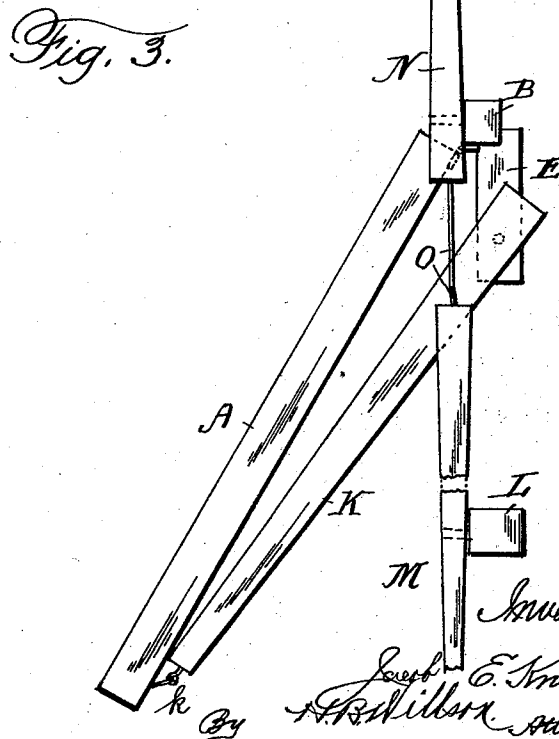
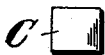
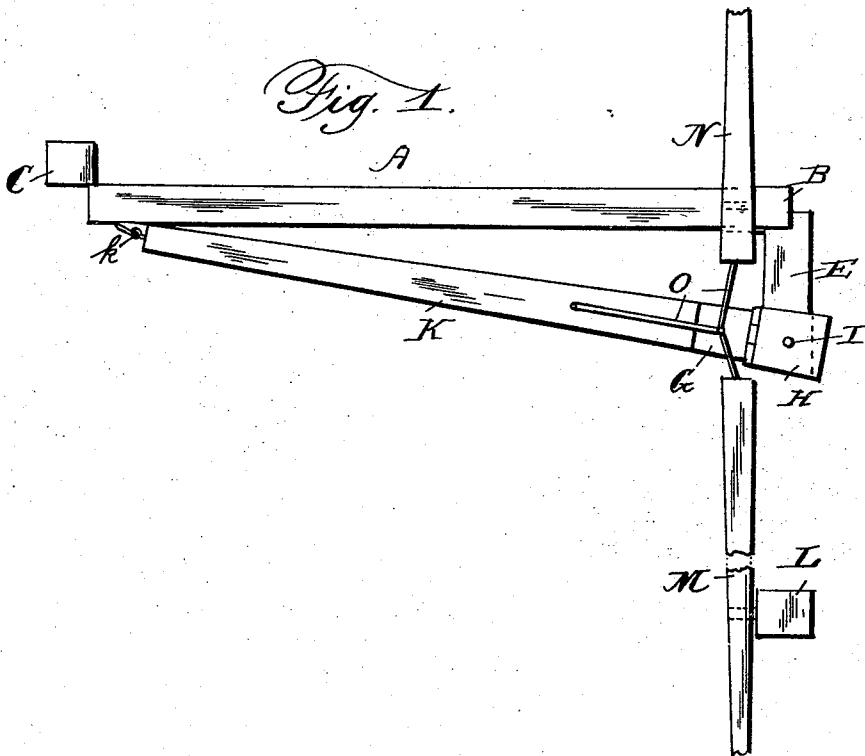
(No Model.)

3 Sheets—Sheet 1.

J. E. KNAPP.
GATE.

No. 531,378.

Patented Dec. 25, 1894.



Witnesses:-
Wm E. Bulker.
M. A. Deane

Inventor

Joseph E. Knapp
H. B. Wilcox, Attorney

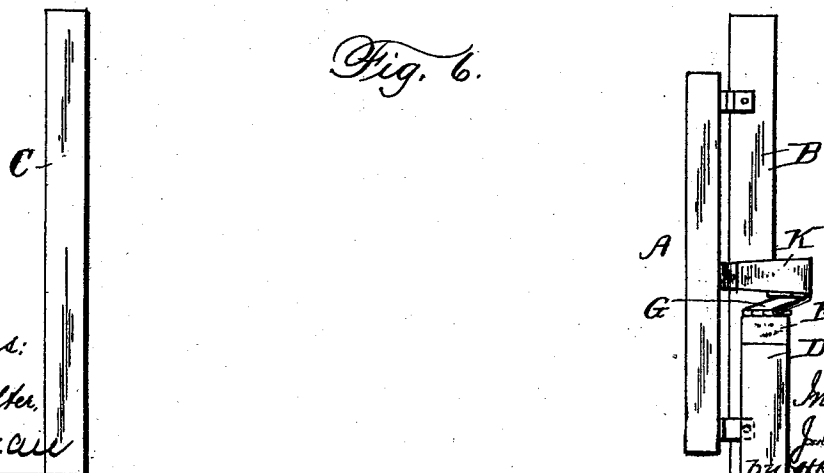
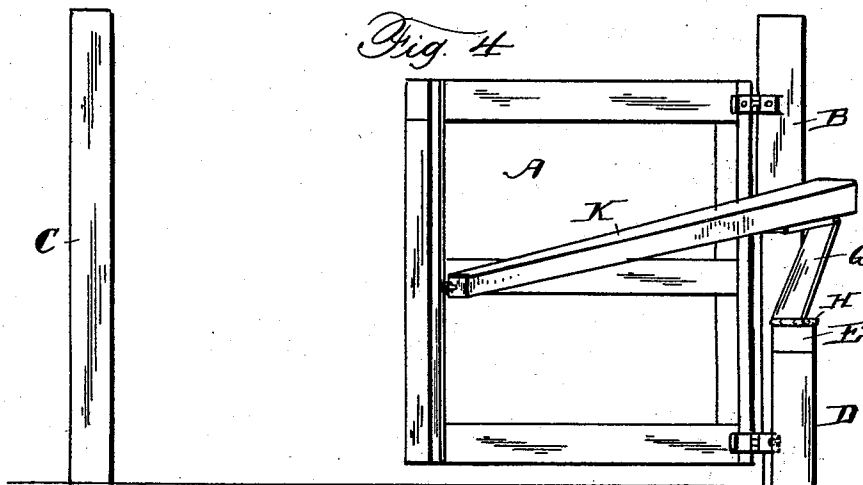
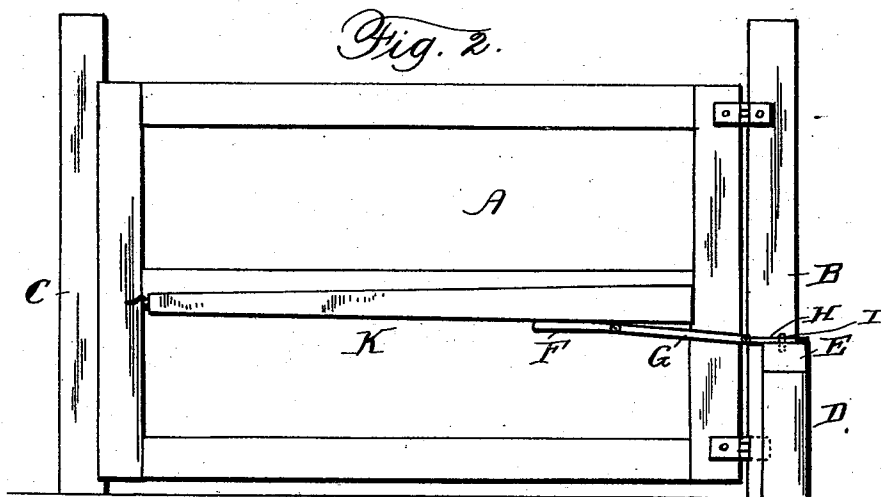
(No Model.)

3 Sheets—Sheet 2.

J. E. KNAPP.
GATE.

No. 531,378.

Patented Dec. 25, 1894.



Witnesses:
Wm. E. Boulter.
M. A. Deane

Inventor:
J. E. Knapp
by H. A. Kilham
Attorney

(No Model.)

3 Sheets—Sheet 3.

J. E. KNAPP.
GATE.

No. 531,378.

Patented Dec. 25, 1894.

Fig. 5.

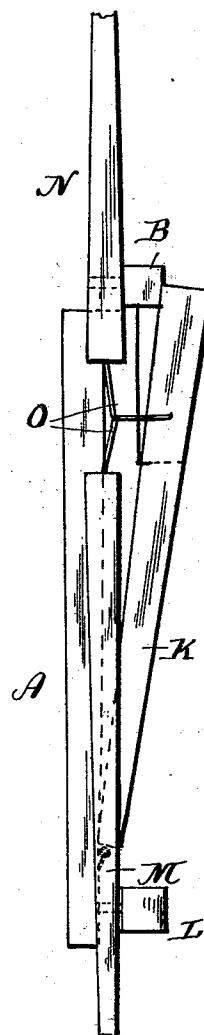
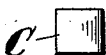
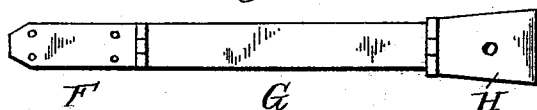


Fig. 7.



Witnesses:

Wm. E. Coulter.
M. A. Drane

Inventor

Jacob E. Knapp
By H. B. Wilcox
Attorney.

UNITED STATES PATENT OFFICE.

JACOB E. KNAPP, OF BROWNSVILLE, OREGON.

GATE.

SPECIFICATION forming part of Letters Patent No. 531,378, dated December 25, 1894.

Application filed July 28, 1894. Serial No. 518,874. (No model.)

To all whom it may concern:

Be it known that I, JACOB E. KNAPP, a citizen of the United States, residing at Browns-
ville, in the county of Linn and State of Ore-
gon, have invented certain new and useful
Improvements in Gates; and I do declare the
following to be a full, clear, and exact descrip-
tion 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 relation to gates and it
relates more particularly to means for oper-
ating ordinary hinge gates whereby the same
may be readily and conveniently opened from
either side and from a wagon or otherwise
and which operating means, when the gate is
closed, operate as a latch to hold the gate in
such position until it is necessary or desirable
to open the gate, and among the objects sought
to be attained by my invention is to pro-
vide simple, inexpensive and efficient means
whereby a hinge-gate may be operated in the
manner described.

My invention consists in the novel con-
struction, arrangement, and combination of
parts as hereinafter fully described, illus-
trated in the drawings, and pointed out in
the appended claims.

In the accompanying drawings:—Figures 1,
3 and 5 are plan views illustrating the gate
in its closed, partly open, and fully open po-
sitions. Figs. 2, 4 and 6 are side views of
Figs. 1, 3 and 5 respectively, the operating
bars M, N, post L and connecting means be-
tween the said bars and the bar K being
omitted for the sake of clearness. Fig. 7 is
an enlarged plan view of the double hinge
detached.

A, indicates any ordinary gate hinged at
one edge to a suitable post or upright B, and
adapted when in its closed position to lie
against the post or upright C.

Adjacent to the post B is arranged a short
upright D to which is secured one end of a
horizontally arranged block E whose opposite
end is secured to the said post B.

My improved hinge which I use in conjunc-
tion with other parts to operate the gate, con-
sists of three sections or leaves, F, G, H, the
intermediate or central section G being some-
what longer than the other sections, as shown
and to the ends of which section G, said sec-

tions F, H, are suitably hinged in such man-
ner as to adapt the section G to fold down
upon the section H, and the section F to fold
down upon the section G, all as seen in Fig. 6.

The section H of the hinge is pivotally
mounted upon the block E as seen at I, while
the section F is fixedly secured to the under
side of a beam or bar K of wood preferably,
though said bar may be of any other desired
material.

The section F may be connected with the bar
K at any desired point intermediate the ends
thereof, though I preferably connect the sec-
tion F to the bar at a point somewhat nearer
one end thereof (as shown) than the other.

I preferably make the inner end of the bar
somewhat weightier than its outer end, for a
purpose presently to be seen, and the outer
end of the bar is pivotally or loosely con-
nected to the gate near the outer end of the
latter as at k.

For the purpose of opening or closing the
gate from either side and from a vehicle or
otherwise, I provide a post or upright L to
which is pivoted a bar M. To the post B is
also pivoted a bar N, the adjacent ends of
the said bars M, N being connected to the bar
K by suitable connecting means O, which
may be bars, ropes, cords, &c.

The operation of my invention may be
briefly described as follows:—A person ap-
proaching the gate from either side, draws
down the outer end of a bar M or N as the
case may be, which lifts the inner end of the
bar K causing the sections of the hinge to
change from the position seen in Figs. 1 and 2
to that seen in Figs. 3 and 4, and at the same
time drawing upon the gate which thus swings
into the position seen in and Figs. 3 and 4. It
will be understood that in the described move-
ments of the parts, the section H of the hinge
turns upon its pivot to permit said move-
ments. When the parts reach the position
seen in Figs. 3 and 4, that is to say where
the center of gravity of the bar K passes be-
yond or over the point where the sections G,
H are hinged together, the parts will then
automatically swing into the position seen in
Figs. 5 and 6, the gate being then in its fully
open position. The person having passed
through the gate and desiring to again close
the latter, pulls down the outer end of the

other operating bar (M or N) which raises the inner end of bar K which thus swings the gate into a partly closed position, the parts again arriving at the position represented in Figs. 3 and 4, and the moment the center of gravity of bar K passes beyond the point where sections G, H, of the hinge are hinged together the parts will automatically return to the position seen in Figs. 1 and 2 and the gate be thus automatically closed. It will thus be seen that it is not necessary for a person to operate the bars M, N after the gate reaches the partly open position represented in Figs. 3 and 4, the further movement of the gate in either direction being automatically accomplished as before set forth by means of the bar K.

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

1. The combination with a hinged gate, of a block arranged adjacent to the hinged end of said gate, a bar pivotally connected at its outer end to the gate near the outer end thereof, a hinge comprising three sections hinged together, one of said sections being pivotally connected to said block, and another

section being fixedly secured to the said bar near its inner end, and means for raising the said inner end of the bar in the manner and for the purpose specified.

2. The combination with a hinged gate, of a block arranged adjacent to the hinged end of said gate, a bar pivotally connected at its outer end to the gate near the outer end thereof, a hinge comprising three sections hinged together, one of said sections being pivotally connected to said block and another section being fixedly secured to the said bar near its inner end, a post arranged adjacent to the gate, a bar pivoted to said post, a second bar pivoted to the post to which the gate is hinged, a rope, bar or the like connecting the adjacent ends of the said bars to the inner end of the bar which is pivotally connected with the gate, all arranged for co-operation, substantially as described.

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

JACOB E. KNAPP.

Witnesses:

LUTHER B. MOORE,
M. S. GAROUTTE.