

H. ALLEN.
Apparatus for Opening Hinged Gates.

No. 228,013.

Patented May 25, 1880.

Fig. 1.

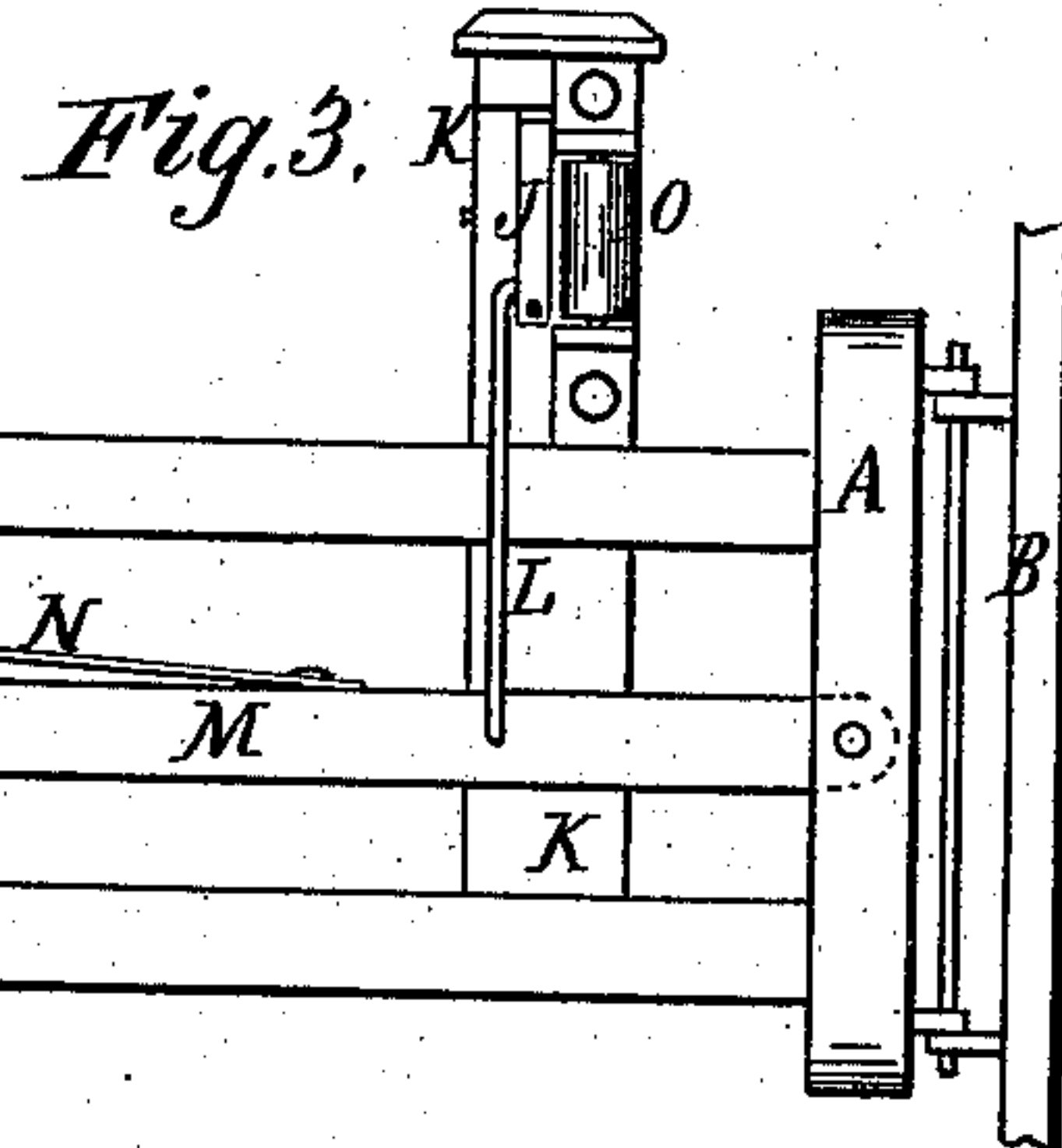
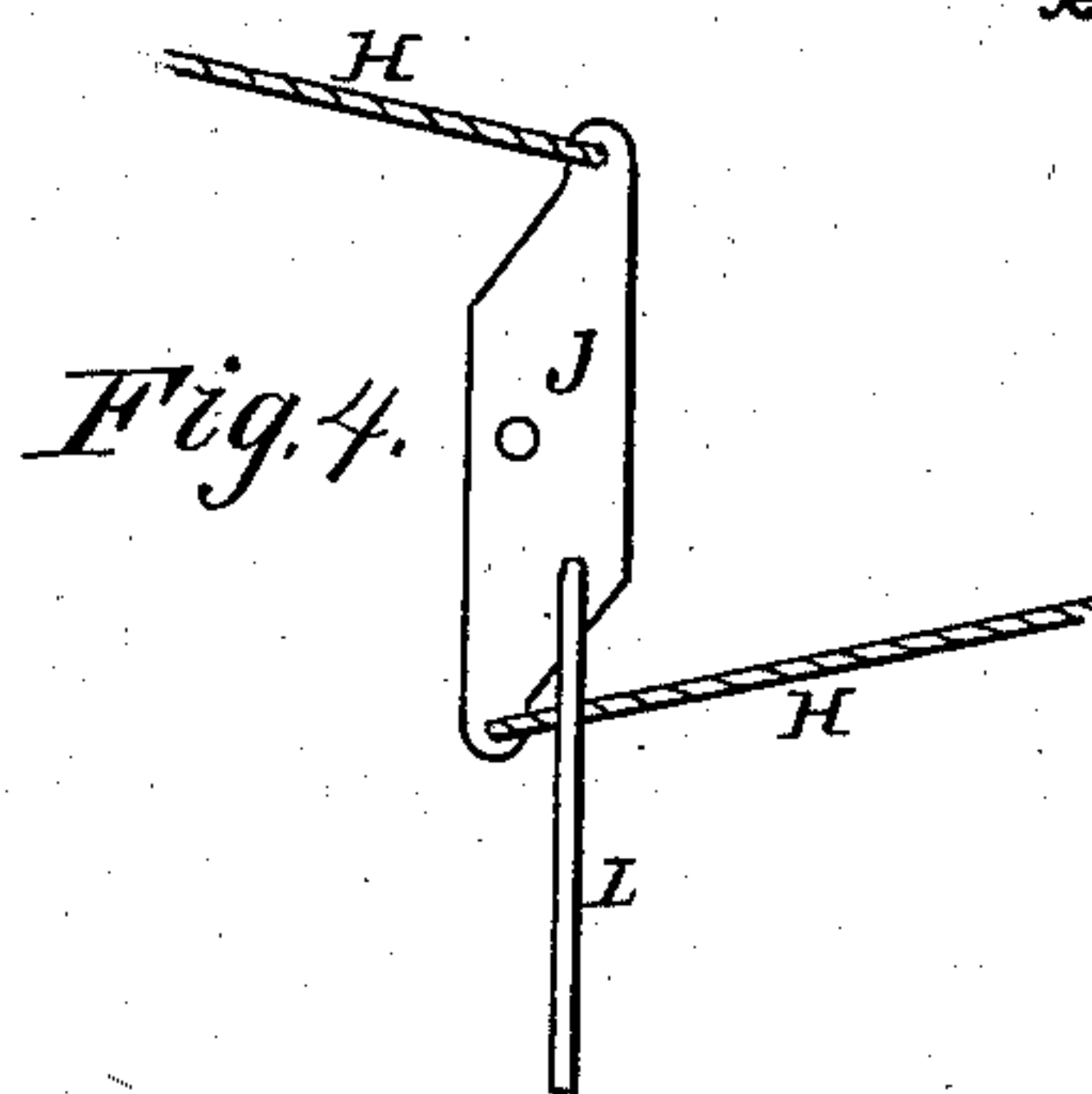
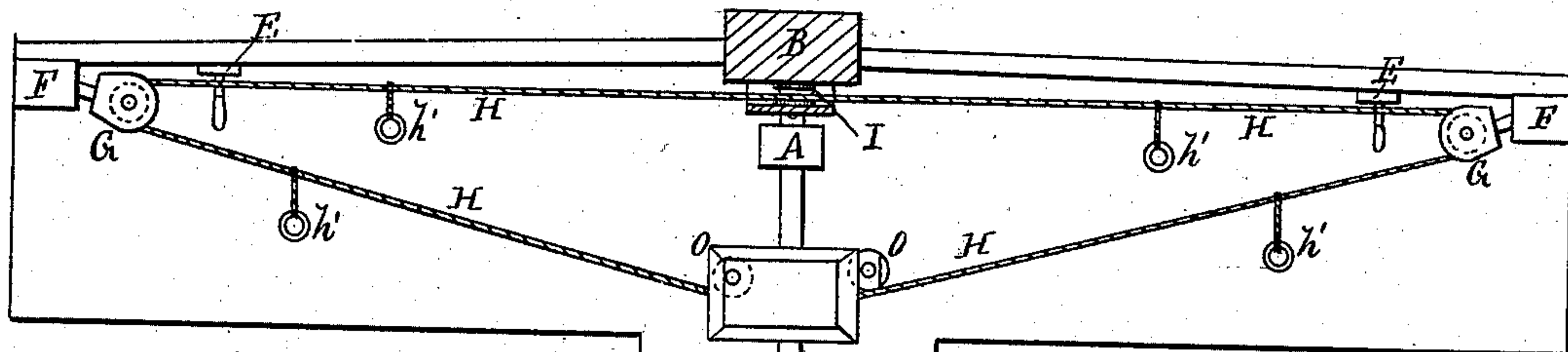
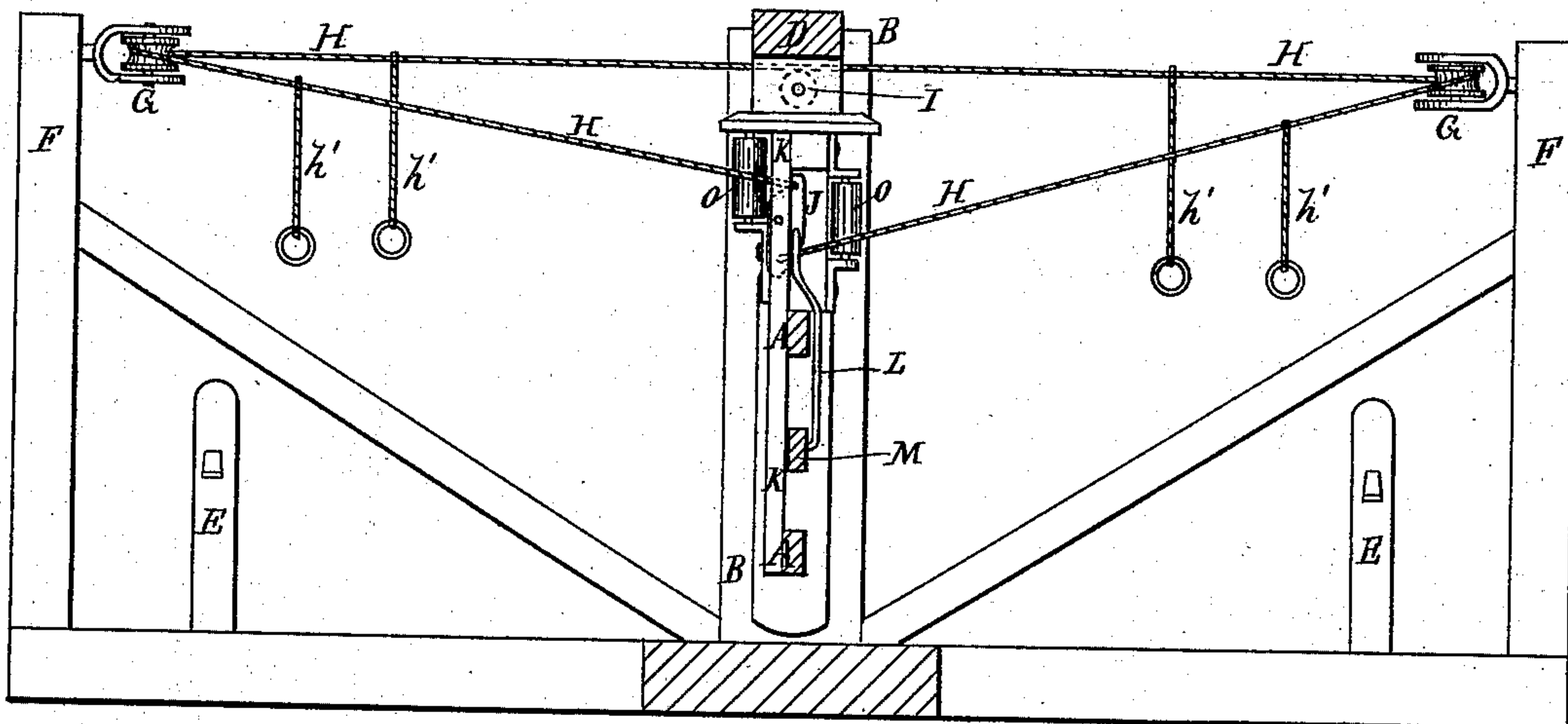


Fig. 2.



WITNESSES:

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HENRY ALLEN, OF SILVERTON, OREGON.

APPARATUS FOR OPENING HINGED GATES.

SPECIFICATION forming part of Letters Patent No. 228,013, dated May 25, 1880.

Application filed September 16, 1879.

To all whom it may concern:

Be it known that I, HENRY ALLEN, of Sil-
verton, in the county of Marion and State of
Oregon, have invented a new and Improved
5 Apparatus for Operating Hinged Gates, of
which the following is a specification.

Figure 1 is a top view of my improved
hinged gate, the hinge and latch-posts being
shown in cross-section. Fig. 2 is a vertical
10 section of the same, taken through the line *x*
x, Fig. 1. Fig. 3 is a detail side view of the
gate. Fig. 4 is a detail view of the lever.

Similar letters of reference indicate corre-
sponding parts.

15 This invention consists in the combination
and arrangement of devices for elevating the
pivoted latch of a laterally-swinging gate, as
hereinafter described and claimed.

A represents a gate, which is hinged to a
20 post, B, and latches, when closed, to a post, C.
The posts B C are set in the ground, and
their upper ends may be connected by a cross-
bar, D.

The gate A may be arranged to swing to
25 both sides, or to only one side, as may be de-
sired or convenient, and latches, when opened,
to posts E, set in the ground at the side of
the roadway.

F are two posts set in the ground at the
30 side of the roadway, upon the opposite sides
of the hinge-post B, and at such a distance
from it that the gate may be opened and
closed by the driver or rider without even
stopping his team or horse.

35 To the upper ends of the two posts F are
pivoted two pulleys, G, around which passes
a chain or rope, H. The middle part of the
chain or rope H passes over a pulley, I, piv-
oted to the forward side of the hinge-post B,
40 or near the middle of the cross-bar D.

The ends of the chain or rope H are at-
tached to the opposite ends of a lever, J, which
is pivoted at its center to an upright bar, K,
attached to the gate A at a suitable distance
45 in advance of its hinges to give suitable lever-
age in operating the gate.

To the lever J is pivoted the upper end of
a rod, L, the lower end of which is pivoted
to the latch M, which projects at the forward
50 end of the gate A, so as to engage with the
catches attached to the posts C E.

The latch M is held down by a spring, N,
attached to it, and which rests against a sta-
tionary post of the gate.

55 If desired, both ends of the rope or chain

H may be attached to the same end of the
lever J, and the rod L pivoted to the other
end. In this case the lower end of the lever
J may be made wide, and two rods, L, may
be used, the said rods L being pivoted to the 60
opposite sides of the said end, so that the
latch M may be raised by the movement of the
said end in either direction.

To arms attached to the upright K are piv-
oted rollers O, for the chain H to bear against, 65
to prevent the said chain from wearing the
wood-work and to give it an increased lever-
age.

Two or four rollers, O, may be used, as
may be desired, and the said rollers may be 70
incased in a box to protect them from the
weather.

A cap may also be attached to the top of
the upright K, to protect the lever J and its
attachments from the weather. 75

The chain or rope H may be made wholly
of chain, or wholly of rope, or the parts
that work upon the pulleys G I and the roll-
ers O may be made of chain or rope, and the
other parts of wire, as may be desired. 80

The wire or chain H may be provided with
handles of rope or wood *h'*, for convenience
in operating it.

With this construction, a driver or rider,
as he approaches the gate, grasps and pulls 85
one of the handles *h'*, the first effect of which
is to raise the latch M, and the next effect is
to swing the gate A open. After passing
through the gateway the driver or rider pulls
one of the handles *h'*, which unlatches the 90
gate from the side posts, E, and swings it
shut.

I do not claim, broadly, operating a swing-
ing gate by means of a rope which is at-
tached to the latch thereof and extends lat- 95
erally from the gate on suitable supports, so
as to be easily accessible from the roadway;
but

What I claim as new and of my invention
is— 100

The combination of the centrally-pivoted
lever or latch-lifter J, rods L, and rollers O
with vertically-swinging latch M, chain H,
having handles *h'*, the laterally-swinging gate,
and posts F, having pulleys G, all as shown 105
and described.

HENRY ALLEN.

Witnesses:

JAMES C. HUTTON,
J. M. BROWN.