(No Model.)

A. L. PIERCE.

FARM GATE.

No. 246,338. Patented Aug. 30, 1881.

Fig. 1

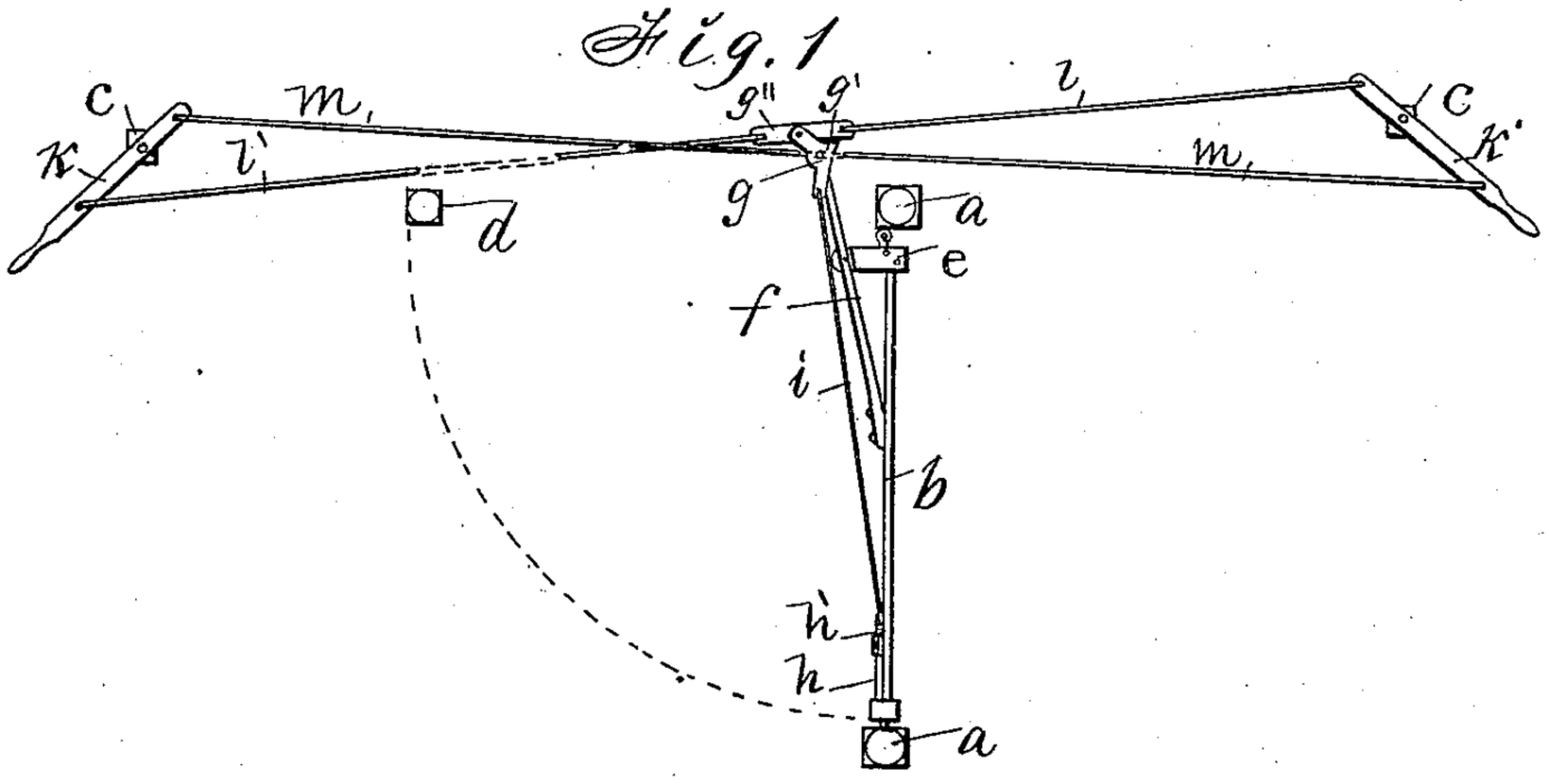
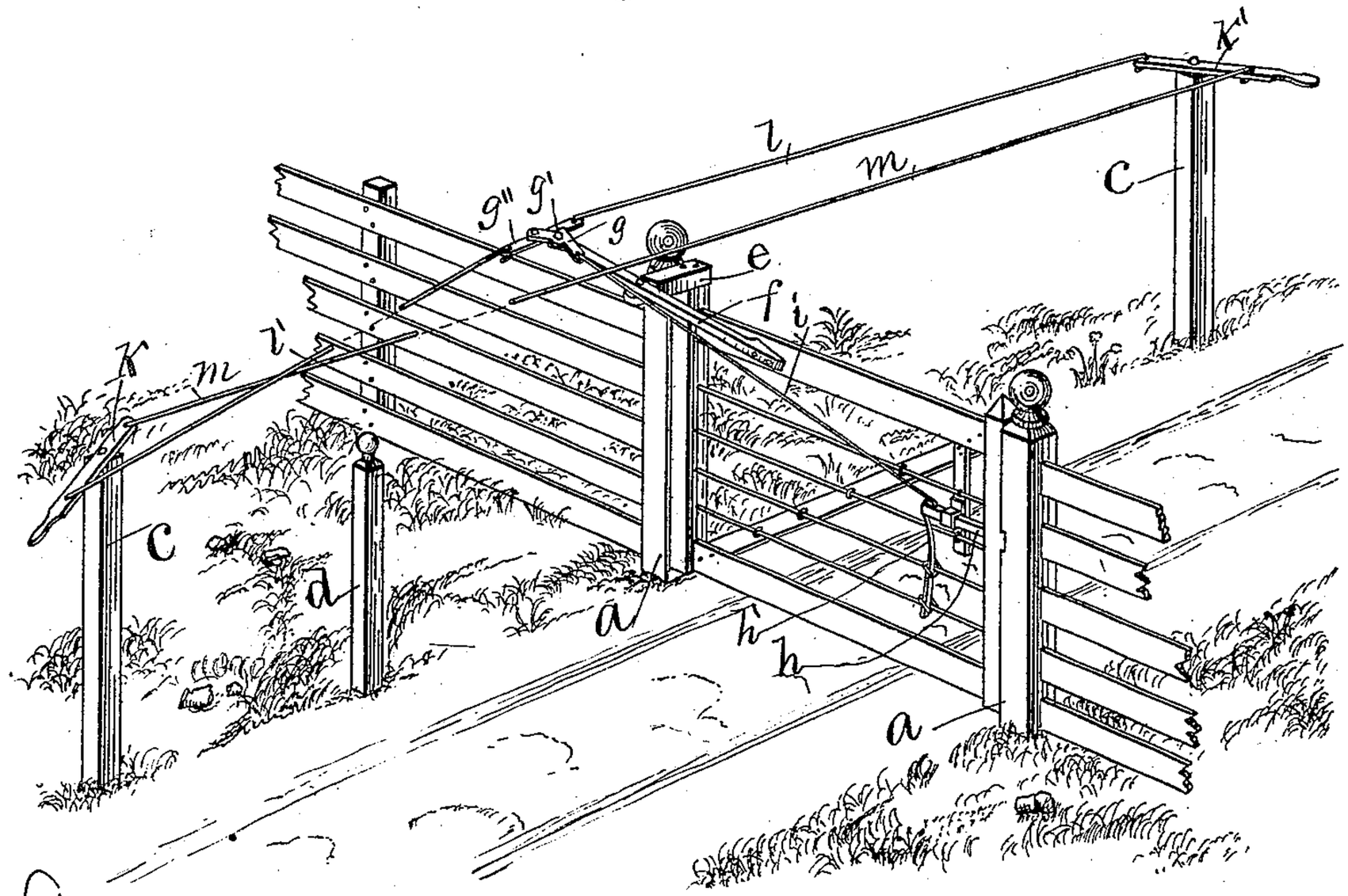


Fig. 2



Witnesses:
R. G. Orwig.
Fred. B. Hampton.

Inventor:
Abraham L. Pierce,
By Thomas G. Orwig,
Attorney.

UNITED STATES PATENT OFFICE.

ABRAHAM L. PIERCE, OF ASHAWA, IOWA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 246,338, dated August 30, 1881.

Application filed July 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM L. PIERCE, of Ashawa, in the county of Polk and State of Iowa, have invented an Improved Farm-Gate, of which the following is a specification.

The object of my invention is to provide a gate-operating device that is simple, cheap, and durable, and that will diminish the power required for operating a gate from a passing vehicle.

Heretofore hand-levers of the first order, a miter-lever, rods, a triangular plate, and a spring-latch have been so arranged and combined with a swinging gate that it could be operated from a passing vehicle; but as the hand-levers have to be mounted upon posts set at a distance from the gate, and being but of the first order, makes it hard to operate a gate from a vehicle. To obviate this difficulty I arrange and combine compound hand-levers, a bell-crank lever, an arm, a spring, a sliding latch, connecting-rods, and a gate as hereinafter fully set forth.

Figure 1 of my accompanying drawings is a top-plan view of my gate and operating device. Fig. 2 is a perspective view of the same. Together they clearly illustrate the construction and operation of my complete invention.

a a represent gate-post.

b represents a common swinging gate.

c c represent posts set in the ground upon opposite sides and in line with the post *a*, to which the gate *b* is hinged.

d is a post set between and in line with posts *a c*. It has a catch device fixed upon its side adapted to catch and hold the latch when the gate is open.

e is a block or arm rigidly fixed upon the top and rear end of the gate *b*.

f represents an arm that projects in an inclined position from the gate. It is rigidly secured to the end of the block *e* and the top board of the gate.

g represents a bell-crank lever pivoted to the free and top end of the arm *f*. It has an extension, *g'*, that projects outward and downward, and is adapted to prevent the crank-lever *g* from drawing on the latch of the gate as it is closed, and also restricts the movements of the hand-levers, so that they will always be in the right position for operating the gate.

g'' is a metal strip pivoted to the crank-lever *g*.

h is a sliding latch, that has its bearing formed in or attached to the front end of the gate.

h' is a spring rigidly secured to the lower portion of the gate, and connected at its top with the rear end of the latch *h*.

i is a rod that connects the latch with the crank-lever *g*.

k k' represent hand-levers pivoted on the tops of the posts *c c*.

l represents a short rod that connects the strip *g''* with the short arm of the lever *k'*.

l' is a rod that connects the opposite end of the strip *g''* with the long arm of the lever *k*, near the handle.

m is a long rod that connects the long arm of the lever *k'* with the short arm of the lever *k*. Connecting the levers in this manner makes each of them a lever of the first and also of the second order to produce compound levers, by means of which the power required to operate the gate is greatly diminished.

I claim as my invention—

The arrangement and combination of the compound levers *k k'*, the bell-crank lever *g*, having extension *g'* and pivoted strip or plate *g''*, the latch *h*, the spring *h'*, the rod *i*, and rods *l l' m* with a gate having a rigid arm, *f*, substantially as shown and described.

ABRAHAM L. PIERCE.

Witnesses:

GEO. A. SMITH,

FRANK W. HEERS.