2 Sheets—Sheet 1.

E. LANNING.
Pivot Gate.

No. 230,291. Patented July 20, 1880.

Fig: 1

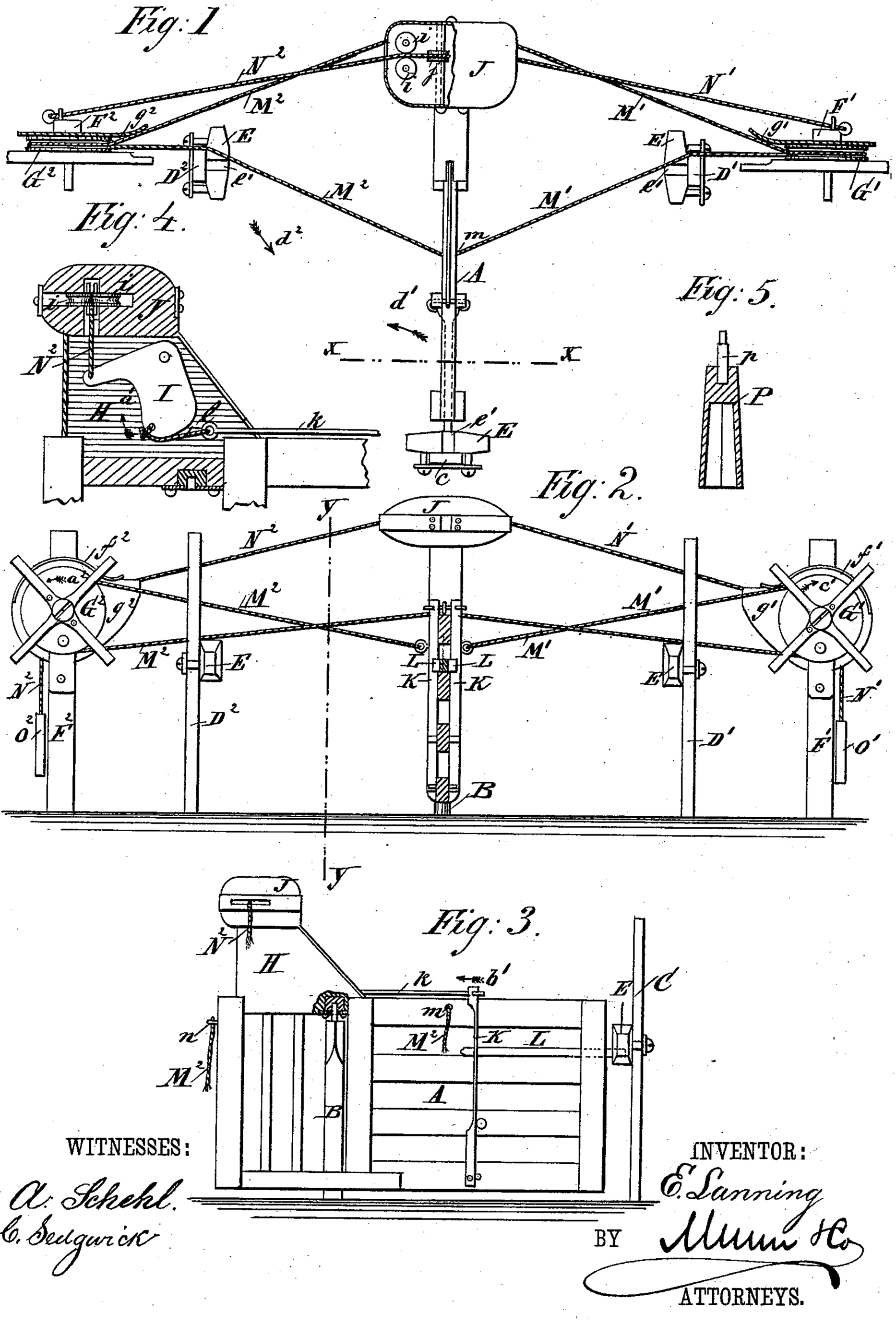


Fig: 4.

Fig: 5.

Fig: 2.

Fig: 3.

WITNESSES:

A. Schehl.
C. Seugarick

INVENTOR:

E. Lanning

BY Munn & Co

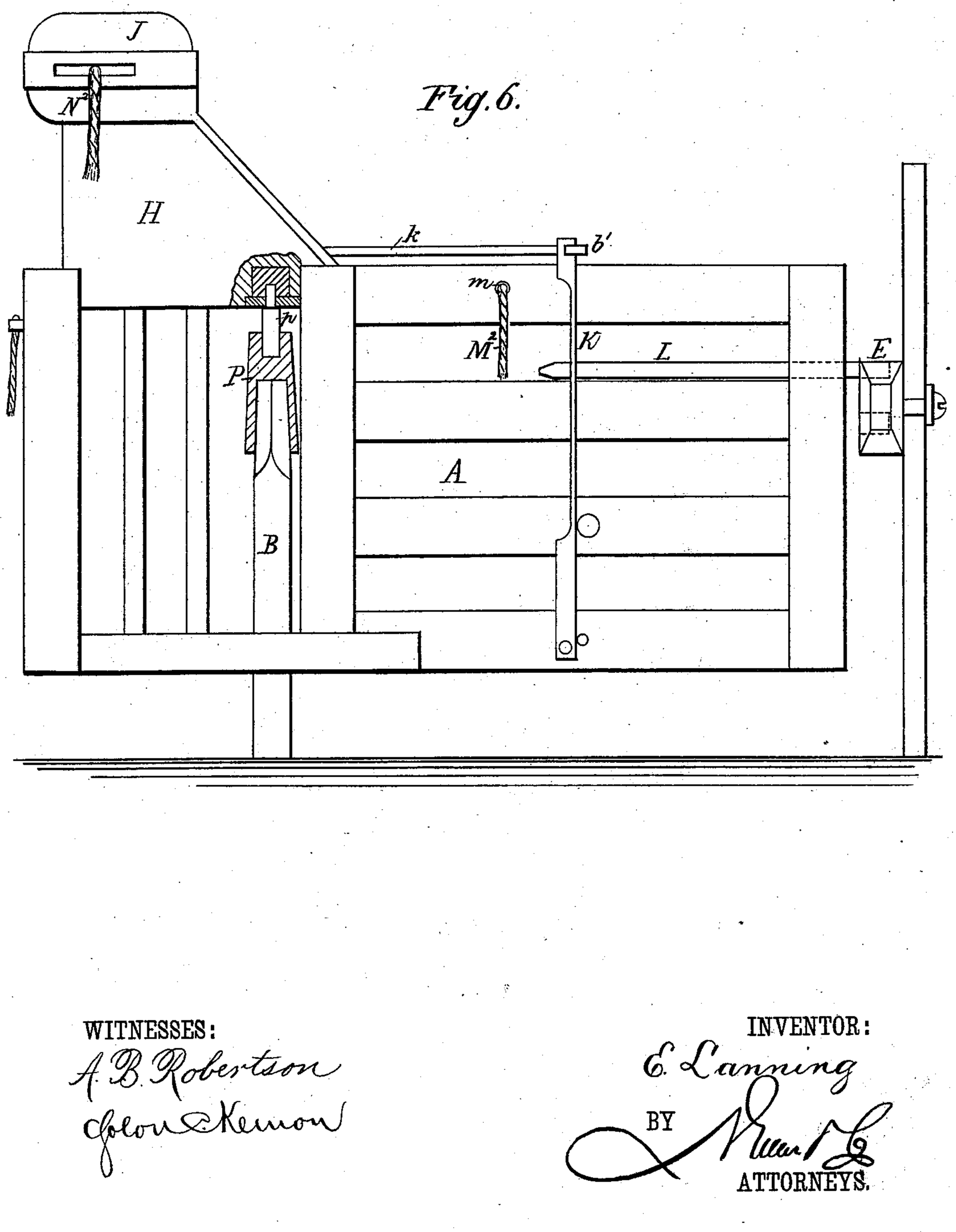
ATTORNEYS.

2 Sheets—Sheet 2.

E. LANNING.
Pivot Gate.

No. 230,291. Patented July 20, 1880.

Fig. 6.



WITNESSES:
A. B. Robertson
Coleon & Kenon

INVENTOR:
E. Lanning
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWARD LANNING, OF IOWA CITY, IOWA.

PIVOT-GATE.

SPECIFICATION forming part of Letters Patent No. 230,291, dated July 20, 1880.

Application filed October 23, 1879.

To all whom it may concern:

Be it known that I, EDWARD LANNING, of Iowa City, in the county of Johnson and State of Iowa, have invented a new and Improved Pivot-Gate, of which the following is a specification.

The object of my invention is to provide a new and improved gate so arranged that it can be conveniently opened and closed from a vehicle or by a pedestrian.

The invention consists in a balanced gate, pivoted near its center and provided with two pulleys, to which ropes or wires pass, by means of which the latch and the gate are opened and closed.

The invention also consists in an improved gate-head containing a weighted lever and pulleys for the purpose of keeping the latch in its proper place or for drawing it.

In the acccompanying drawings, Figure 1 is a ground plan of my improved gate. Fig. 2 is a vertical longitudinal sectional elevation on the line *x x*, Fig. 1. Fig. 3 is a vertical cross-sectional elevation on the line *y y*, Fig. 2. Fig. 4 is a vertical longitudinal section of the gate-head. Fig. 5 is a vertical cross-section of the snow-post for increasing the height of the pivot-post. Fig. 6 is an elevation showing the snow-post arranged in the position which it is intended to occupy.

Similar letters of reference indicate corresponding parts.

The gate A is pivoted on the pivot-post B, and its forward end rests against the post C when it is closed, or against one of the posts D′ and D² when open.

The posts C D′ D² are provided with vertically-adjustable latch-blocks E, beveled on three sides, and having the notch *e′* in the upper side and a notch in the front side.

The standards F′ and F², to which the grooved pulleys G′ and G², protected by the top plates, *f′* and *f²*, and the side plates, *g′* and *g²*, are pivoted, are arranged at each side of the gate, as shown in Figs. 1 and 2.

The gate A is formed of a number of vertical and horizontal bars in some suitable manner, and the part behind the pivot-post is provided with a gate-head, H, formed of two flat pieces, between which a heavy weighted lever or weighted bell-crank, I, is pivoted. A large heavy block, J, containing the pulleys *i i* and *j j*, surmounts this head, and in part balances the gate. Two latch or bolt springs, K K, between which the bolts or latch L is clamped or fastened in some other suitable manner, are attached to the lower bar of the gate, and their upper ends are connected with the weight I, or made to pass under a pulley by the wire or rod *k* and the small rope *l*.

A rope, M′, is attached to the forward part of the gate at *m*, passes over the block E on the post D′, is wound around the pulley G′ several times, and is then attached to the rear part of the gate at *n*, as shown in Figs. 1, 2, and 3.

In a like manner a wire or rope, M², is attached to the gate and passes over the pulley G². A wire, N′, is attached to the arm of the weighted lever I, passes over the pulleys *j* and *i i* in one side of the block J, passes through a staple in the standard F′, and has a handle, O′, attached to its end.

In the same manner a wire, N², is attached to the weight I and passes to the standard F². The cords M² and N², when they cross each other, pass through a small ring.

The piece P, Fig. 5, provided with a pin, *p*, is placed on top of the pivot-post B in case it is desired to increase the height of the post A, so that the gate is higher above the ground, in case the snow is very deep and for similar reasons.

The gate operates as follows: Assuming that the gate is closed, a person at the standard F′ would first draw on the wire or rope N′. This would cause the weight I to move as indicated by the arrow *a′*, and the bolt L would be drawn back as indicated by the arrow *b′*, and the gate would be opened a small distance. The pulley G′ is then rotated in the direction of *c′*, and this will cause the rear inner rope, M′, to be wound onto G′, and the gate is thus opened, moving in the direction of *d′* until the bolt, which is pushed back by the bevel of the block E on D², snaps into the notch in the face of this block, thus locking the gate. The person having passed through to the other post, F², he pulls on the wire N², which acts in the same manner as N′ and disengages the latch from the block E on D². The pulley

G^2 is then rotated in the direction of c^2, which causes the rear wire, M^2, to be wound onto the pulley G^2, thus moving the gate in the direction of d^2.

If a person comes from F^2 to F', the actions are similar, only in the reverse directions. If the snow-post P is used, the gate will be so high above the ground that the latch cannot pass into the notch in the face of the block E, until it is raised. The notches e' e' on the upper edge of E are for another latch. The action of the several ropes remains the same whether the snow-post is used or not.

This gate can be conveniently opened or closed by a pedestrian or by a person on a vehicle.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the gate A with the latch-bar L, springs K, rod *k*, the weighted bell-crank I, the wires M' M^2, the pulleys *j j i* in block J, the pulleys G' G^2, and the ropes N' N', as and for the purpose specified.

2. The combination of the gate A, the latch-bar L, and the posts C, D', and D^2, provided with vertically-adjustable beveled latch-blocks E E, having a notch, e', in the upper side and a notch in the front side, substantially as herein shown and described, for the purpose of locking the gate at different positions of the same above the ground.

3. The combination of the gate A, the pivot-post B, and the snow-post P, substantially as herein shown and described, and for the purpose of raising the gate higher above the ground in case the snow is very deep.

EDWARD LANNING.

Witnesses:
ED. SHEPARD,
SAMUEL J. HESS.