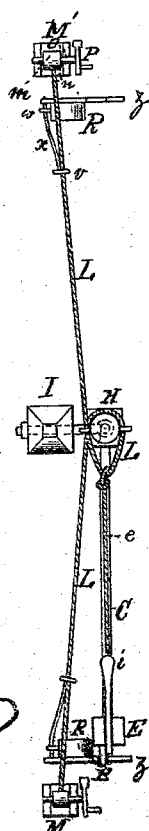
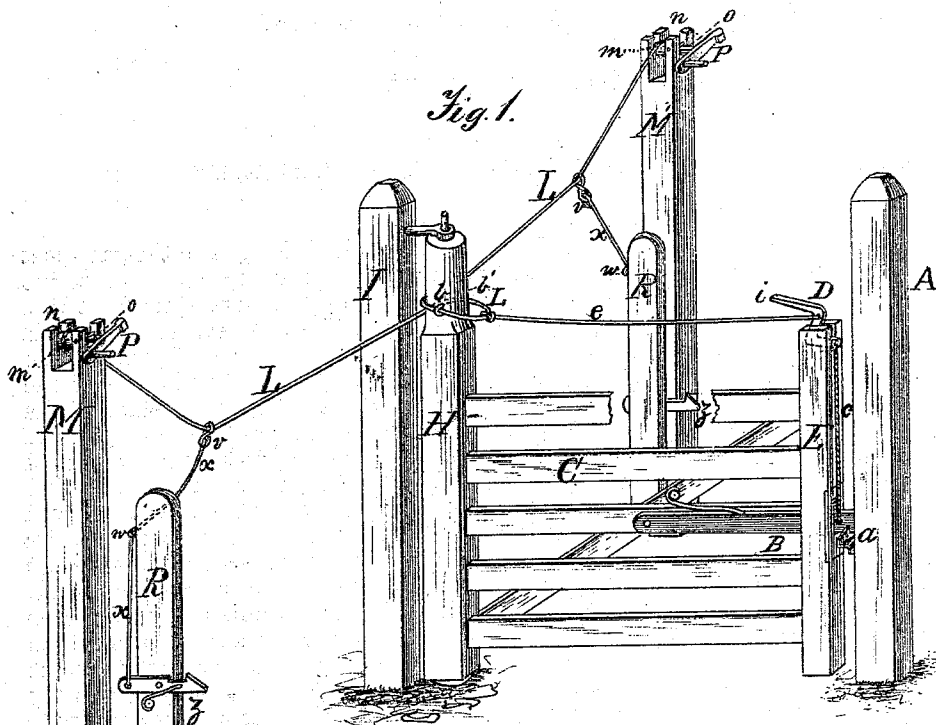


P. SCHWEBEL.
Improvement in Gates.

No. 124,858.

Patented March 19, 1872.



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UNITED STATES PATENT OFFICE.

PHILLIP SCHWEBEL, OF QUINCY, ILLINOIS.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 124,858, dated March 19, 1872.

To all whom it may concern:

Be it known that I, PHILLIP SCHWEBEL, of the city of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had to the accompanying drawing.

Nature and Objects of the Invention.

The invention relates to a gate, which may be opened by means of cords connecting a latch with cranks placed in posts at a proper distance from the gate, so that by the cranks on either side being turned in either way the gate is opened, and after being opened may be closed by turning a crank on a post on the opposite side of the gate, the cords and cranks operating, when the gate is closed, to raise the latch and open the gate; and when the gate is open to depress the catch, holding it in such position, elevate the latch, and close the gate; the object of the invention being to provide a gate which can be operated by pedestrians in the ordinary manner, or by persons in vehicles, or mounted, without dismounting.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of the invention with a part of the upper bar of the gate broken out. Fig. 2 is a plan view of the same, showing the position of the posts and the manner of operating the main cord.

General Description.

A in the accompanying drawing represents a post having a catch, *a*, properly placed to receive the extremity of the latch B, which is attached to the gate C, and, in the present instance, has a downward pressure. In the upper part of the post E of frame of the gate C, through which the latch B passes, is pivoted the bell-crank D, the outer end of the lower arm of which is connected with the latch B by means of a cord or wire, *c*, drawn to proper tension. The upper part of the bell-crank D, adjacent the top of the post E, is provided with a cord or wire, *e*, connecting it with the cord L. The bell-crank is also provided with an arm or lever, *i*, so placed that by its being depressed the front of the bell-crank is elevated, thus raising the latch B and allowing the gate to be opened in the ordinary manner. The post

H of the gate-frame is hinged to the gate-post I so that the gate C, in swinging, may describe a semicircle. The upper part of the post H is provided on each side with staples or eyes *b b'* to receive and sustain the cord L, which is of proper length, and passes entirely around the post H, and extends on opposite sides of the post to the grooved rollers *m* on the posts M M'. Thus the cord L passes from the post M to the staple *b'* through it; thence to and through the staple *b*, and thence to the curved roller *m* on the post M'. At a point opposite the post H and midway between the staples *b b'* the cord L is secured to the cord or wire *e*. The posts M M' are situated opposite each other at any proper and desired distance from the gate, and in a line with the post on which the gate is hung. They are provided on top with slots *n*, so cut as to be at right angles to the plane of the gate C when closed. In these slots *n* are placed the grooved rollers *m*, fixed upon axles *o*, which are journaled at each side of the slot, their extremities on the side toward the gate being provided with the cranks P. The posts or standards R are so placed that when the gate is thrown open the latch B can enter the catch Z, which is pivoted to the post R, and has an upward pressure; and its rear projecting back of the post R is provided with a cord, *x*, passing through a staple, *w*, on the same side of the post R, which cord is of proper length, and is provided with a ring, *v*, through which passes the cord L.

It is obvious that the bell-crank D may be dispensed with, and the post E provided with a roller-wheel properly grooved or provided with an aperture to prevent the cord L slipping off the post E. In the event of such arrangement the cords or wires *c* and *e* may be united.

An automatic latch will answer in the place of the latch B.

The posts R and their attachments may also be dispensed with, as the gate will remain open when so swung.

A pulley or circular piece of wood may be used instead of the upper part of the post H, since it is only necessary that the line of tension of the cord L shall not pass through the vertical axis of the post H.

Operation.

When it is desired to open the gate C the

approach is made so that the crank P can be reached, which crank is turned either toward or from the gate, and the cord L secured to the roller *m* is thus drawn taut, and, acting upon the cord or wire *e*, depresses the rear of the bell-crank D, thus elevating its front arm and raising the latch B. At the same time the tension of the cord L, by its passing around the post H, is directed toward the standard opposite that side of the gate C on which the crank is being operated, and, the latch B being raised, the gate C swings open until it comes in contact with the standard last aforesaid, when the latch B enters the catch on the post R and the gate is held open. After the above operation, when it is desired to close the gate, the crank *m* on the opposite post is turned. The cord L, thus drawn taut, acts as aforesaid to close the gate and elevate the latch. At the same time as it becomes taut the cord *x* is drawn upward, thus elevating the rear and depressing the front of the catch Z, and so freeing the latch B and allowing the gate C to swing.

It is obvious that by continuing the revolu-

tions of the cranks P the gate, when latched upon one of the posts R, may be made to perform a semicircular swing and latch itself upon the post R on the side opposite that on which the crank is being operated.

Claims.

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

1. The combination of the cranks P, rollers *m*, cord L, rounded post H, cord or cords *e*, latch B, and catch *a*, substantially as shown and described.

2. The combination of the crank P, cord L, post R, catch Z, and cord *x*, substantially as shown and described.

In testimony that I claim the foregoing invention of improvements in gates, as above described, I have hereunto set my hand and seal this 22d day of January, 1872.

PHILLIP SCHWEBEL. [L. S.]

Witnesses:

ROBERT BUNCE,
WM. SCHWEBEL.