

C. N. Owens.

Gate.

No. 112,174.

Patented Feb. 28, 1871.

Fig. 1.

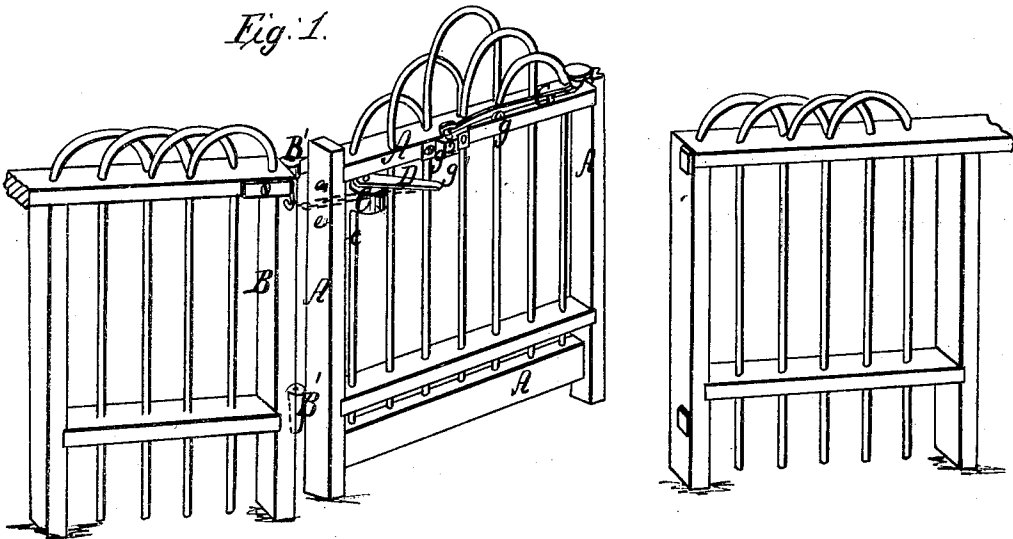
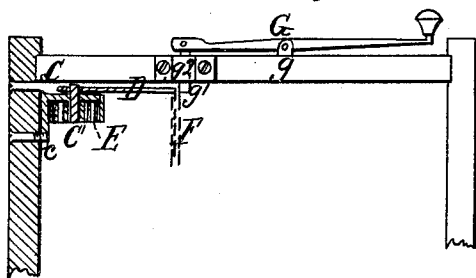


Fig. 2.



Witnesses;
Alex. Mahon
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by his Attorney
A. M. Smith

United States Patent Office.

CHARLES N. OWEN, OF SALEM, OHIO.

Letters Patent No. 112,174, dated February 28, 1871.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, CHARLES N. OWEN, of Salem, county of Columbiana, State Ohio, have invented a new and useful Improvement in Gates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a view of a gate having my improved shutting device attached; and

Figure 2 is a detached view showing a vertical section of the coiled spring.

In the drawing—

A is the gate, which may be of any usual or desired construction; and

B the post, upon which the gate is supported by means of hinges B' B'.

C is a cylindrical case or shell, secured to the gate by means of bolts which pass through ears *c* upon shell C.

C' is a short stud-shaft, the upper end of which projects through the upper face of shell C.

D is a vibrating sweep or arm, mounted upon the projecting end of stud-shaft C', and secured thereto by a nut or its equivalent.

E is a coiled spring placed within shell C, and connected with said shell and with the stud-shaft C' in such manner that a movement of the shaft and the arm D with the sun, or a reverse movement of the shell, the arm in the meanwhile remaining stationary, will wind up the spring E in a manner which will be readily understood without further explanation. In practice I generally prefer to make the spring double, that is, in two parallel strips, coiled one within the other.

F is a chain or equivalent device, by means of which the free end of arm D is connected with the post upon which the gate is hinged.

G is a thumb-latch pivoted, to the gate at *g*; the inner end *g'* of this latch is bent downward at a right angle to the horizontal portion and passes through a guide-box or strap, *g''*. By preference I hinge the part *g'* to the main part or lever, in order to secure a perfect freedom of movement in the guide or way *g''*; but this may not be essential.

As will be readily seen from the above description, when the gate is opened, as in fig. 1, the tension upon spring E is increased, so that as soon as the gate is released it will be closed, and the arm D will pass behind the lower end of the vertical arm *g'* of latch G. The outer face of that portion of this arm which impinges upon the arm D should be chamfered so as to facilitate its rising to admit arm D. While the parts are in this position it will be impossible to open the gate; but the lock can be instantly released by depressing the front end of the latch and allowing the arm D to escape.

Having now described my invention,

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

In combination with a gate, the spring E, vibrating arm D, chain or link F, and latch G, these parts being arranged for joint operation as set forth.

In testimony whereof I have hereunto set my hand this 14th day of October, A. D. 1870.

C. N. OWEN.

Witnesses:

EDWARD KENNETT,
THOMAS KENNETT.