

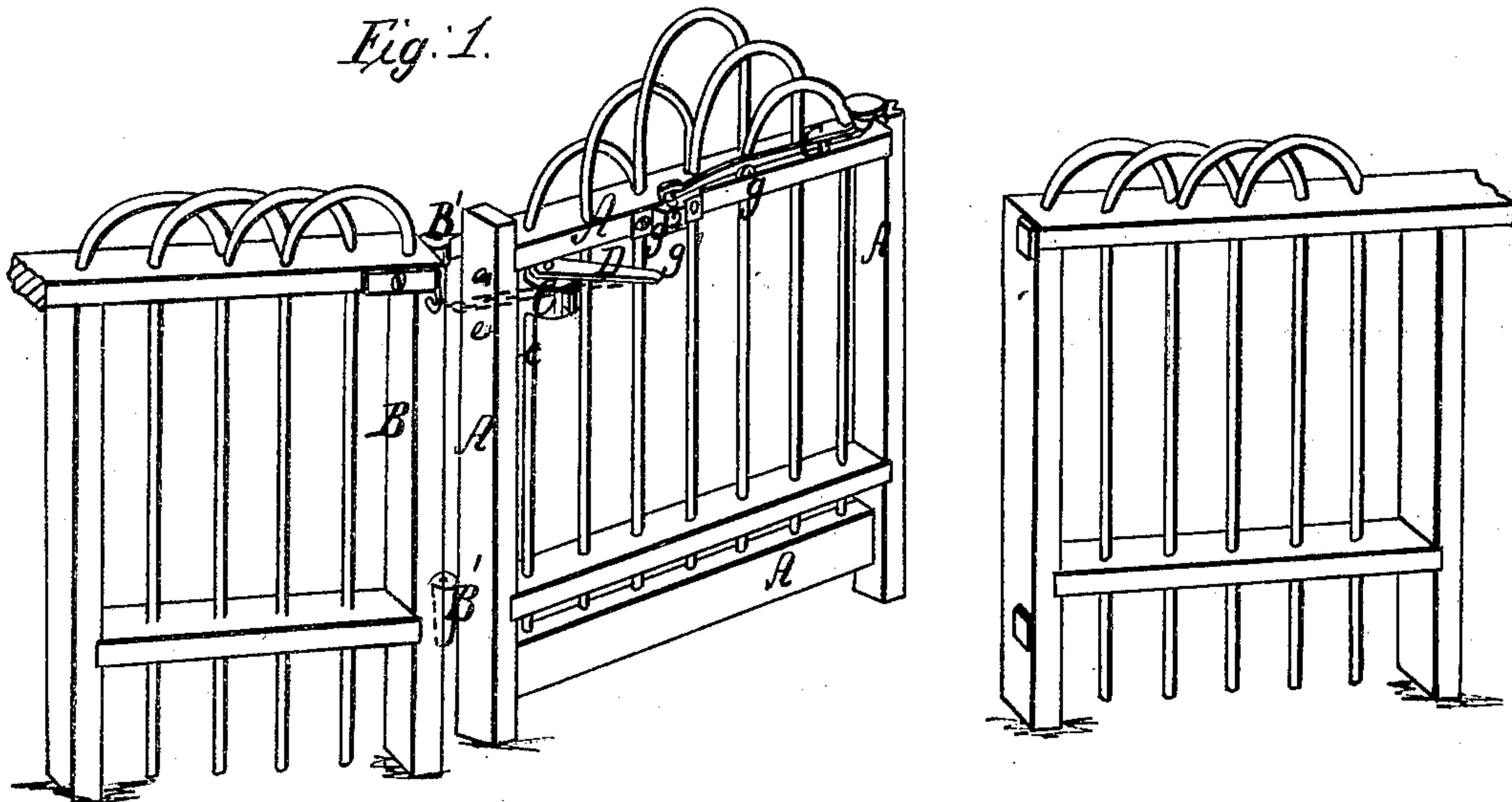
C. N. OWEN.

*Gate.*

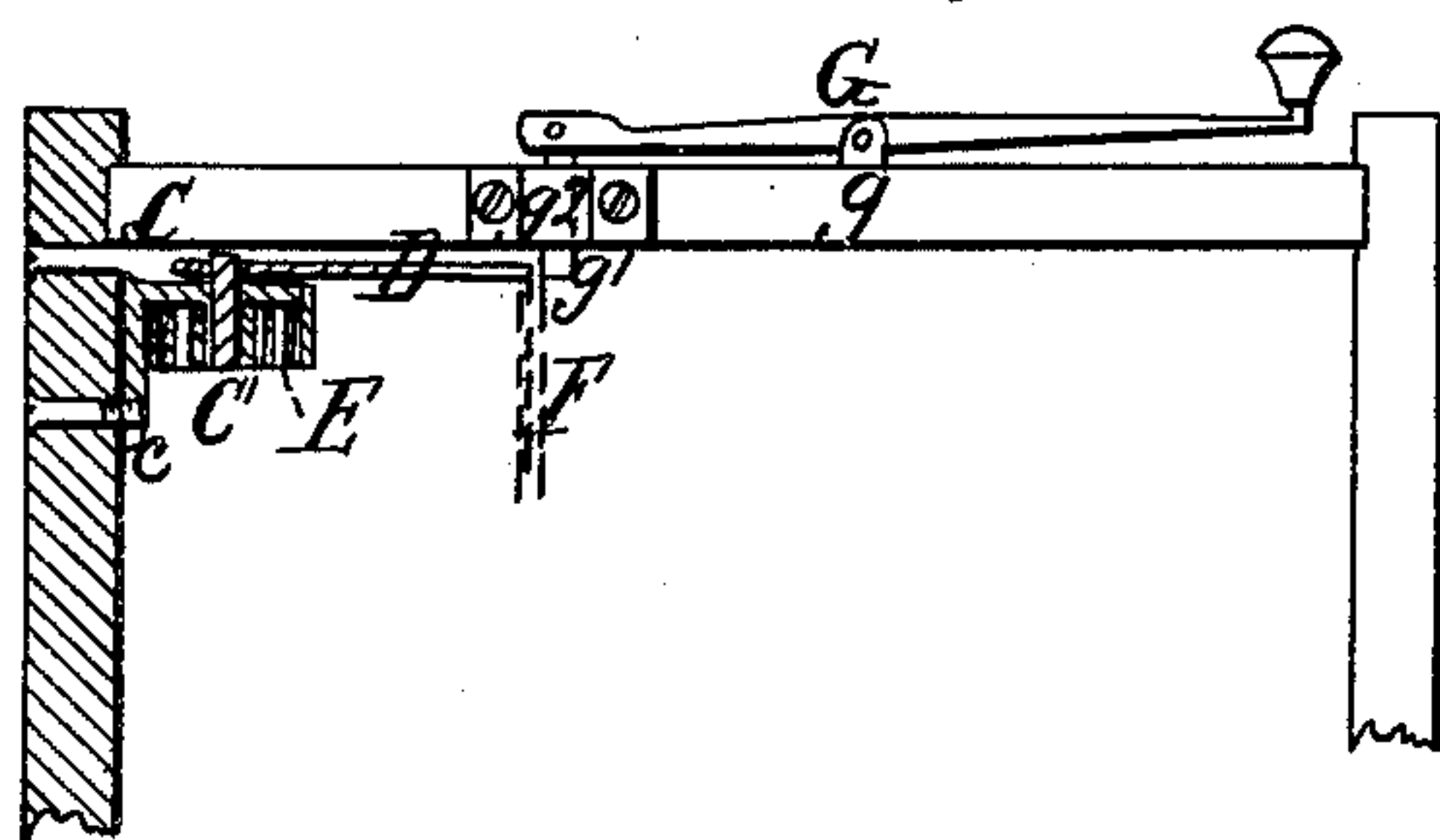
N<sup>o</sup> 112,174.

*Patented Feb. 28, 1871.*

*Fig. 1.*



*Fig. 2.*



Witnesses;  
Alex Mahon  
H. H. Doubleday

Inventor;  
Charles N. Owens  
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<sup>1</sup> of this latch is bent downward at a right angle to the horizontal portion and passes through a guide-box or strap, g<sup>2</sup>. By preference I hinge the part g<sup>1</sup> to the main part or lever, in order to secure a perfect freedom of movement in the guide or way g<sup>2</sup>; 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<sup>1</sup> 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.