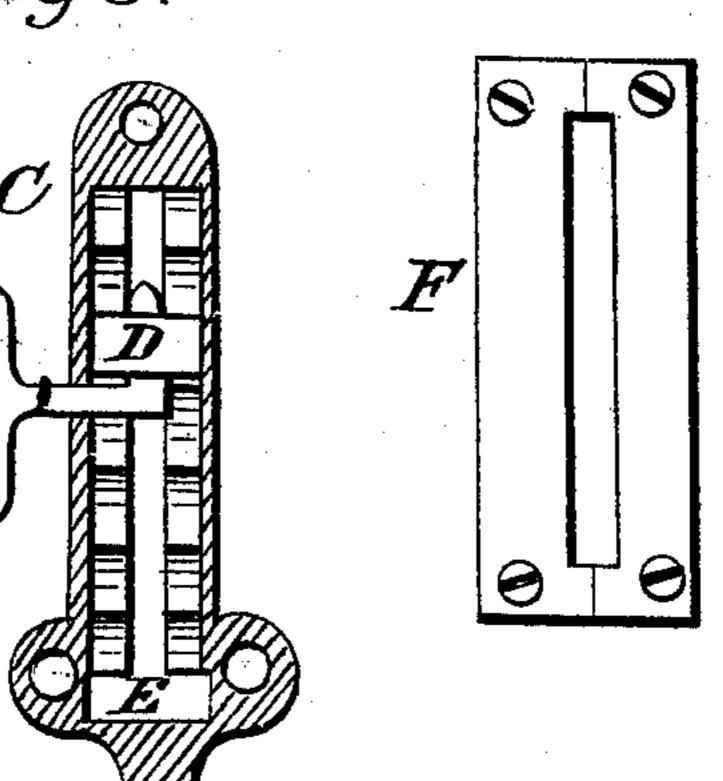


Fig.3.



Witnesses.

John S. Sewis

Charles Roct hum

Inventor.

Charles St Zonney.

Fig. 4.

## Anited States Patent Office.

## CHARLES S. BONNEY, OF SYRACUSE, NEW YORK.

Letters Patent No. 99,822, dated February 15, 1870.

## IMPROVEMENT IN GATES.

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

raised.

To all whom it may concern:

Be it known that I, Charles S. Bonney, of Syracuse, in the State of New York, have invented a new and useful Improvement in Gates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the gate;
Figure 2 is a top view of the lower hinge;
Figure 3, a view of the upper hinge; and
Figure 4, a view of the catch.

The letters of reference refer to the same parts in each figure.

The nature of my invention consists in making the hinges of a gate so that the gate will shut by its own weight, and constructing the lower hinge so that when once put together they cannot be separated by the action of the gate, and allow the gate to be raised or lowered at pleasure. The upper hinge is made also to allow the gate to be raised or lowered; also the catch will allow the gate to be raised or lowered and catch equally well, and the catch will be sure to hold the gate when it swings to the place of shutting.

To enable others skilled in the art to make and use my invention, I will proceed to describe its mode of construction and operation.

A is the gate. The stile that holds the hinges must be made thick enough to have sufficient surface for the hinges to be fastened to, and of such material as will hold screws or bolts well. The other stile must be made so that it will hold a latch, and allow it to project far enough through to enter the catch, to hold the gate shut. The gate and gate post must be made to allow the gate to be raised or lowered at will, otherwise the gate may be made as desired.

B is the lower hinge. It is made in two parts, as represented in figs. 1 and 2; one part is fastened to the gate and the other to the post. The part that is fastened to the gate has two holes through it vertically, to receive the bars of the other part of the hinge, as shown in fig. 2. The holes will receive the bars from the under side, and when the hinge is turned on either bar, it cannot be separated; so that all danger of breaking by separating the hinge is avoided. The part that is fastened to the post is made of two parallel bars, of any required length. They are united, so that they may be fastened to the post with screws or bolts. The size of the bars must correspond with the holes in the other part and allow them to pass in and out of the holes when the gate is swung. Their length may be

varied, to allow the gate to be raised or lowered any required distance.

C is the upper hinge. It is made of three parts; one part is attached to the stile of the gate; the pivot part is fastened to the post and the eye that holds them together; the part that is fastened to the gate has a mortise through nearly the whole length, for the eye to slide up and down, and at the lower end of the mortise is a hole for the cross or T of the eye to pass through, as represented in fig. 3. The outer surface is raised, so that there is a sufficient chamber for the T to slide up and down in; and the surface has a series of notches each side of the mortise, so that it will hold the eye in either of them to hold the gate the proper height; and by means of the construction of these parts, the gate may be raised or lowered at will. The part that is fastened to the post may be made in any convenient manner that will hold the eye and prevent it raising when the gate is being

D is the eye. It is made with a hole to fit the part attached to the post, and allow the gate to swing freely. It has a shoulder to fit the notches and a neck that passes through the mortise, and a T-part to hold it to the part of the upper hinge on the gate.

E is a hole below the mortise, for the T to be put through.

F is the catch. It is fastened to one of the posts with screws. It is represented in figs. 1 and 4. It is made with a mortise through it to receive the latch. It is important that this should be as long as the hinges, so that it will hold the gate shut at any point to which it may be adjusted. The outer surface is made angular by being raised or made thicker at the mortise, so as to actuate the latch. One side is raised more or made thicker than the other, to cause the latch to enter the mortise without the gate passing by its stopping place in going one direction, and when going the other direction, it will pass but once; and when returning, the latch will be sure to be caught.

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

The hinges B and C when constructed substantially as specified, and the catch F, when all the parts are arranged and used as and for the purpose set forth.

CHARLES S. BONNEY.

Witnesses:

JOHN L. LEWIS, CHARLES KETCHUM.