F. DANZENBAKER.
Adjustable Gate.

No. 219,804. Patented Sept. 23, 1879.

Fig. 1.

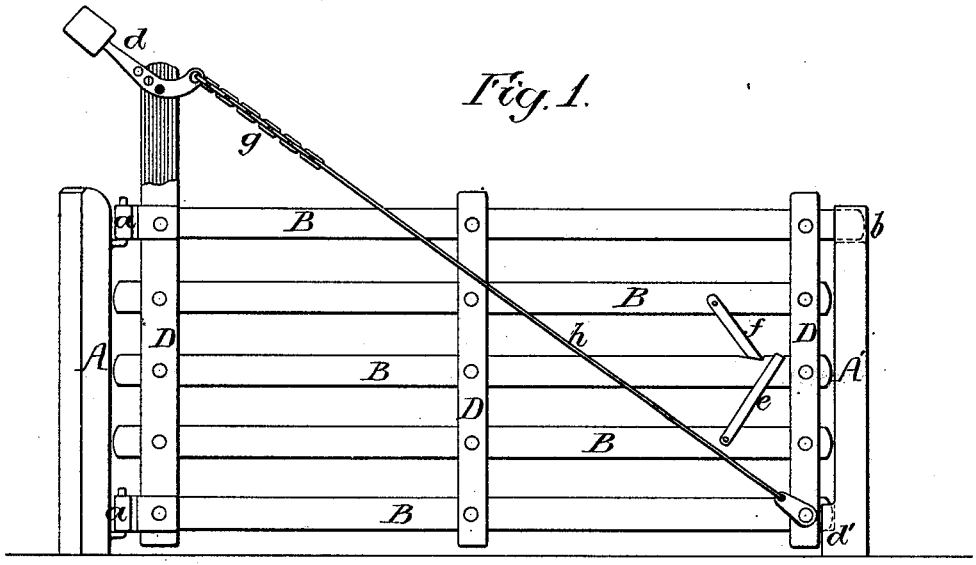
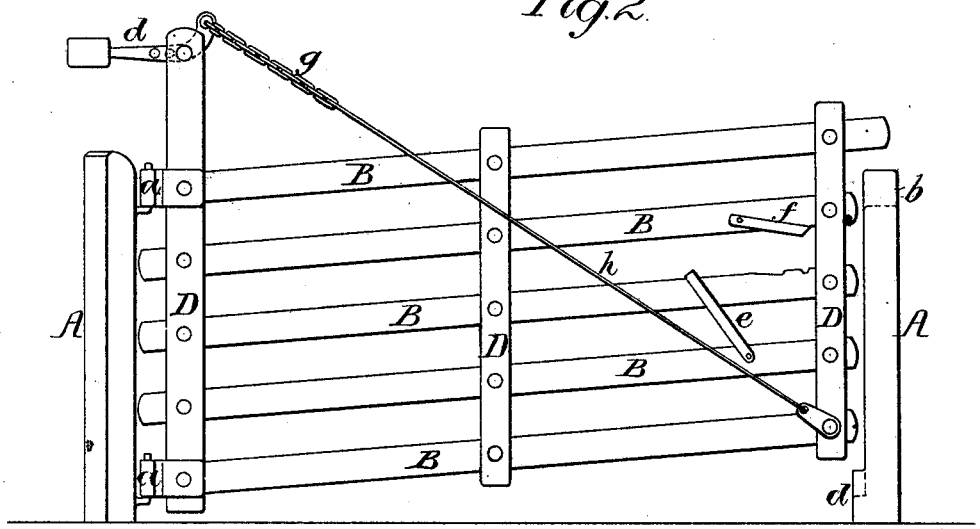


Fig. 2.



Witnesses
Henry Howson Jr.
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UNITED STATES PATENT OFFICE.

FRANCIS DANZENBAKER, OF BRIDGETON, NEW JERSEY.

IMPROVEMENT IN ADJUSTABLE GATES.

Specification forming part of Letters Patent No. **219,804**, dated September 23, 1879; application filed February 4, 1879.

To all whom it may concern:

Be it known that I, FRANCIS DANZENBAKER, of Bridgeton, Cumberland county, New Jersey, have invented a new and useful Improvement in Adjustable Gates, of which the following is a specification.

My invention relates to an improvement in that class of adjustable gates in which a counterbalance-weight is employed; and the objects of my invention are to dispense with the usual swiveled frames carrying the bearings for the counterbalance weight or lever, and to provide a means for securely locking the gate when the latter is down.

These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of the gate in its closed position, and Fig. 2 a side view of the gate when partially raised.

A A′ are the opposite gate-posts, B the horizontal bars, and D the vertical rails, of the gate.

The gate is hung to the post A by hinges *a*, and the top bar B of the gate, when the latter is down, fits into a recess, *b*, in the top of the post A′, the bar projecting beyond the end rail, D, for this purpose, and thus preventing the gate from being swung on its hinges until its outer end is first raised sufficiently to free the projecting end of the rail B from the slot in the post. For the same purpose the bottom bar B is projected into a slot in a projection, *d′*, formed on or secured to the post A′ at and near the base of the same.

In order to facilitate the raising of the outer end of the gate the latter is counterbalanced by means of a weighted lever.

Ordinarily the counterbalance weight or lever is hung to the post A, to which the gate is hinged, so that the frame carrying it must necessarily be pivoted or swiveled, in order to turn as the gate is swung on its hinges.

In order to overcome the necessity for using a pivoted frame on the gate-post, I simply hang the weighted counterbalance-lever *d* to the upper end of the rear rail, D, of the gate, which is extended above the other rails for this purpose, the inner end of the lever being connected by means of a chain, *g*, and rod *h* to the lower front corner of the gate. By this means not only is the necessity for a swiveled frame for carrying the counterbalance weight or lever overcome, but the device is more certain in its action, owing to the fact that there is no straining of the connecting chain or rod or jamming of the bearing when the gate is moved on its hinges.

In order to prevent the accidental elevation of the front end of the gate, I pivot to one of the bars B a yoke, *e*, which embraces the bar above that to which it is pivoted, and is adapted to a notch in the upper edge of the same.

When in the position shown in Fig. 1, the yoke prevents the elevation of the front end of the gate; but when thrown over to the position shown in Fig. 2 it offers no obstacle to such elevation.

In order to prevent the accidental moving of the yoke *e* from the position shown in Fig. 1 to that shown in Fig. 2, I employ a locking-arm, *f*, the lower end of which is adapted to a notch in the rear of the yoke *e* when the latter is in the position shown in Fig. 1, the removal of the yoke from this position being thus prevented until the arm *f* has first been raised.

A simple sliding weight may be employed instead of the lever *d*; but the latter is preferred.

I claim as my invention—

1. The combination of the pivoted bars B and rails D of an adjustable gate with a counterbalance-weight carried by the rear rail of the gate, and connected to the movable portion of said gate, all substantially as and for the purpose described.

2. The combination of the pivoted bars B and rails D, the weighted lever *d*, hung to the rear rail, the chain *g*, and rod *h*, all substantially as set forth.

3. The combination of a gate, counterbalanced as described, with the retaining-yoke *e* and locking-arm *f*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS DANZENBAKER.

Witnesses:
ALEX. PATTERSON,
HARRY SMITH.