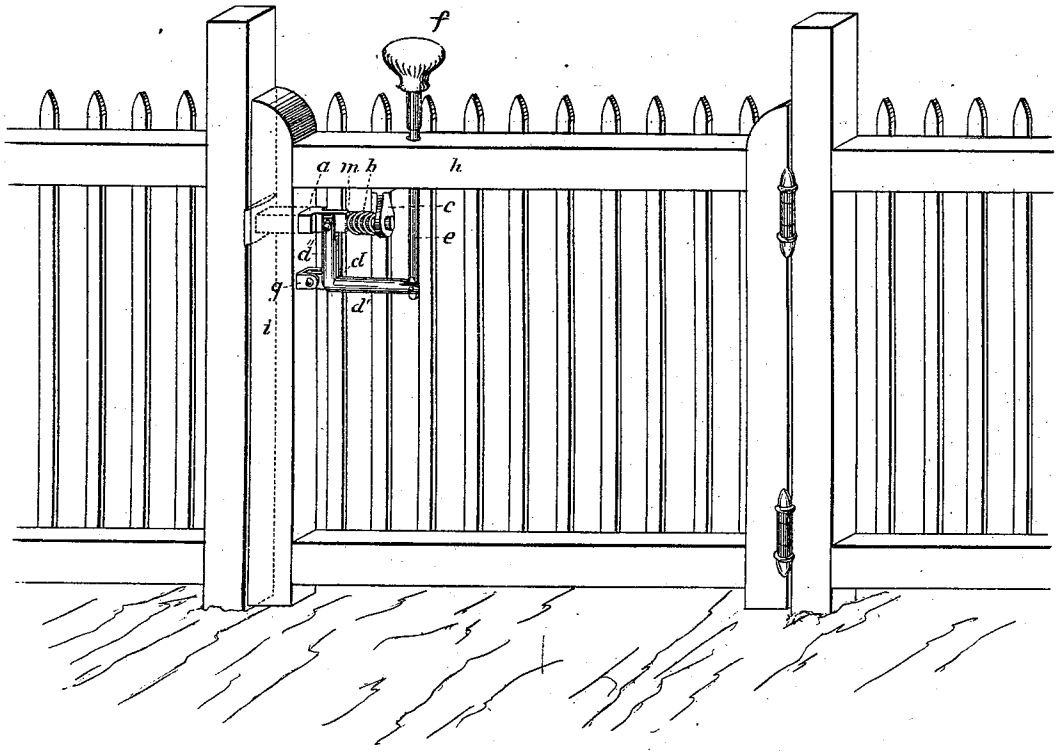
J. D. CAMERON.
GATE-LATCHES.

No. 193,750. Patented July 31, 1877.



WITNESSES:
Story B. Ladd
James C. McGowan

John D. Cameron INVENTOR:
By Paine and Grafton
attorneys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN D. CAMERON, OF CHIPPEWA FALLS, WISCONSIN.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. **193,750**, dated July 31, 1877; application filed May 2, 1877.

To all whom it may concern:

Be it known that I, JOHN D. CAMERON, of Chippewa Falls, in the county of Chippewa and State of Wisconsin, have invented certain new and useful Improvements in Gate-Latches; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to the class of gate-latches which are operated by a vertical rod, generally placed so that a knob on the end of the rod comes at the top of the gate, and when this knob is pushed down the gate-fastening is released.

My invention, which consists of the arrangement and combination of parts herein described, will be fully understood from the following description and claim.

The drawing shows a gate with my improved latch. It can be applied equally well to a gate which opens either way, or to one which swings only in one direction.

The latch is intended to be made as shown, so as to be placed in the angle between the top and front bars *h* and *i* of the gate. The bracket *c* is screwed to the under side of the top bar *h*, and the lug *g*, for the fulcrum of the bell-crank lever *d*, is secured to the inside of the front bar *i*. Then, by making a hole in the top bar for the rod *e*, and one in the front bar for the bolt *a*, the latch can be easily applied to the gate.

The end of the horizontal bolt *a* passes through and is supported by the bracket *c*, while the center of the bolt is pivoted to the arm *d''* of the bell-crank lever *d*. The spring *b* is coiled around the bolt between the shoulder *m* and the bracket *c*.

The bell-crank lever is constructed, preferably, with one short and one long arm, the short arm, *d''*, being pivoted to the bolt *a*, and the long arm, *d'*, to the bottom of the vertical rod *e*.

The short arm, *d''*, may be pivoted to a collar which slides on the bolt *a*, and which can be fastened at any point by a screw. The collar would serve as a shoulder for the spring *b*, and its position on the bolt *a* could be changed to suit the width of the front bar *i*, to which the latch is to be applied.

The rod *e* projects above the top of the gate and terminates in a knob, *f*.

By pressing upon the knob the bolt *a* is withdrawn and the gate unfastened, and when the hand is raised from the knob the spring *b* forces forward the bolt into the position for latching the gate.

I claim as my invention—

The combination of the bolt *a*, bell-crank lever *d*, vertical rod *e*, with knob *f*, bracket *c*, lug *g*, and spring *b*, the whole arranged substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN D. CAMERON.

Witnesses:
F. G. BARLOW,
HENRY M. LEWIS.