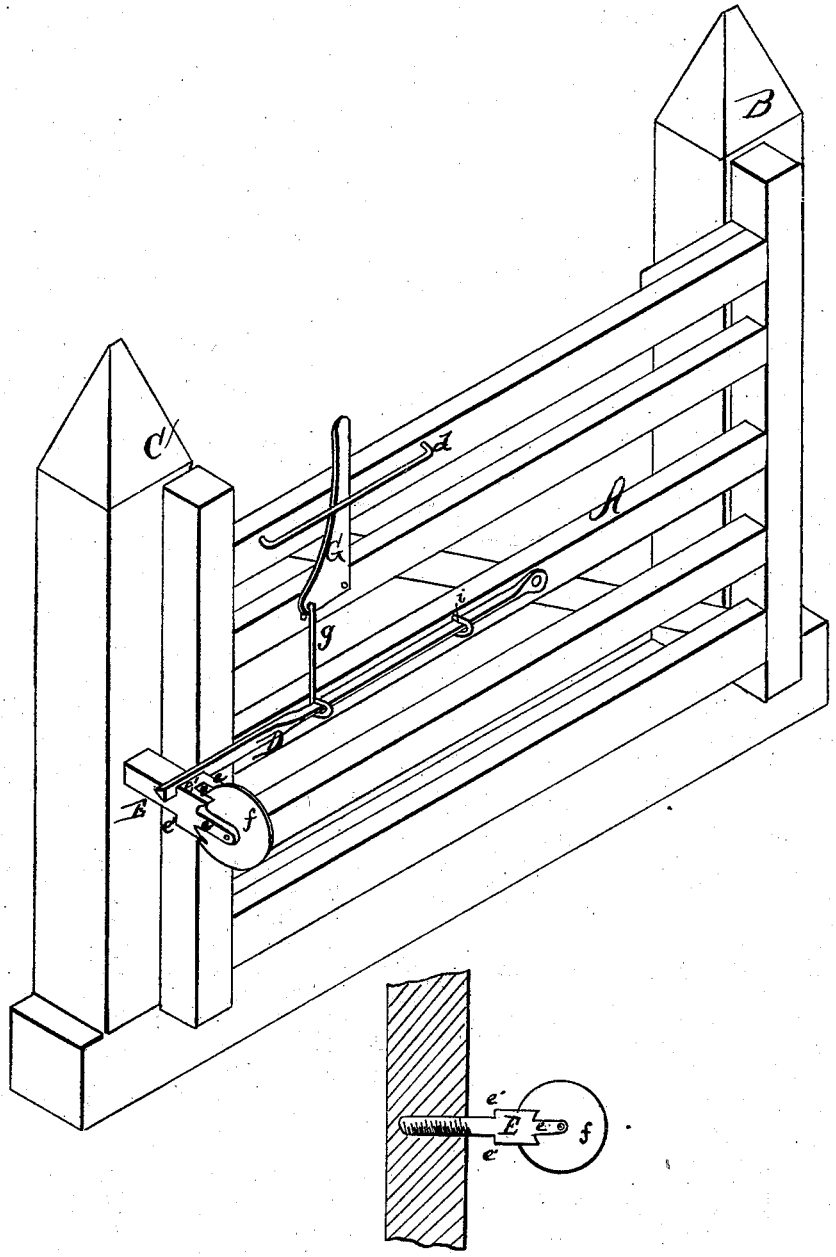
F. J. LEE & J. S. RANSDELL.

Gate-Latch.

No. 209,485. Patented Oct. 29, 1878.



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UNITED STATES PATENT OFFICE.

FREDERICK J. LEE AND JOHN S. RANSDELL, OF HARRISBURG, KENTUCKY; SAID RANSDELL ASSIGNOR TO SAID LEE.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. **209,485**, dated October 29, 1878; application filed September 19, 1878.

To all whom it may concern:

Be it known that we, FREDERICK J. LEE and JOHN S. RANSDELL, of Harrisburg, in the county of Owen and State of Kentucky, have invented certain new and useful Improvements in Gate-Latches; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, and in which the figures are perspective views of our improvement.

The nature of our invention consists in the peculiar construction and arrangement of a latching device for gates, which will allow the gate to fasten automatically even should it be sagged down, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation.

A represents a gate, of any suitable construction, hinged to the post B, and closing against the post C, as usual. D is a spring-latch, secured rigidly to the gate at its inner end, and the outer end left free to spring in either direction to pass the shoulders on the catch. Near its inner end the latch passes through the staple *i*, which serves as a fulcrum, upon which it springs.

E represents the catch, formed with a screw on its inner end, which enters the post C; or the latch may be otherwise secured therein. Near the outer end of the catch are two shoulders, *e' e'*, and beyond these the catch is slotted or forked, forming two arms, *e e*, between which is pivoted a friction wheel or disk, *f*, whose diameter should be a little greater than the thickness of the catch immediately behind the wheel, in order that the latch D may slip easily over it. The shoulders *e' e'* are situated one on top and one on the under side of the catch, so that in screwing it into the post it does not matter which side may come uppermost. Nor does it matter in operation whether the outer end of the gate is sagged down or not, as by the peculiar construction of the catch, as described, if the gate sags, the latch D, striking the lower part of the friction-disk *f*, is sprung down and catches behind the lower shoulder, *e'*.

The latch is sprung back to allow the gate to open by means of the angle-lever G, pivoted to the gate above the latch, and the lower and short arm of which is connected to the latch by a rod, *g*. The upper end of the lever is prevented from moving too far, and thereby injuring the spring-latch D, by means of a small guide-rod, *d*, as shown, the ends of the rod being secured to the gate, and the lever moving between the rod and gate.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The catch E, constructed with shoulders *e' e'* and arms *e e*, between which arms is pivoted the friction-roller *f*, for lifting or depressing the spring-latch D, substantially as and for the purposes set forth.

2. The combination of spring-latch D, catch E, constructed with shoulders *e' e'*, and friction-roller *f*, pivoted vertically between arms *e e*, substantially as and for the purposes set forth.

3. The catch E, constructed with shoulders *e' e'* and arms *e e*, combined with friction-roller *f*, spring-latch D, lever G, and connecting-rod *g*, substantially as and for the purposes described.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

FREDERICK J. LEE.
JOHN S. RANSDELL.

Witnesses:
JO. C. REVILL,
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