J. H. KING.

GATE.

No. 82,229. Patented Sept. 15, 1868.

Fig: 1

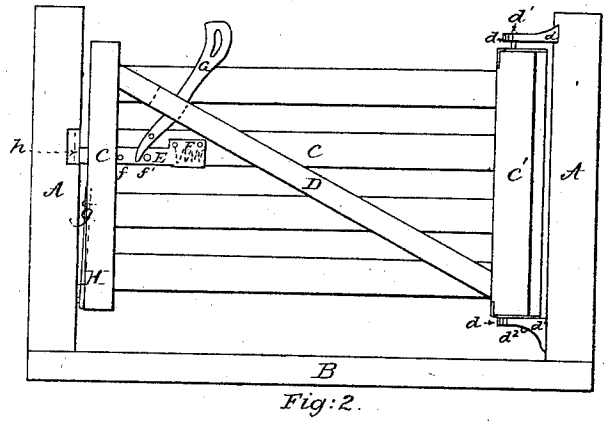


Fig: 2.

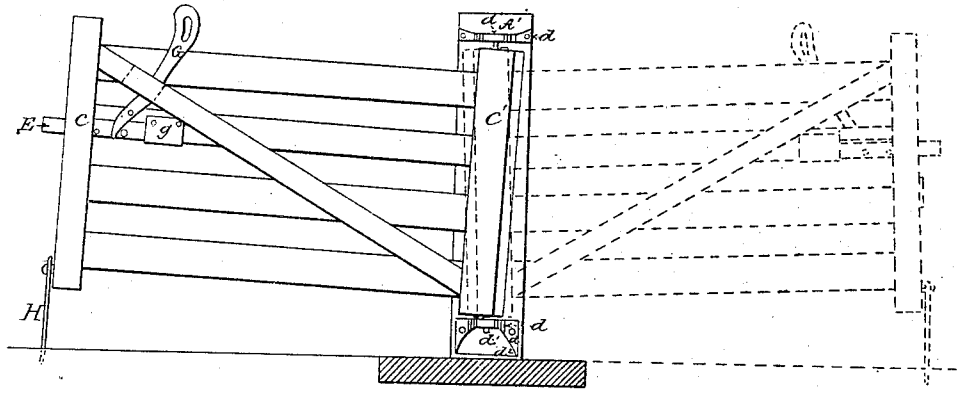
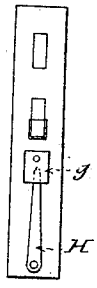


Fig: 3.



Witnesses:

Chas. D. Smith

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United States Patent Office.

JOHN H. KING, OF SMITHFIELD, INDIANA.

Letters Patent No. 82,229, *dated September* 15, 1868.

IMPROVEMENT IN GATE.

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, JOHN H. KING, of Smithfield, in the county of Delaware, and State of Indiana, have invented new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of a gate in closed position, as illustrating my invention.

Figure 2, a view of the same when entirely open; and

Figure 3 a side view of one of the battens.

Similar letters of reference indicate corresponding parts in the several figures.

My invention is a novel improvement in gates, and consists in means for causing the automatic return or closing of the gate.

It also consists in the construction of a spring-bolt, and an operating-lever or handle, as will be hereinafter more fully described.

To enable others skilled in the art to which my invention appertains to fully understand and use the same, I shall proceed to describe its construction and operation.

In the drawings—

A A′ represent upright posts, which are inserted into the ground, or secured to a sill, B, resting on the ground. The gate is constructed of battens C C′, diagonal braces D, and usual horizontal rails or slats *c*. The gate is pivoted to the post A by means of hinges *d*, which consist of plates of metal, or other suitable material, having the inner bearing-faces flat to correspond with the protecting-metal pieces on the batten C′.

To the upper end of this batten, I secure pin d^1, and a similar pin, d^2, to the lower end. These pins project in opposite directions, and the pin d^1 is nearest to the inner side of the batten, while pin d^2 is nearest to the outer side thereof, so that the two pins are out of line with each other.

The forward end of the rail *c* is cut away, and the piece thus cut out forms a slide-bolt, E, which moves in an aperture in the batten, C, and projects beyond the batten, and, in order to keep it projected, (since it is of the same size as the cut-away part,) I interpose a coiled or other spring, F, between its inner end and the shoulder in the rail *c*, which shoulder is formed by cutting away said bolt. This spring is concealed in a box or cover, *y*, secured to the rail *c*, and which serves to retain and guide the inner end of the sliding bolt.

A suitable opening, *h*, is made in the post A′ to receive the bolt, and thereby lock or hold the gate in a closed position.

To one side of the bolt, a pin, *f*′, is secured, and against this bears the lower end of a weighted lever, G, which is pivoted so that its upper end will always fall or swing freely toward the hinged side of the gate.

In order to open the gate, the lever G is drawn forward, and, as its lower end bears against the pin *f*′, it causes the bolt to slide longitudinally away from post A′, so as to clear it, or to force it out of the opening *h*.

The gate can then be swung to the right or left, as desired, and, as it opens, its forward end gradually raises itself until it is entirely opened, and then occupies the position as shown in fig. 2.

As its tendency is to swing back and close itself, it must be either held by hand, or in some other manner.

I prefer to employ a prop, H, which consists of a tapering strip of metal, or other material, pivoted near the lower end of batten C.

When the prop is not needed, it is swung upwards, and held by a pivoted catch, *g*, as shown in fig. 3.

When the prop is free from the catch, and the gate is being opened, the prop drags on the ground, and, so soon as the gate is swung to the desired place, the point of the prop enters the ground, and at once forms a stop to prevent the unintentional closing of the gate.

Now, when the prop is raised and held by the catch, or the hand released from the gate, the latter at once flies towards the post A′. When it reaches it, and sliding bolt E comes in contact with it, the latter is forced back until it is opposite the opening *h*, when it springs into it, and at once locks the gate.

When the bolt is thus pushed back, the weighted lever remains stationary, and offers no impediment to the full power of the spring F, but is always in place to readily withdraw the bolt from the post.

The gate may be opened in either direction, and operates equally well in both cases.

By means of the hinge-plates *d d*, I dispense with one butt for each hinge, and thereby merely employ the pins or pivots d^1 d^2 as the fulcrum for the gate.

The free side of batten C should be rounded, so that it may be brought closely to the post A, and allow but a small space between the two parts.

A pin, *f*, is secured to the sliding bolt E, between the free end and the pin *f'*, and is intended to limit the outward play of said bolt.

The simplicity and utility of my gate are apparent.

I am aware that a self-closing gate is not new; such device I do not, therefore, claim; but, having thus described my invention,

What I do claim, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the pins d^1 d^2, plates *d*, sliding bolt E, concealed spring F, and the weighted lever G, when constructed and operating as described.

2. The combination of pins d^1 d^2, plates *d*, sliding bolt E, concealed spring F, weighted lever G, hinged prop H, and catch *g*, arranged and operating as described.

To the above specification of my improved gate, I have signed my name, this twenty-first day of May, 1868.

JOHN H. KING.

Witnesses:

JACOB HENRY,

JOHN A. WIEDERSHEIM.