

A. H. ALLISON.
Gate.

No. 219,194.

Patented Sept. 2, 1879

Fig. 1.

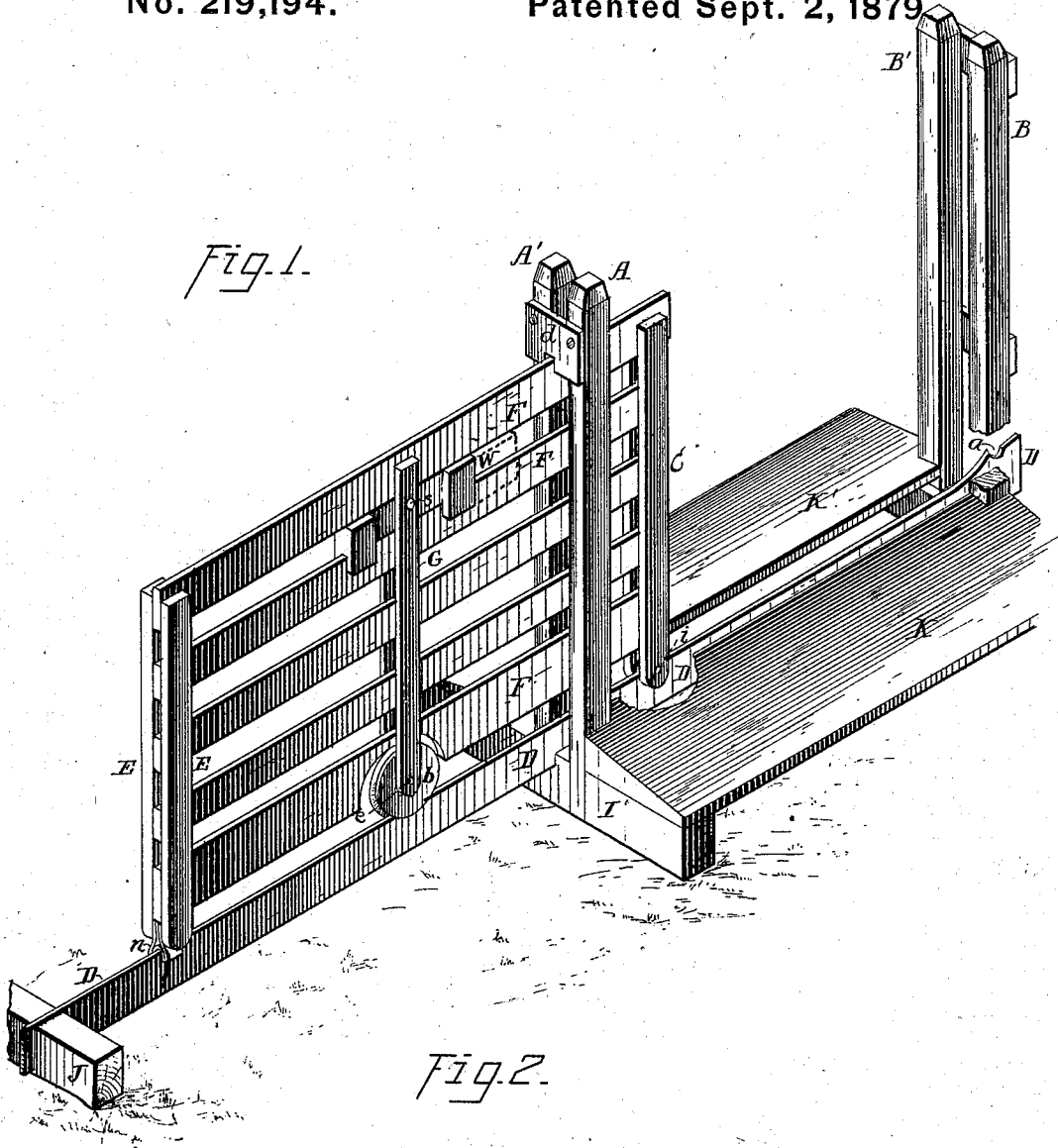
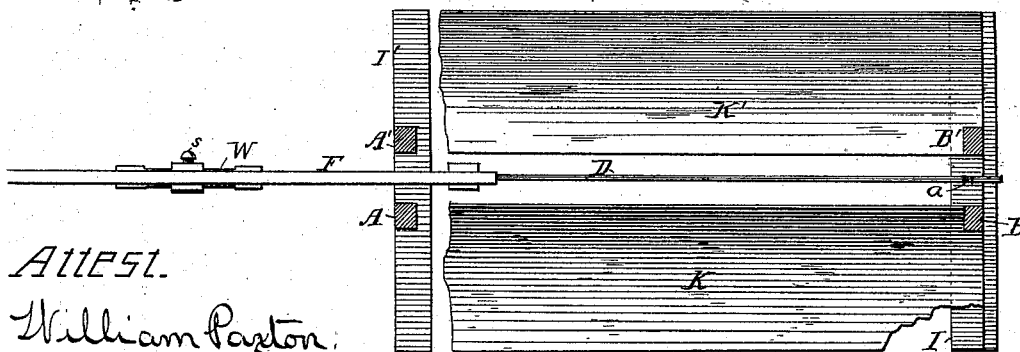


Fig. 2.



Attest.

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IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **219,194**, dated September 2, 1879; application filed July 15, 1879.

To all whom it may concern:

Be it known that I, ASA H. ALLISON, of Millville, Henry county, State of Indiana, have invented a new and useful Improvement in Gates, of which the following is the specification.

The object of my invention is a sliding gate, constructed as fully described hereinafter, so as to reduce friction and permit easy manipulation.

In the drawings forming part of this specification, Figure 1 is a perspective view of my improved gate, and Fig. 2 is a plan view.

A A' and B B' are parallel uprights, supported by cross-sills I I'. Between the uprights, and in slots in the sills I I', and in a cross-bar, J, extends a metal rail, D, resting with its lower edge on the ground, highest between the uprights B B', where it has a notch, *a*, and projecting beyond the uprights A, as shown.

The gate consists of standards C E G and cross-bars F, and rests upon a grooved wheel, *b*, running upon the rail D, and having its bearing upon a pin, *e*, extending through the central standards, G.

A pin, *i*, extends through the standards C, near the lower end, and a guide, *n*, secured at the lower end of the standards E embraces the edge of the rail D.

The gate carries an adjustable weight, W, arranged above the central wheel, *b*, by means of which the gate may be balanced or tilted to either end, as described hereinafter, a pin, *s*, securing the weight after adjustment.

When the weight is centrally arranged, as shown in Fig. 1, the gate is evenly balanced, and its weight rests wholly upon the wheel *b*, so that the gate may be moved back and forth with but little friction, a cross-piece, *d*, connecting the uprights A A', having a notch to receive the upper rail, F, and thus guiding the gate.

When the gate is brought with its standards C between the uprights B B' the pin *i* will strike the inclined edge of the rail D, and will slide upon the latter until it falls into the notch *a*, when the gate will be retained in its position.

In order to lock the gate more securely, the weight W is moved in position shown in dotted lines, Fig. 1, when it will cause the pin *i* to bear in the notch, with the weight of more than one-half the gate upon it.

To release the gate the weight is moved backward suddenly, when its momentum will aid in carrying the gate to the position shown in Fig. 1.

The weight, when moved toward the standard E, causes the gate to press heavily with its guide *n* upon the rail D, creating such friction as will hold the gate in place.

To protect the rail D without interfering with the operations of the gate, inclined bridge-boards K K' are arranged with their inner edges adjacent to, but above, the edge of the blade, as shown.

I claim—

1. The combination of the uprights A A' B B', rail D, elevated and notched at one end, and gate provided with a central grooved wheel resting upon the rail D, and with a guide, *n*, and pin *i*, as set forth.

2. The combination, with the gate, its central supporting-wheel, and notched rail D, of the adjustable weight W, as specified.

3. The combination of the notched sills I I', cross-piece J, rail D, carried thereby, and sliding gate supported centrally on the roller *b*, substantially as set forth.

4. The combination of the sliding gate supported by its central roller, *b*, of the uprights A A' and cross-piece *d*, having a notch to receive the upper rail of the gate, substantially as set forth.

5. The combination of the gate, its central wheel, *b*, pin *i*, and the rail D, having a raised end and notch *a*, substantially as set forth.

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

ASA H. ALLISON.

Witnesses:

J. A. STAFFORD,
RUFUS H. DAVIS.