

S. M. Snyder,
Railway Gate.

No. 100,943.

Patented Mar. 15. 1870.

fig. 1.

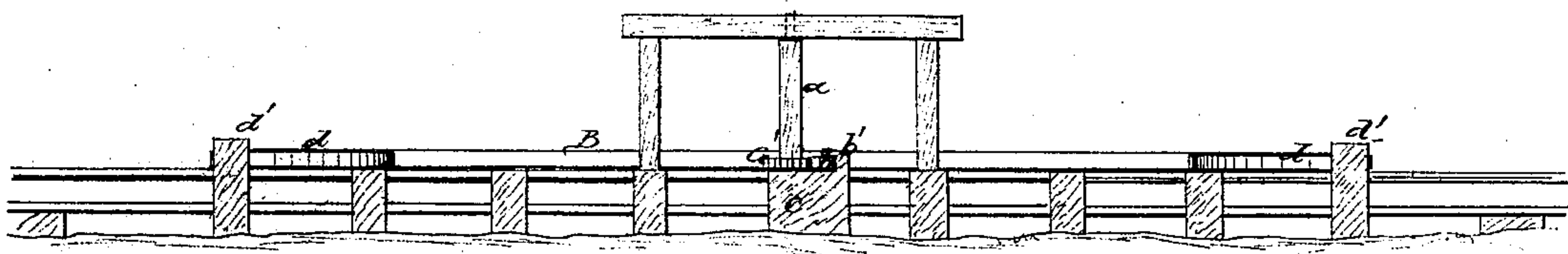
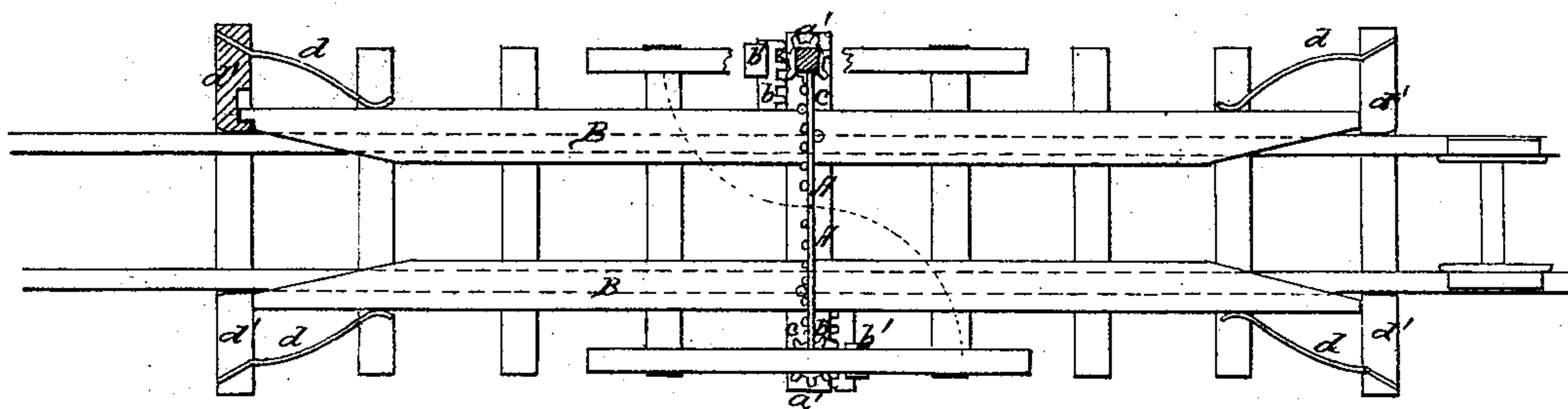


fig. 2.



Witnesses:

Victor Hagmann
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United States Patent Office.

SAMUEL M. SNYDER, OF BRADY, PENNSYLVANIA.

Letters Patent No. 100,943, dated March 15, 1870.

IMPROVED RAILWAY 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, SAMUEL M. SNYDER, of Brady, in the county of Indiana, and State of Pennsylvania, have invented a new and improved Railroad Gate; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a plan view, and

Figure 2 is a side elevation.

This invention has for its object to enable a railroad train to open automatically, in advance of its passage, a gate placed across the track for preventing cattle from straying thereon to places whither they should not wander.

The invention consists of a bar or bars laid beneath the gate, on one or both rails of the track, according as the gate is single or double, said bars being provided with springs which thrust them forward in the way of the wheels of the engine, and being furnished with racks projecting from their outer sides, which engage with pinions affixed to the gate-posts, in such manner that, when the bars are forced outward by the passage of the train, the racks rotate the pinions, and cause the gate to fly open, while the springs cause the gate to close after the train has passed.

In the drawings—

A A are the leaves of a double gate, whose inner ends meet at the center of a railroad track, and whose outer ends are fixed in vertical posts, *a a*, which are stepped in block *c* at the sides of the track, and rotate freely therein.

The posts *a* are encircled with toothed collars or pinions, *a'*, near their lower ends, which mesh with racks *b*, moving in horizontal guide-ways *b'*, formed in the blocks *c*, said racks projecting from the outer sides

of the parallel bars B B, laid one on each rail of the track beneath the gate.

The bars are furnished with springs, *d*, near their ends, which press them toward the middle of the track.

The extremities of the bars move in recesses made in blocks *d'*, placed outside the rails, which blocks prevent the bars from being pressed or otherwise moved too far inward, it being necessary that they should lie directly in the path of the engine-wheels. The latter strike first the beveled inner sides of the bars, and immediately press them outward, which movement causes the racks *b* to rotate the collars *a'* and posts *a*, and thus open the gates before the engine reaches them. The bars B are held apart, and, by consequence, the gate held open, as long as the wheels of the train are passing between them; and, when the train has entirely cleared the bars, the springs *d* force the latter inward to their former position, which movement causes the racks *b* to rotate the gate-posts in the opposite direction, and thus close the gate.

If the bars B become inoperative through any deficiency in the springs *d*, the boxes *d'* prevent them from being moved across the track, or otherwise doing damage.

Having thus described my invention,

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

The bars B, moving in the boxes *d'*, and provided with springs *d*, in combination with the racks *b*, pinions *a'*, and gate A, in the manner and for the purpose described.

S. M. SNYDER.

Witnesses:

GEO. E. BROWN,
CHAS. A. PETTIT.