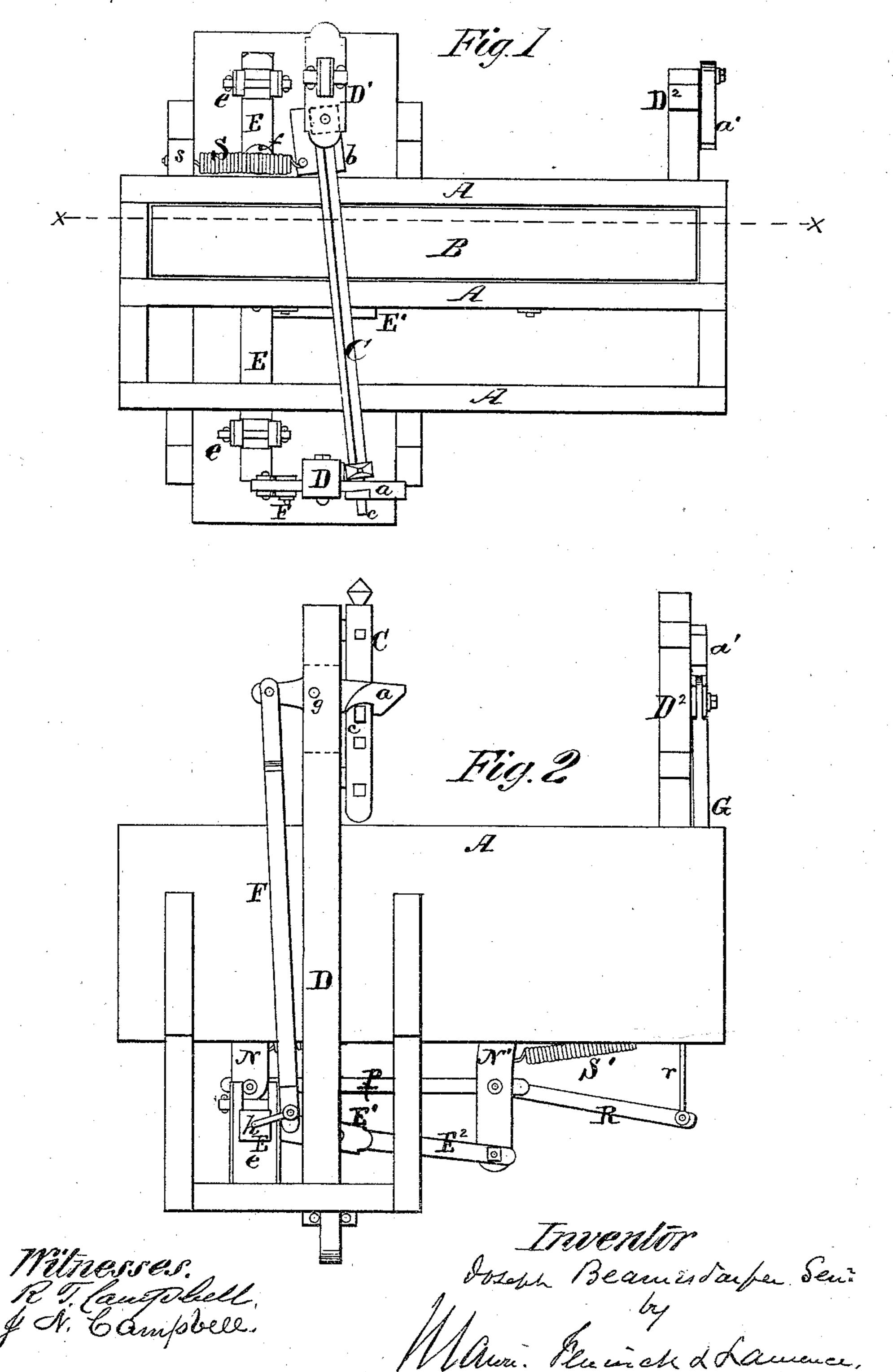
J. BEAMISDARFER, Sr.

Railroad Gates.

No. 135,620.

Patented Feb. 11, 1873.

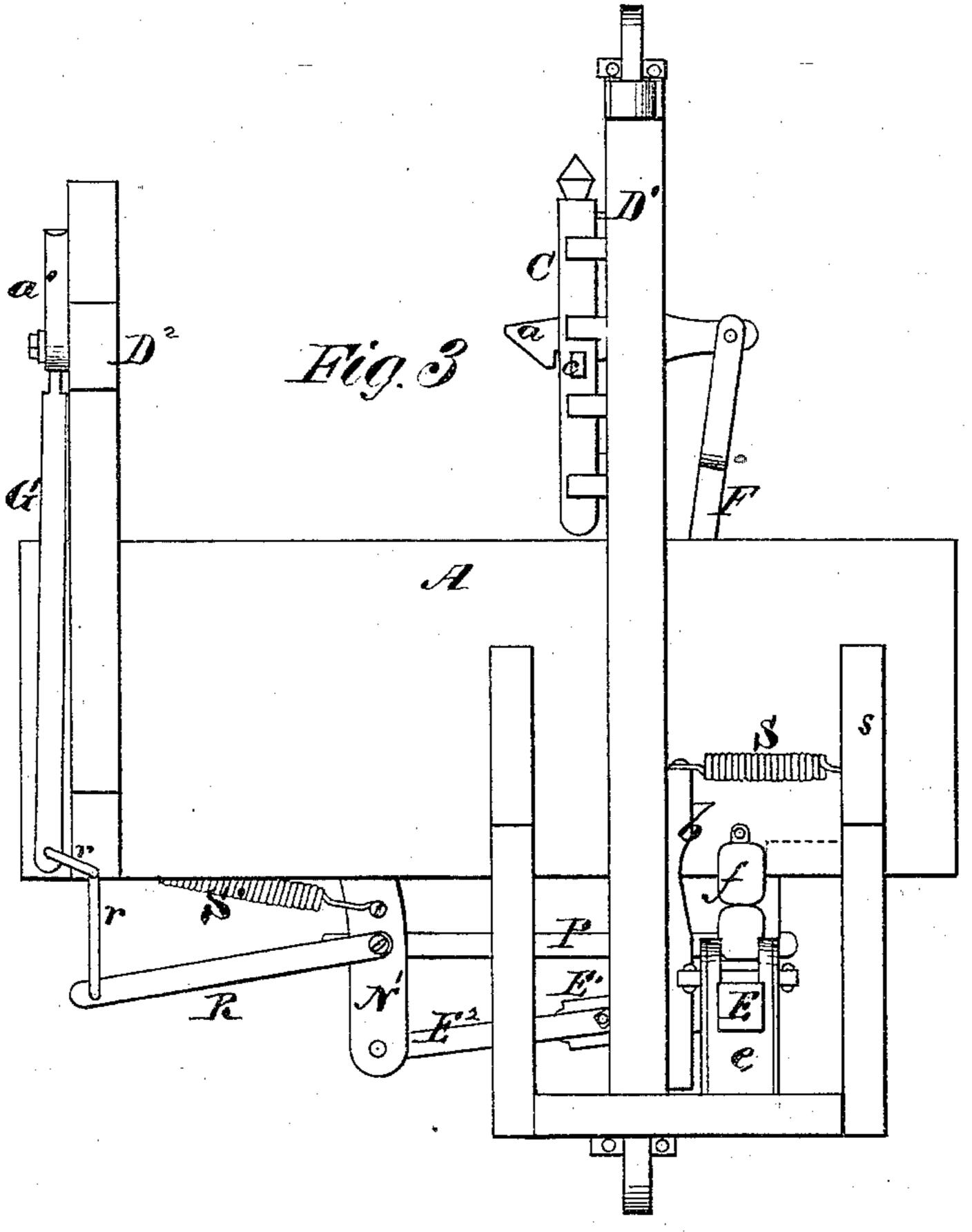


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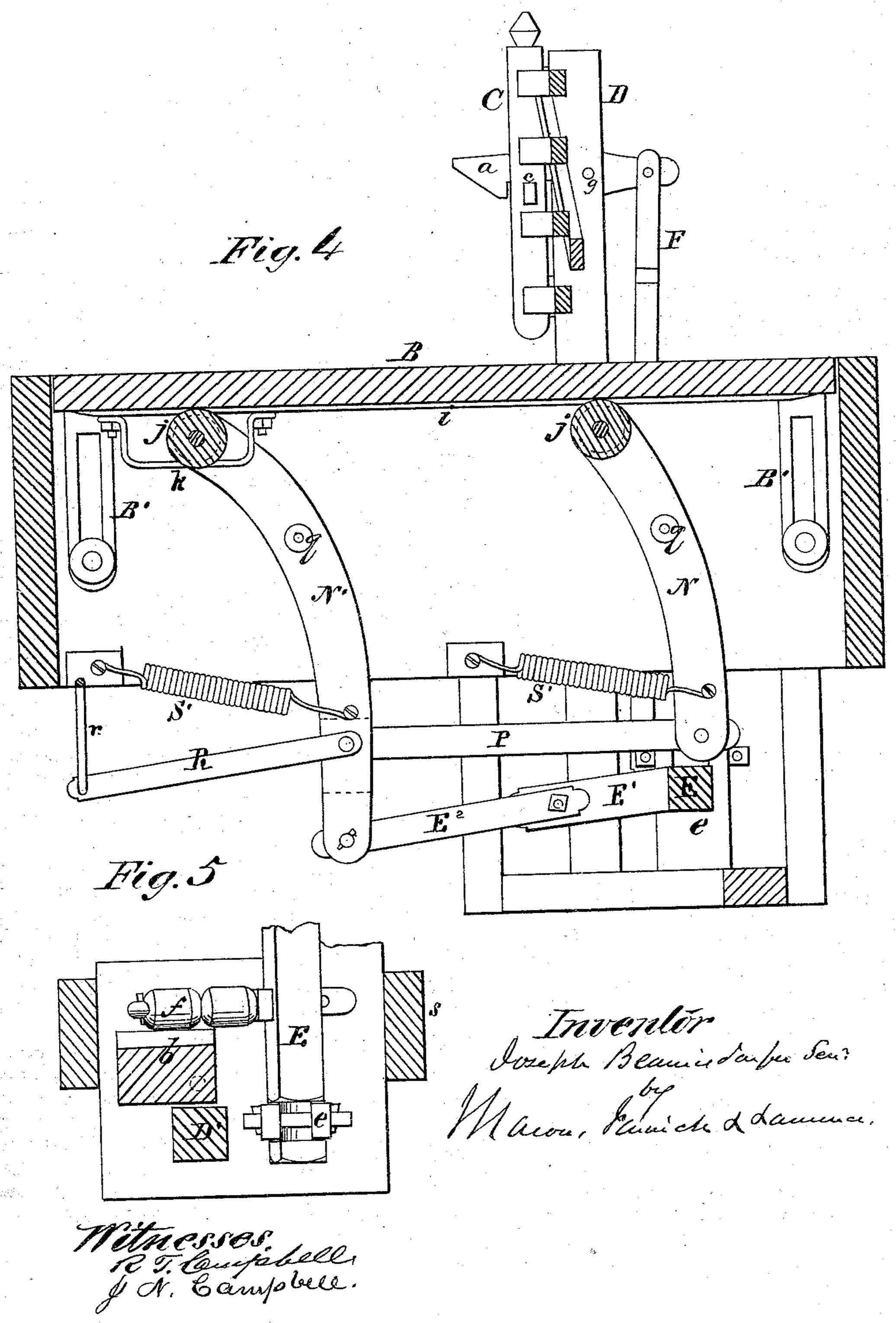


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UNITED STATES PATENT OFFICE.

JOSEPH BEAMISDARFER, SR., OF CAMPBELLSTOWN, PENNSYLVANIA.

IMPROVEMENT IN RAILROAD GATES.

Specification forming part of Letters Patent No. 135,620, dated February 11, 1873.

To all whom it may concern:

Be it known that I, Joseph Beamisdarfer, senior, of Campbellstown, in the county of Lebanon and State of Pennsylvania, have invented an Improved Automatic Railroad Gate; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, Plate 1, is a top view of the gate. Fig. 2, Plate 1, is an elevation of one side of the same. Fig. 3, Plate 2, is a view of the opposite side of the same. Fig. 4, Plate 3, is a section taken vertically through the same. Fig. 5, Plate 3, is a sectional view in detail, showing the arm and cam for swinging open the gate.

Similar letters of reference indicate corre-

sponding parts in the several figures.

The object of this invention is to combine with a swinging gate a horizontal vertically-movable platform, which is connected with the said gate in such manner, hereinafter explained, that the flanges of railroad-car wheels will depress the said platform and open the gate when a train approaches it from either side, and after the train passes through the inclosure the gate will be shut by the action of springs, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to under-

stand it.

In the accompanying drawing, A represents the supports for the rails, which may be of masonry or wood-work, and which are arranged in a pit beneath the surface of the ground at the place where it is desired to have a gate. This structure is rigid—that is to say, it is permanently fixed—and supports upon it the railroad rails, which are in line with the track at each end. B represents a platform, which is supported in a horizontal position just below the surface of the rails, so that the flanges of car-wheels rolling on the rails will depress it more or less. This platform, which is at or nearly at right angles to a gate, C, which crosses it, is maintained in a horizontal position by means of vertical slotted guides B', through which studs pass that are fixed to the sides of the structure A. At the middle of

the width of the platform B is fixed a longitudinal rib, i, which is received between antifriction rollers j j on the upper ends of two curved levers, N N', which levers are shown in Fig. 4, connected together by a pitman-rod, P. The anti-friction rollers on the upper end of the lever N' receive between them, below their axis, a staple-guide, k, which is made fast to the bottom of the platform B, and which keeps the said rollers in close contact with the platform. The curved or inclined levers N N' have their fulcrums at qq, and are respectively connected to the structure A by means of springs S', which, by their recoil, keep the platform at its highest point, except when this platform is under pressure from the flanges of the car-wheels of the train passing over it. The lower end of the lever N' is connected by a link, E², to an arm, E¹, which is fast on a rockshaft, E. It is also connected to a crank, r, by a rod, R. The rock-shaft E has its bearings in standards e, and to this shaft, near the post D' of the gate C, an arm, f, is secured, on which anti-friction rollers are applied. The arm f is designed for opening the gate C, which it does by pressing against the beveled surface of a wing, b, when the platform B is depressed. The wing b is secured fast to the lower end of that portion of the gate which is pivoted to the post D', and presents a concave or beveled surface to the arm f. To the upper inner corner of the wing b one end of a spring, S, is attached, the other end of which is fastened to a portion, s, of the structure A. This spring shuts the gate.

When the gate is shut it is fastened by means of a hooked latch, a, which is pivoted at g to the post D, and connected by a rod, F, to a crank, h, on one end of the rock-shaft E. The gate is also fastened when it is fully open by means of a hooked latch, a', which is pivoted to post D^2 , and connected by a rod, G, to

the crank r, shown in Fig. 3.

When a train of cars passes over the platform B the flanges of the wheels will depress the platform B. This causes levers N N' to rock the shaft E, which, by its arm f acting against the wing b, opens the gate. When the train leaves the platform B the springs S' cause the levers N N' to elevate it again, and the spring S at the same time shuts the gate.

It will be seen that the gate can be opened and shut by hand in the usual manner without depressing the platform or interfering in any manner with the mechanism by which said platform actuates the gate.

Having described my invention, what I claim as new, and desire to secure by Letters

Patent, is-

1. A vertically-movable platform, B, which is supported upon the upper extremities of levers N N', and guided by loops B', in a structure, A, in combination with springs S', connecting-rod P, link E^2 , and an arm, E^1 , on a rock-shaft, E, the latter carrying an arm, f, which acts on a wing, b, of the gate C, substantially as described.

2. The hooked latch a' on post D^2 , connected by a rod, G, crank r, and a rod, R, to the

lever N', in combination with the platform B and swinging gate C, substantially as described.

3. The hooked latch a on post D, connected to the rock-shaft E by means of a rod, F, and crank h, in combination with the mechanism described for opening and closing the gate C, substantially as set forth.

4. The beveled wing b on the pivoted post of the gate C, in combination with the antifriction arm f on the rock-shaft E, substantially as and for the purposes set forth.

JOSEPH + BEAMISDARFER, SENR.

Witnesses:

James N. Campbell, James Martin, Jr.