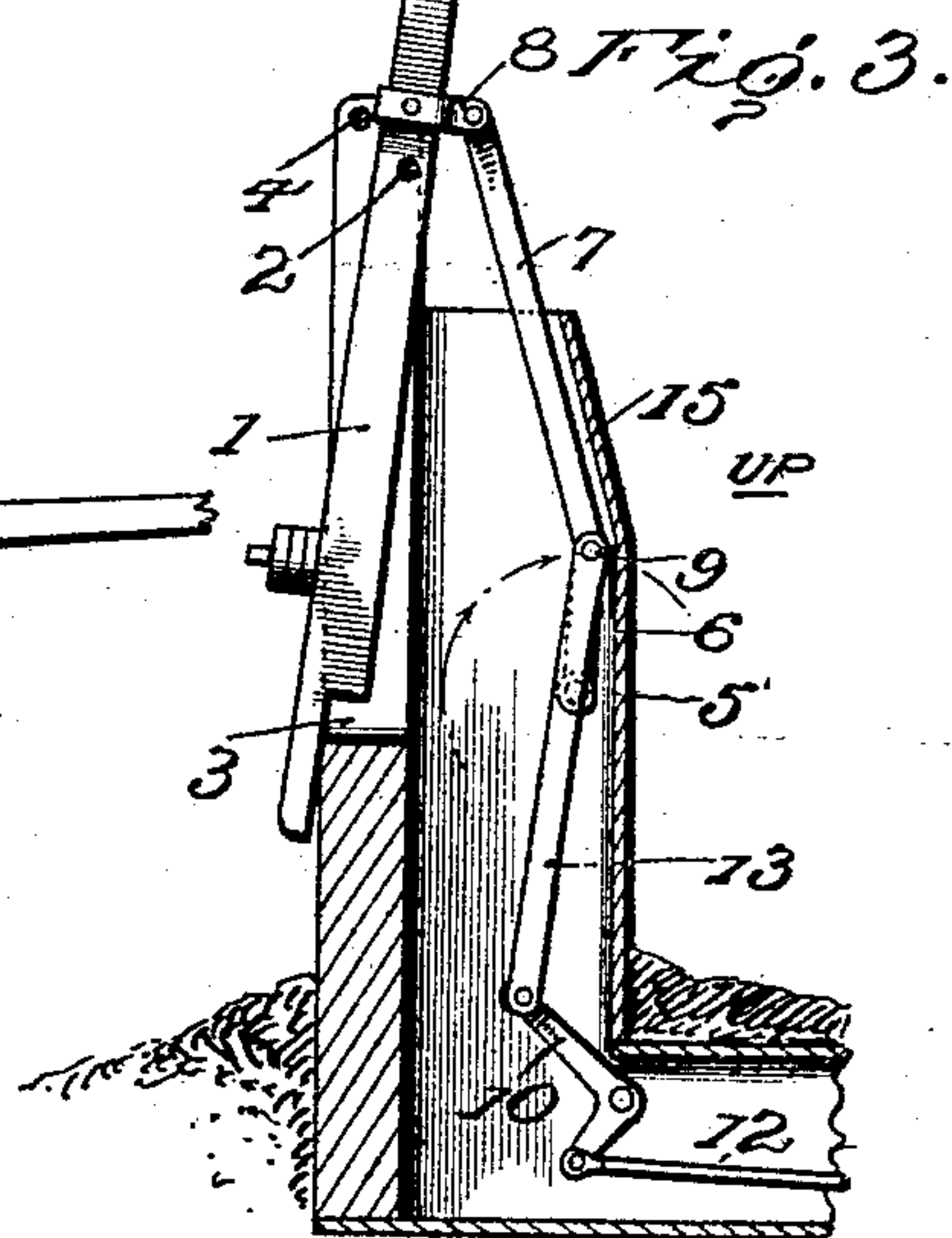
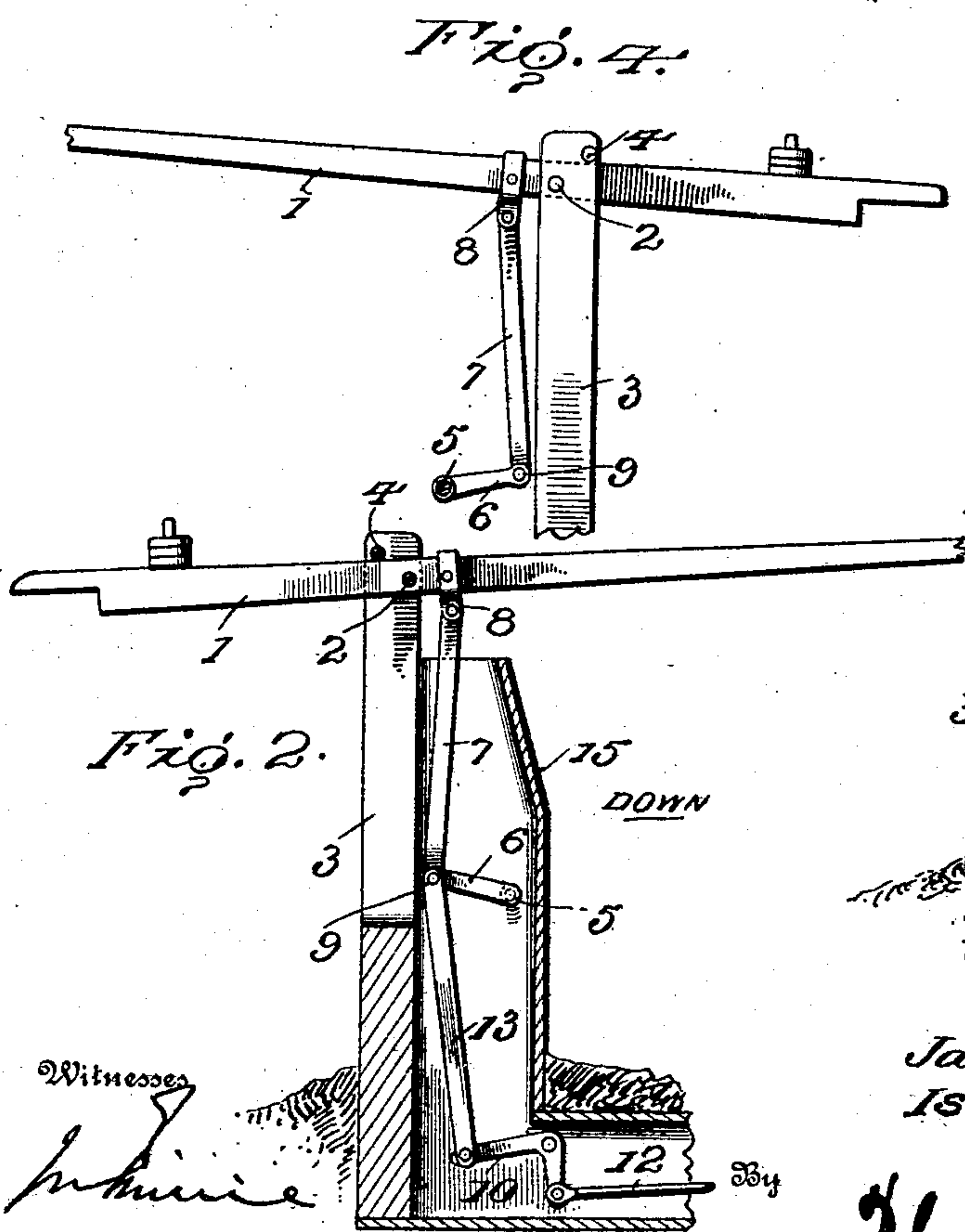
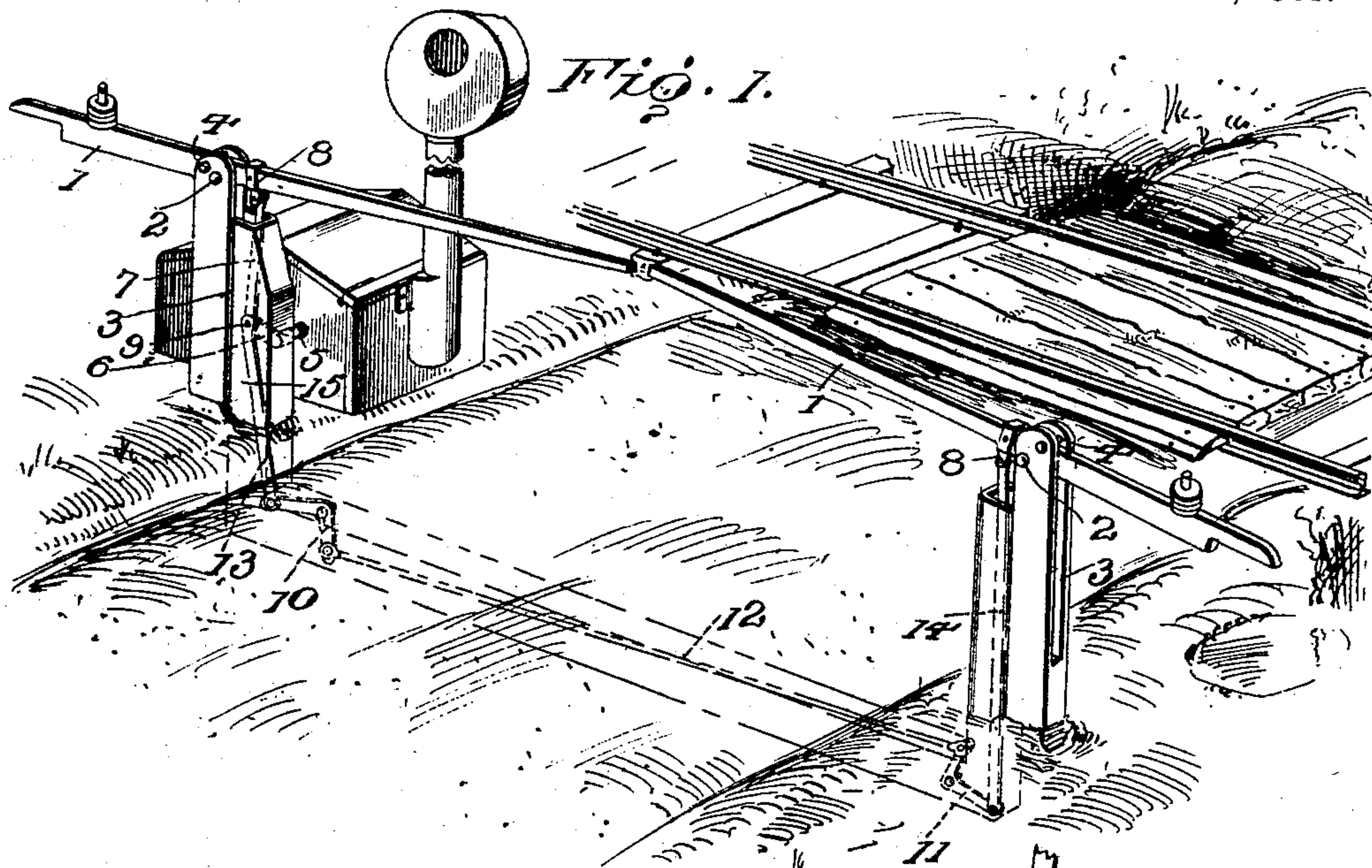


J. G. O. & I. D. COMBS.
RAILWAY GATE;
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Patented Jan. 5, 1909.



Witnesses
Johnnie
W. H. Hordson

Inventors
James G. O. Combs.
Isaac D. Combs.

Thos. R. Roney, Attorneys

UNITED STATES PATENT OFFICE.

JAMES G. O. COMBS AND ISAAC D. COMBS, OF WALNUT GROVE, MISSOURI.

RAILWAY-GATE.

No. 908,749.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JAMES G. O. COMBS and ISAAC D. COMBS, citizens of the United States, residing at Walnut Grove, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Railway-Gates, of which the following is a specification.

The present invention relates to gates for protecting roadways at points crossing railways which gates are automatically operated by the train, being closed as the train approaches the crossing and opened as the train clears or moves away from the crossing. The gate operating mechanism is such that the gate is locked in open position, thereby preventing closing of the gate by the direct application of force thereto, as by one grasping the same, the gate being hung and weighted so that when released it will close automatically, thereby safeguarding the roadway.

For a full understanding of the invention and the merits thereof that is to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a railway gate embodying the invention. Fig. 2 is a front view of the gate showing the relation of the parts when the same is closed. Fig. 3 is a view of the parts shown in Fig. 2, illustrating the relative arrangement of the cooperating elements when the gate is open. Fig. 4 shows a single gate.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The gate 1 may be of any construction and as shown consists of a bar or pole pivoted between its ends at 2 to an upright or post 3, said gate being weighted or hung so that when released it normally closes, thereby insuring safety to the crossing. In cases where the roadway is comparatively narrow, the single gate may suffice to protect the same, but where the roadway is wide, two

gates may be employed, as indicated in Fig. 1. A pin 4 applied to the upper end of the post 3 forms a stop to limit the movement of the gate in each direction, as shown most clearly in Figs. 2 and 3.

The gate actuating means embodies a shaft 5 having a crank 6, a link 7 connecting the outer end of the crank 6 with a band or clip 8 secured to the gate. The link 7 is pivoted at 9 to the crank arm 6 and when the gate is open the point 9 is outside of a straight line connecting the shaft 5 and the point of connection between the link 7 and the clip 8, with the joint in contact with the outer wall of the casing, as shown most clearly in Fig. 3, thereby preventing the closing of the gate by the direct application of force thereto, as by grasping the same or by an object coming in contact therewith. Upon breaking the joint 9 inward, as by movement of the shaft 5 to throw the outer end of the crank arm 6 towards the post 3, the gate 1 automatically closes by the superior weight of its upper end.

In the event of companion gates being employed for protecting a roadway, as indicated in Fig. 1, bell cranks 10 and 11 are located adjacent the lower ends of the posts to which the respective gates are pivoted, a rod or bar 12 connecting corresponding arms of said bell cranks. A link 13 connects the arm of the bell crank 10 with the crank arm 6 and a link 14 connects an arm of the bell crank 11 with the duplicate or cooperating gate. The connections between the two gates are such as to cause both to open or close synchronously. To prevent tampering with the gate connections, the same are housed by casings 15. The bell cranks 10 and 11 and the connecting rod or bar 12 are inclosed in a conduit or other protected space extending across and beneath the roadway so as to be out of the way.

It is to be understood that the shaft 5 may be operated in any accustomed way, either by hand or by the moving train, the connections not being shown since the same will depend upon the style of gate and the means cooperating therewith for actuating the same.

Having thus described the invention, what is claimed as new is:

1. In a railway gate, the combination of a post comprising transversely spaced portions, a gate mounted between the spaced portions of the post, means pivotally connecting

the gate to said spaced portions, a pin connecting the spaced portions of the post and serving as a stop to limit the gate both when opened and closed, and actuating means for
5 said gate.

2. In combination, a post, a gate pivoted to the post, gate operating means including a crank, a link connecting the crank with the gate, and a casing for housing the crank
10 and link and adapted to engage with the joint formed between the link and crank to

form a stop to limit the movement of the gate in one direction, said post cooperating with the said joint to limit the movement of the gate in an opposite direction. 15

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES G. O. COMBS. [L. s.]

ISAAC D. COMBS. [L. s.]

Witnesses:

WILLIAM L. NASH,

JAMES G. TURPIN.