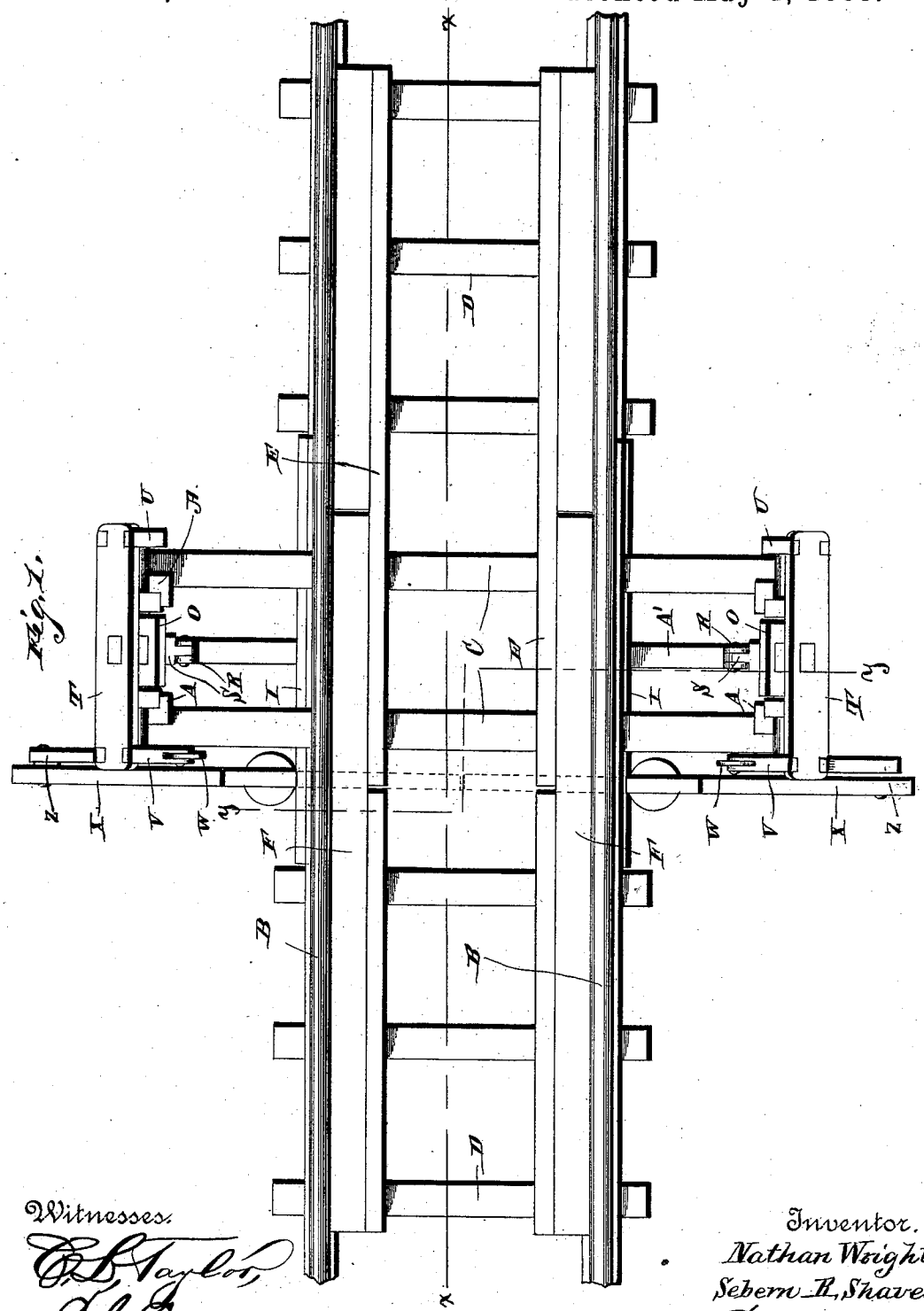
(No Model.) 3 Sheets—Sheet 1.

N. WRIGHT & S. R. SHAVER.

RAILROAD OR FARM GATE.

No. 382,022. Patented May 1, 1888.



Witnesses.
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Fig. 2.

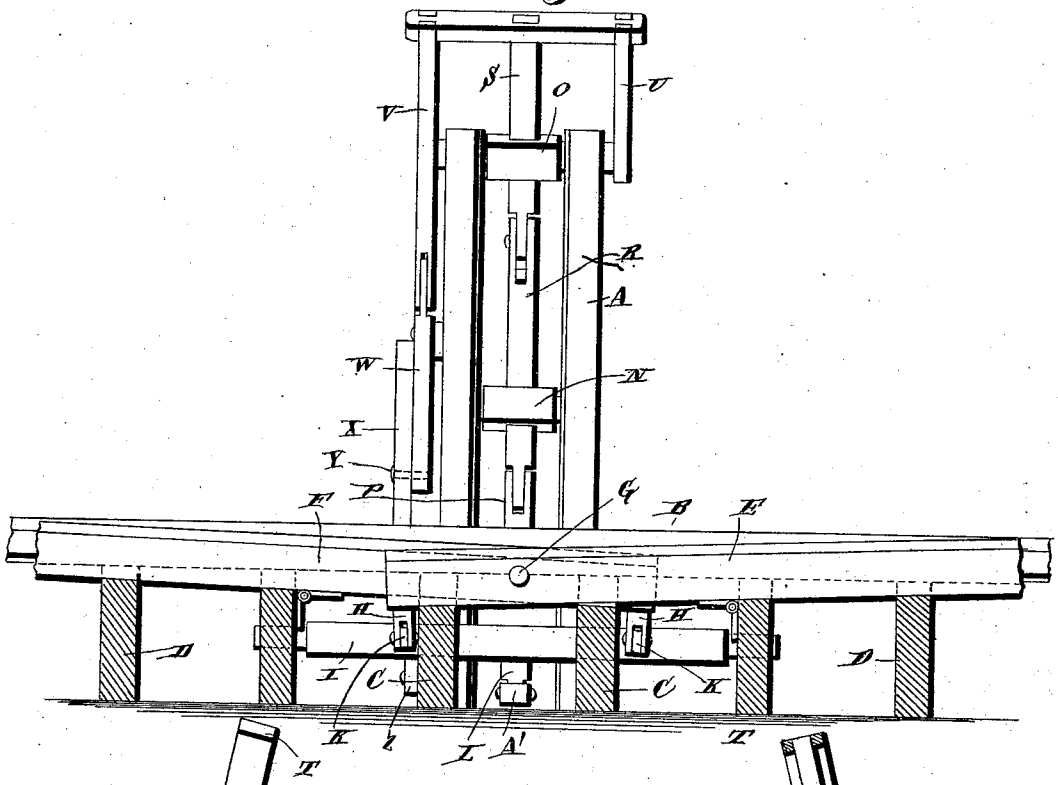

Fig. 3.

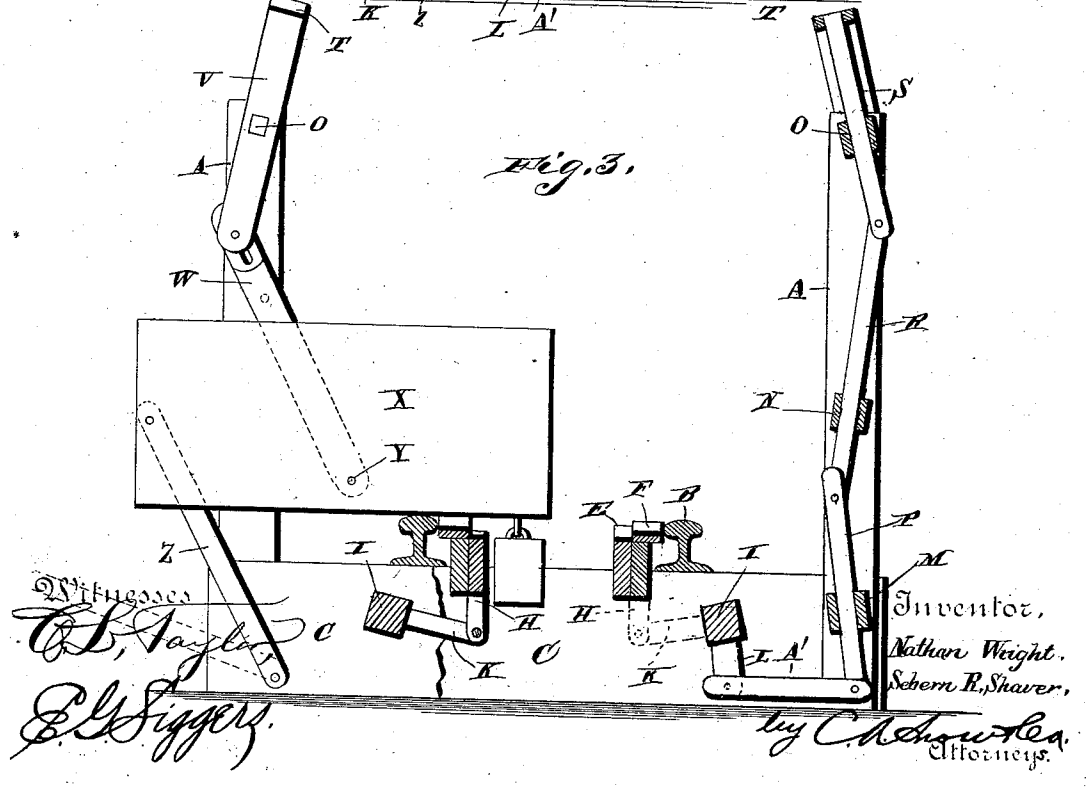

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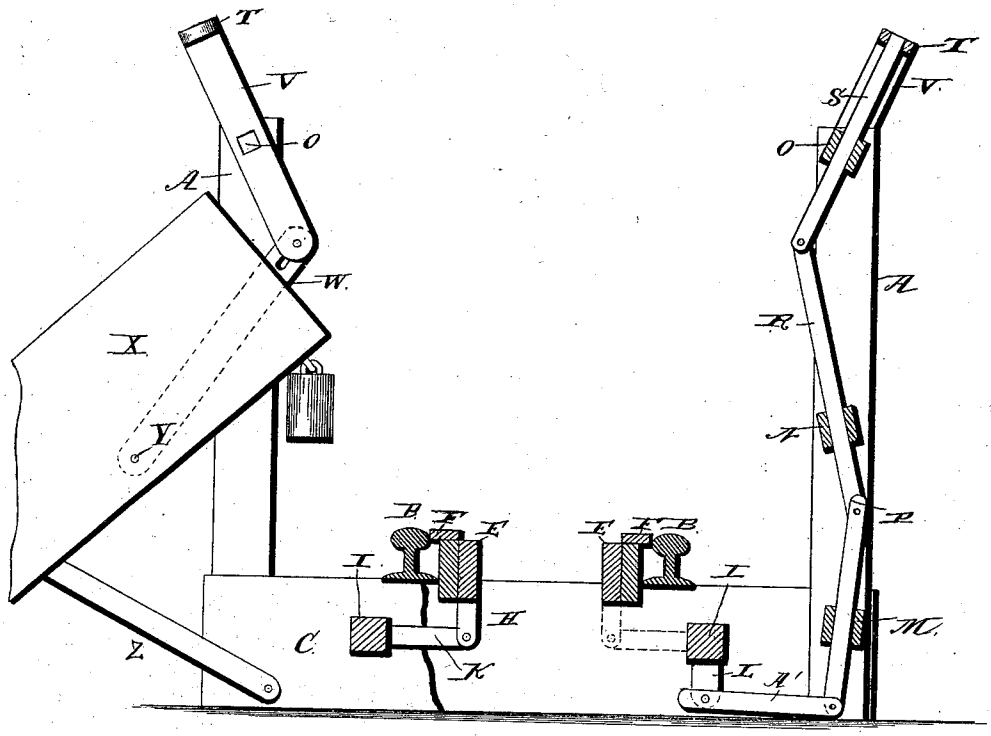
Fig. 4.



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UNITED STATES PATENT OFFICE.

NATHAN WRIGHT AND SEBERN RANFERD SHAVER, OF INGRAM, ARKANSAS.

RAILROAD OR FARM GATE.

SPECIFICATION forming part of Letters Patent No. 382,022, dated May 1, 1888.

Application filed December 19, 1887. Serial No. 258,361. (No model.)

To all whom it may concern:

Be it known that we, NATHAN WRIGHT and SEBERN RANFERD SHAVER, citizens of the United States, residing at Ingram, in the county of Randolph and State of Arkansas, have invented a new and useful Improvement in Railroad or Farm Gates, of which the following is a specification.

Our invention relates to an improvement in jump-gates for railroads or other purposes; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of a jump-gate embodying our improvements. Fig. 2 is a vertical longitudinal sectional view of the same, taken on the line *x x* of Fig. 1. Fig. 3 is a vertical transverse sectional view of the same, taken on the line *y y* of Fig. 1, the gate being shown as closed. Fig. 4 is a view similar to Fig. 3, with the gate open.

A represents a pair of vertical frames, which are erected on opposite sides of a railroad-track or other way. The lower ends of these frames A are connected together by transverse beams C, which are arranged parallel with the cross-ties D of the railroad-track. On the inner sides of the track-rails B are arranged operating-rails E F, which extend in opposite directions and have their inner ends overlapping each other, as shown in Fig. 1. The said operating-rails are fulcrumed at the points G, and their extremities are free to move vertically. From the inner end of each operating-rail depends a hanger, H.

I represents a pair of rock-shafts, which are journaled in suitable bearings, extend transversely through the cross-beams C, and are arranged almost directly beneath the track-rails. These rock-shafts are provided near their extremities with inwardly-extending arms K, which are pivotally connected to the lower ends of the hangers H, and from the centers of the said rock-shafts depend rock-arms L. Between the sides of each vertical frame A, near the lower ends thereof, is journaled a rock-shaft, M. N represents similar rock-shafts, which are journaled between the sides of frames A at a suitable distance above the shafts M, and O represents similar rock-shafts, which are journaled between the sides of the frames A at the upper ends of the said frames. To each rock-shaft M is secured a lever, P, which extends above and below its rock-shaft, the latter forming the fulcrum for the lever. To each rock-shaft N is secured a similar lever, R, and to each rock-shaft O is secured a similar lever, S. The lower end of each lever R is pivotally connected to the upper end of the adjacent lever P, and the lower end of each lever S is pivotally connected to the upper end of the adjacent lever R.

T represents a cross-head, which is secured to the upper end of each lever S, the said cross-heads being connected to the rock-shafts O by means of vertical bars U V. The bars V have their lower ends extended a considerable distance below the rock-shafts O.

W represents a pair of levers, which are fulcrumed at a suitable distance from their upper end to the outer sides of the frames A and have their upper ends pivotally connected to the lower ends of the rocking bars V.

X represents the gates, which are arranged tranversely with relation to the track and are pivoted near their centers to the lower end of the levers W by means of pivotal bolts Y.

Z represents a pair of links, which have their lower ends pivoted to the opposite ends of one of the cross-beams C and have their upper ends pivoted to the gates near the outer ends of the latter.

The operation of our invention is as follows: The inner ends of the gate are heavier than the outer ends thereof, and thereby the said gates by their own gravity are caused to normally move inward over the track until their inner opposing ends meet, as shown in Fig. 3, and the outer ends of the operating-rails E F are normally elevated nearly to the level of the tops of the track-rails. When a train approaches the gate from either side, the flanges of its wheels engage the operating-rails and depress the outer ends thereof, and thereby cause the rock-shafts to partly rotate, and the said shafts having their depending arms connected to the lower ends of the levers P by means of links A′, the said levers P are turned to the position indicated in Fig. 4 and cause the levers R and S to be turned, as shown,

thereby inclining the arms V so that their lower ends extend inward toward the track, and the said arms V, being pivoted to the levers W, cause the latter to spring outward and thereby move the gates in a transverse direction beyond opposite sides of the track and leave an unobstructed passage-way for the train. As soon as the train has passed, the gates reassume their normal position, previously described, and close the gateway.

Having thus described our invention, we claim—

1. The combination of the jump-gates, the links Z, connected to the outer ends thereof and to fixed points, the operating-rails adapted to be actuated by the wheels of a passing train, the levers W, pivotally connected to the gates near the centers thereof, and connections between the said levers and the operating-rails, whereby, when the operating-rails are actuated, the gates will be opened, substantially as described.

2. The combination of the operating-rails, the rock-shafts, connections between the said rails and the said rock shafts, the series of connected levers P, R, and S, the jointed levers V W, connected to and operated by the said series of levers, connections between the levers P and the rock-shafts, the jump-gates X, pivotally connected to the lower ends of the levers W, and the links pivotally connected to the outer ends of the jump-gates, substantially as described.

3. The operating-rails E F, fulcrumed together near their inner ends and arranged alongside the track-rails, whereby the outer ends of the rails E F will be elevated so as to be operated upon by the wheels of a passing train, in combination with the rock-shaft I, connected to the rails E F, the jump-gates X, the links Z, pivotally connected to the gates, the levers W, connected to the gates, and the system of levers between the rock-shaft I and the levers W, for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

NATHAN WRIGHT.
SEBERN RANFERD SHAVER.

Witnesses:
W. M. HOGAN,
W. S. TANNER.