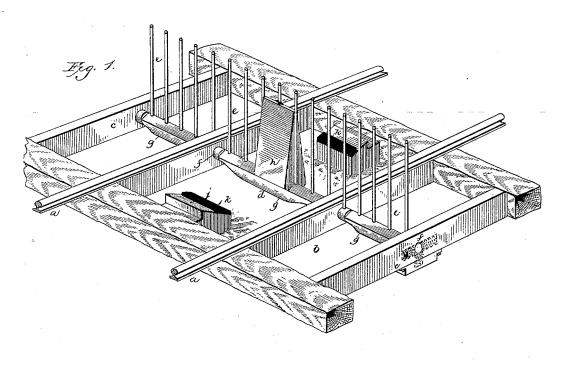
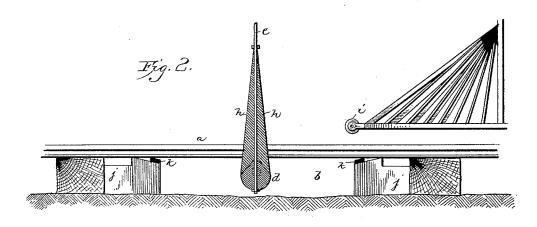
(No Model.)

E. L. EDMONDSON. RAILWAY GATE.

No. 419,144.

Patented Jan. 7, 1890.





Witnesses: John Enders Jo H. E. Peck, Inventor: Idwin I. Edmondson, per OEDuff —Attorney,

UNITED STATES PATENT OFFICE.

EDWIN L. EDMONDSON, OF STAUNTON, ASSIGNOR TO THE EDMONDSON RAILWAY GATE COMPANY, OF RICHMOND, VIRGINIA.

RAILWAY-GATE.

SPECIFICATION forming part of Letters Patent No. 419,144, dated January 7, 1890.

Application filed March 30, 1889. Serial No. 305,345. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. EDMONDSON, of Staunton, in the county of Augusta and State of Virginia, have invented certain new 5 and useful Improvements in Railway-Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the ic same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to an improvement in 15 railway-gates, and more particularly to that peculiar class of railroad-gates known as "rocking cattle guard gates;" and the invention consists in certain novel features of construction and combinations of parts more 20 fully described hereinafter, and particularly

pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of a portion of a railroad-track showing the improved gate. 25 Fig. 2 is a side elevation showing the pilot of

a locomotive approaching the gate. In the drawings, the reference-letter a indicates a railroad-track. Cattle passing along streets or roads which cross a railroad-track 30 or on division-lines of farms are very apt to wander from the road up or down the railroad-track, and thereby endanger the lives of passengers and cause loss to the railroad company and the owner of the animal. These 35 gates are intended to be placed on the track on each side of the crossing or division-line, and thereby close the way up or down the track. A suitable bed or frame b is located beneath the track, and is provided with cross-40 sills, upon which the rails longitudinally rest, and with end sills cc parallel with and outside of the rails, said sills being framed to a third pair of sills, which answer the purpose of cross-ties. A horizontal rock-shaft d is 45 mounted in the cross and end sills of the supporting bed or frame and extend transversly beneath and beyond the rails of the track. A series of pickets e are secured to and extend upwardly from the rock-shaft, as clearly

50 shown. These pickets are vertical and of a

in such a manner that its center of gravity will be in a plane considerably below the axis upon which the shaftswings. This is accomplished by casting or forming the shaft with 55 inclined upper sides, as shown, or of any suitable shape, having the journals f near the top side of the shaft, and weights g longitudinally located on the under side of the shaft between the journals. This shaft and 60 the weights are cast or formed integral, as shown, thereby greatly increasing the strength and durability of the device, as these parts of the device cannot become loose, separated, and injured by the constant shocks and jar 65 caused by locomotives coming in contact with the gate. At a point centrally between the rails the shaft is provided with a double-inclined block having surfaces h, said block being inclined upwardly and inwardly to receive 70 the force of the locomotive pilot or "catcher,' which catcher is preferably provided with an anti-friction roller i at its front extremity to operate the shaft by coming in contact with one of said inclined sides of the block, thereby 75 turning the shaft and lowering the pickets to allow the car or train to pass. After the passage of the train the shaft, by means of its construction, automatically resumes its upright position. Trains running in either 80 direction will operate the gate in the same manner Should the block become broken by the shock of the train, a new one can be put on, still preserving the shaft in its original position. One of the pickets having a collar near 85 its top and screw-threaded at the bottom will be sufficient to hold the wedge-shaped block to the shaft. Thus the device is cheap in first cost, ready of repair, and is simple and made up of but few parts.

The efficiency and durability of the device are greatly increased by the double-inclined block and the shaft arranged as shown. The block being secured to the shaft by one or more of the pickets and the shaft properly jour- 95 naled, it is ready for use. A pair of blocks or stops j are located on the bed of the track or secured to the frame b, on opposite sides of the shaft, so that when this gate is swung into a horizontal position in either direction one of 100 the surfaces of the block h will engage one suitable height. The rock-shaft is journaled | of the stops j located on that side of the shaft,

and thereby limit the downward swing of the gate. These stops each preferably have an inclined face to correspond to the inclined face of the block on that side. Snow, mud, or ice will not interfere with the working of

the apparatus. Said blocks or stops j can be provided with buffers k. Vertical slots may be made under the journals and springs inserted therein. Slots may also be made at each side of the journal, in which springs may be inserted. These springs are for the pur-

be each side of the journal, in which springs may be inserted. These springs are for the purpose of taking up and providing for the recoil force of the shaft when the buffer-block is in contact with the pilot of the engine, and the vertical slots below the journals, in which

15 the vertical slots below the journals, in which springs may be placed, are for the purpose of permitting the gate to go downward should the train stop just over the gate and back, which would turn the gate in the opposite

20 direction.

Any railroad hand can put this gate in position, and when there it will automatically operate itself.

What I claim is—

25 1. A cattle-guard gate comprising a frame

located on the track, a rock-shaft journaled in the same beneath the rails, a series of vertical pickets carried by the shaft, a block secured to the shaft and adapted to be engaged by a locomotive, stops upon opposite sides of 30 the shaft to limit the downward movement of the gate, and one or more weights longitudinally formed on the lower side of the shaft, substantially as described.

2. A rocking railroad-gate consisting in the 35 combination of a frame beneath the track, a counterbalanced rock-shaft transversely journaled in the frame, a series of vertical pickets secured to and extending up from the shaft, and an oppositely-inclined block carried by 4c one or more of the pickets and adapted to be engaged by a locomotive coming in either direction, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of 45

two witnesses.

EDWIN L. EDMONDSON.

Witnesses:

O. E. DUFFY,

C. M. WERLE.