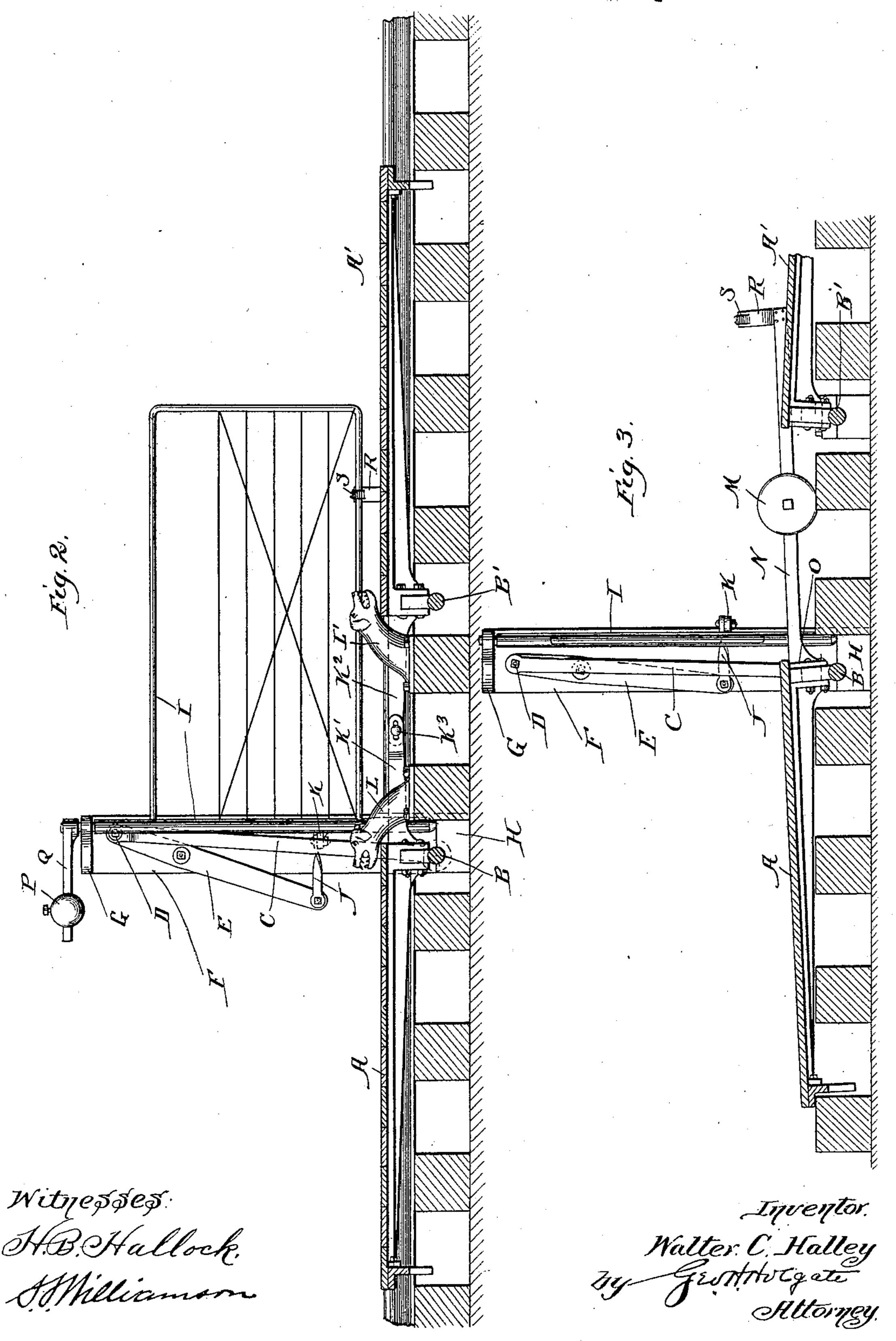
W. C. HALLEY.
CATTLE GUARD.

CATTLE GUARD. Patented Apr. 12, 1898. No. 602,075. Fig.1.

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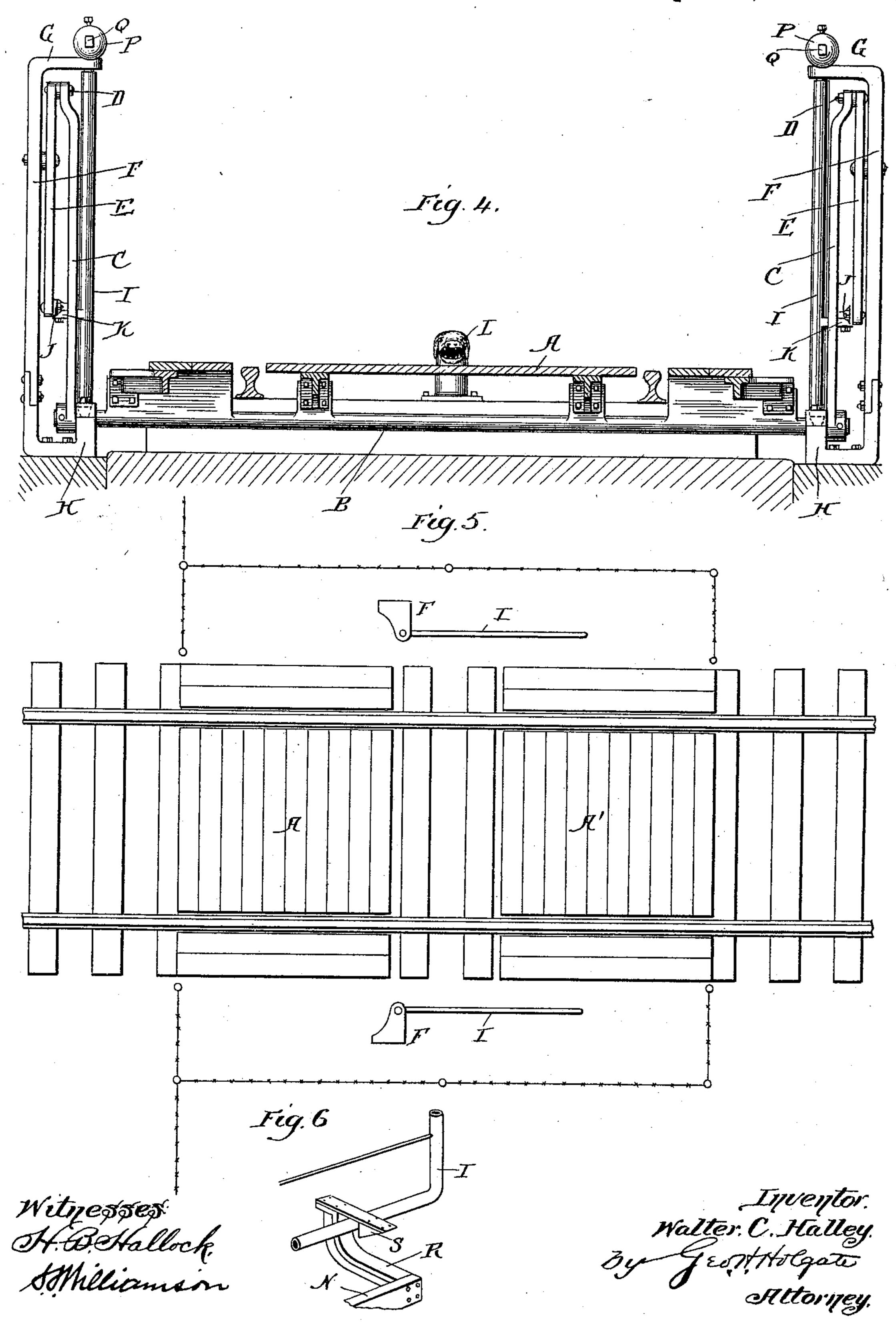


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W. C. HALLEY.
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No. 602,075.

Patented Apr. 12, 1898.



## United States Patent Office.

WALTER COLQUETT HALLEY, OF HALLEY, ARKANSAS.

## CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 602,075, dated April 12, 1898.

Application filed June 10, 1897. Serial No. 640,197. (No model.)

To all whom it may concern:

Beitknown that I, Walter Colquett Hal-Ley, a citizen of the United States, residing at Halley, in the county of Desha and State of Arkansas, have invented a certain new and useful Improvement in Cattle-Guards, of which the following is a specification.

My invention relates to a new and useful improvement in cattle-guards for use upon railways and similar locations for preventing the passage of cattle along the railway-track from one field or pasture into another, and has for its object to improve upon the construction shown in United States Patent No. 571,616, granted to me upon the 17th day of November, 1896.

With this end in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of a cattle-guard made in accordance with my improvement, 30 showing the gates open; Fig. 2, a central longitudinal section of a portion of a railway, showing the arrangement of the operating mechanism, the gates being open; Fig. 3, a view similar to Fig. 2, the gates being closed; 35 Fig. 4, a cross-section of the road-bed and a portion of the guard, illustrating the arrangement of the mechanism for operating the gates; Fig. 5, a diagrammatical view of my improvement, showing the guard inclosed by a 40 suitable fence; and Fig. 6, a detail perspective of the latch mechanism for holding the gates open when the platforms are in their normal position, so as to prevent said gates from being displaced by the wind.

In carrying out my invention as here embodied I mount the platforms A and A' upon the rock-shafts B and B', respectively, which latter are journaled in suitable bearings arranged upon the sides of the railway-track, and secured to the outer ends of the shaft B are the arms C, which, extending upward, are pivoted at D to the levers E. These levers in

turn are pivoted to the uprights or posts F, which are set upon each side of the road-bed, and these posts F have projecting from the 55 tops thereof the brackets G, between each of which and the blocks H are pivoted the gates I. The levers E are connected by the horizontal links J to the short arms K, projecting from the gates, so that when either plat- 60 form is tilted so as to swing the arms C this in turn, through the levers E and links J, will swing the gates across the railway, thereby stopping the passage of cattle, and in order that the two platforms A and A' may work in 65 unison arms K' and K<sup>2</sup> project from said platforms, respectively, and are coupled together by a slotted joint, as indicated at K<sup>3</sup>, so that when one platform is depressed the other will likewise be depressed. In practice the plat- 70 forms are set at a slight incline, so that cattle coming in either direction and passing upon one of the platforms will tilt the outer end thereof downward, bringing about the operation of the gates just described.

As a further precaution against the passage of cattle and to prevent the same from forcing the gates or attempting to do so I place the representation of a dog (indicated at L and L') between the platforms and lo- 80 cate in the former suitable firing mechanism and means for holding cartridges, so that when the gates are swung closed they will strike the firing mechanism contained in the figure L and discharging the cartridge therein contained 85 will scare off the cattle and prevent them from undertaking to force the gates. After the cattle have withdrawn from the platform the same will be returned to its normal position by means of the weights M, which are 90 adjustably supported upon the rods N, the latter being secured to the rock-shaft, as indicated at O, and by this return of the platforms to their normal positions the gates will be swung open, as will be readily understood, 95 thereby freeing the railway for the passage of trains in the usual manner, and yet at all times maintaining an automatic guard against the passage of cattle.

Under ordinary circumstances it is preferable to balance or counterbalance the gates, so as to prevent the sagging thereof, and this I accomplish by securing the arms Q to the pintle-post and adjustably placing thereon

the weights P, so that the proportion of the weight of the gates which it is desired to over-

balance may be varied.

As a means for preventing the gates from blowing closed when the platforms are in their normal position I provide brackets R upon the outer ends of the rods N, and these brackets carry spring-hooks S, adapted to enter into engagement with the lower portion of the gates I, as indicated in Fig. 6, thus holding said gates in their open position until the platforms have been depressed, thereby lifting these latches out of line with the lower portion of the gates and permitting them to swing closed.

From this description it will be seen that an exceedingly simple arrangement is provided which will be entirely automatic and absolutely preclude the passage of animals from one field to another along a railway, and it has been found in practice that after a few attempts of cattle to pass such a guard the discharge of the cartridges and the appear-

ance of the dogs will deter them from continuing the attempt, and this is advantageous, since by continued efforts to force a gate or fence cattle are known to do much damage to the fencing and finally gain access to the field for which they are striving.

Having thus fully described my invention,

what I claim as new and useful is—

1. In combination, a post set upon each side of the railway, gates hinged thereto, weights for balancing said gates, two rock - shafts journaled in suitable bearings and extending across the railway-track, arms projecting upward from one of said shafts, levers connected to said arms, short arms projecting from the pintle-posts of the gates, horizontal links con-

necting the last-named levers and the short 40 arms, and the figure of a dog having firing mechanism therein whereby when the gates are swung closed a cartridge will be dis-

charged, as specified.

2. In combination, a post set upon each side 45 of the railway, gates hinged thereto, weights for balancing said gates, two rock-shafts journaled in suitable bearings and extending across the railway-track, arms projecting upward from one of said shafts, levers connected 50 to said arms, short arms projecting from the pintle-posts of the gates, horizontal links connecting the last-named levers and the short arms, a figure of a dog having firing mechanism therein whereby when the gates are 55 swung closed a cartridge will be discharged, and latch-hooks carried by the weighted arms for holding the gates open so long as the platforms remain in their normal positions, as specified.

3. A cattle-guard consisting of posts mounted on either side of a railway-track, gates hinged thereto, weights for balancing said gates, rock-shafts journaled in suitable bearings and extending across the track, platforms 65 mounted on said rock-shaft, weighted levers connected with said rock-shafts, latches on the weighted levers to engage the gates, and means connected with the rock-shafts to close said gates when the platforms are depressed, 70

substantially as set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WALTER COLQUETT HALLEY.

Witnesses:

S. S. WILLIAMSON,

J. B. CARMICHEAL.