

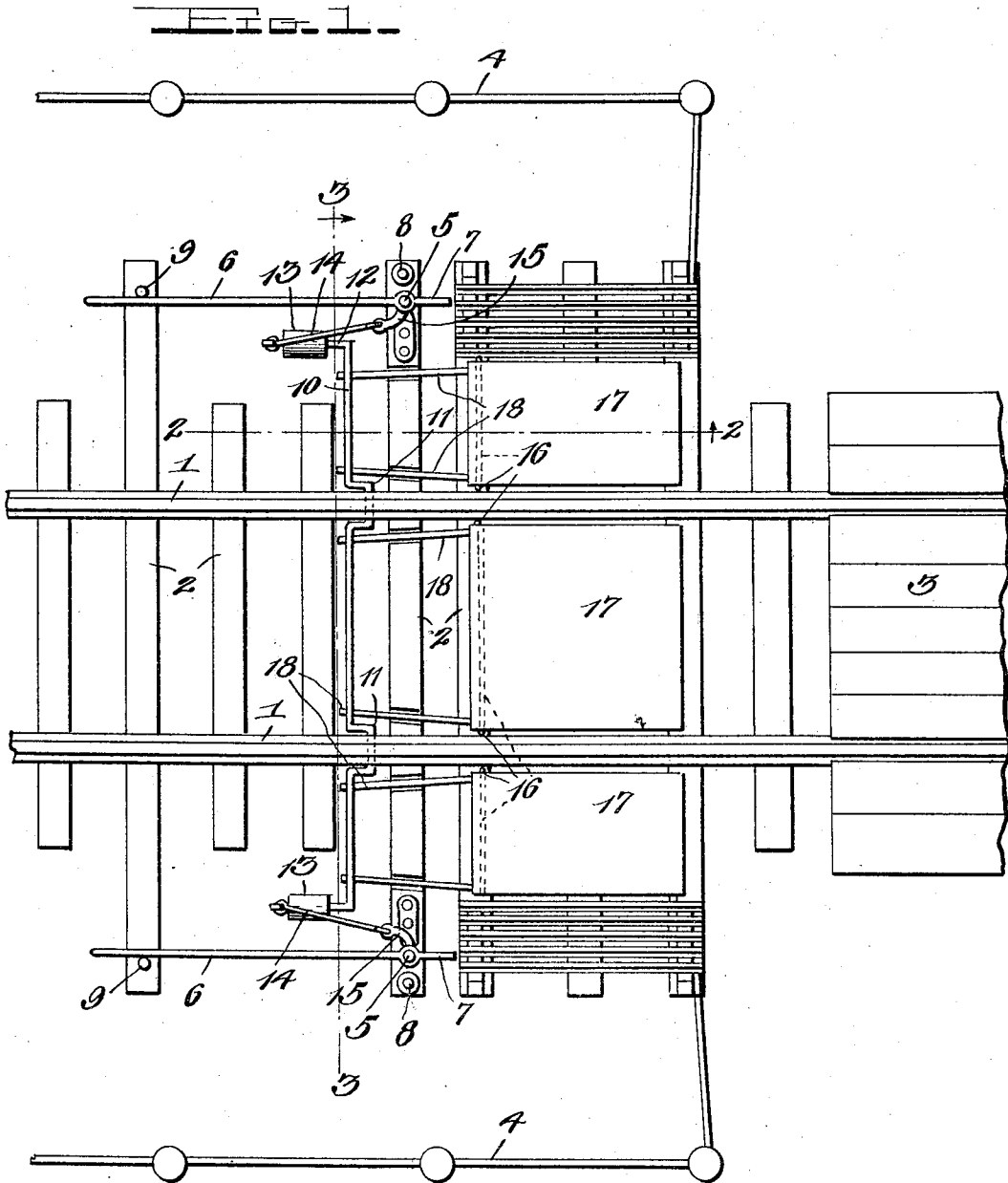
F. W. LULL.
CATTLE GUARD.

APPLICATION FILED FEB. 14, 1912.

1,046,618.

Patented Dec. 10, 1912.

2 SHEETS—SHEET 1.



Inventor

F. W. Lull,

Witnesses

Chas. L. Griesbauer
A. B. Norton

By

Watson E. Coleman
Attorney

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2 SHEETS-SHEET 2.

Fig. 2

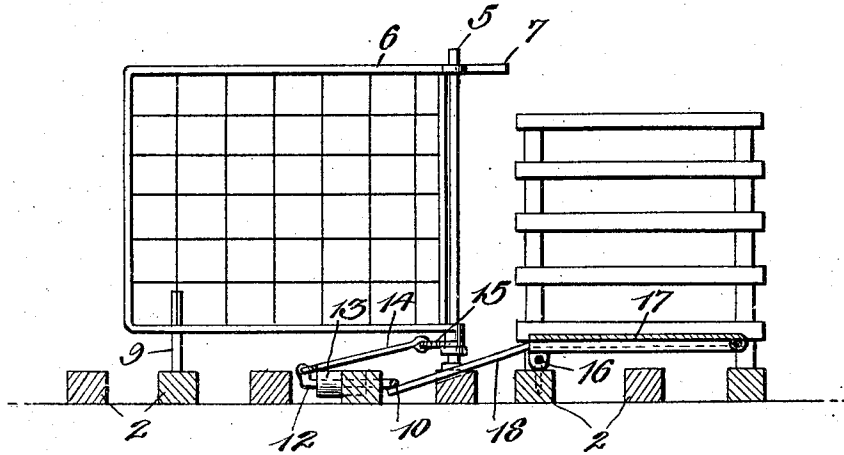
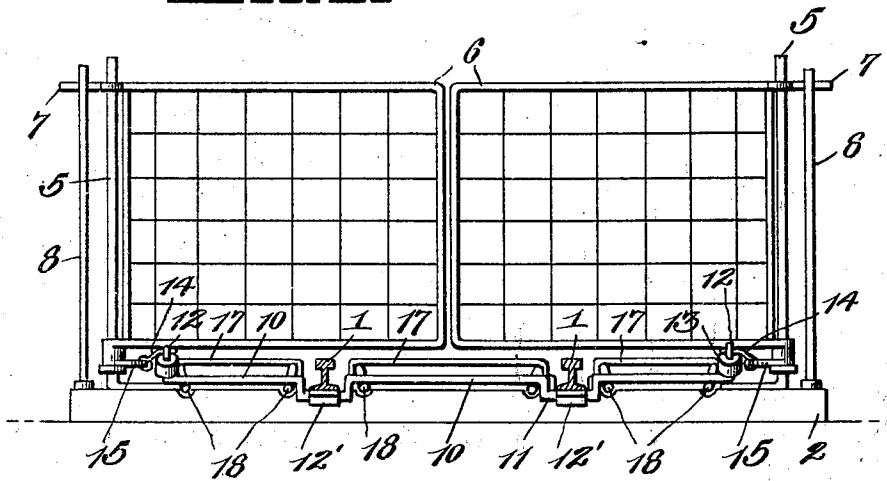


Fig. 3



Inventor

F. W. Lull,

Witnesses

Chas. L. Grischauer.
A. B. Norton.

By

Watson E. Coleman,
Attorney

UNITED STATES PATENT OFFICE.

FERSON WALLACE LULL, OF OSO, WASHINGTON.

CATTLE-GUARD.

1,046,618.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FERSON WALLACE LULL, a citizen of the United States, residing at Oso, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Cattle-Guards, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in cattle guards, and the primary object of the invention is to provide a device of this character which will be most efficient in preventing cattle from walking between the rails, and thereby eliminate the danger of having the same killed by passing trains.

A further object of the invention resides in providing platforms between and on the sides of the tracks which have connection with swinging gates to swing the latter horizontally across the tracks when weight is placed on said platforms.

A still further object of the invention resides in providing a device which is simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

In the accompanying drawings forming a part of this application, Figure 1 is a top plan view showing my device applied to use; Fig. 2 is a longitudinal section through the device as seen on the line 2—2 of Fig. 1; and Fig. 3 is a transverse section there-through, as seen on the line 3—3 of Fig. 1, showing the gates in closed position.

In carrying out my invention, I shall refer to the drawings, in which similar reference characters designate corresponding parts throughout the several views, and in which—

1 indicates rails mounted in the usual or any preferred manner upon the ties.

2 and 3 indicate a road crossing over the rails 1.

A fence 4 extending on both sides of the track for a considerable length thereof, is provided to prevent the cattle and other animals on adjacent farms from crossing the said track and in order to further prevent these animals from walking on the track after passing over the crossing 3, I provide my improved guard which will be hereinafter and more particularly described in detail.

Certain of the ties 2 are of greater length

than ordinarily are provided and on one of these ties of increased length are mounted vertical posts 5 on each side of the track, said posts supporting thereon the horizontally swinging gates 6. The upper portions of these gates are provided with arms or the like 7 which are disposed in alinement with said gates proper and also mounted on the tie upon which the posts 5 are mounted, are the additional posts 8 which are disposed beyond the posts 5 and are adapted to contact with the arms 7, as said gates are swung in their horizontal position across the track, while an additional tie of increased width is provided with the stopping posts 9 disposed in substantial alinement with the posts 5, which stopping posts are adapted to limit the outward swinging movement of said gates.

A rock shaft 10 having crank portions thereon suitably journaled in bearings 12' on the lower face of the track rails 1, has the outer ends thereof, bent to form crank arms 12, each of which arms has mounted thereon a weight 13. The free ends of the crank arms 12 have in linking engagement therewith the connecting arms 14 which have the opposite ends of the same engaged with arcuate stems or arms 15 carried on the lower portions of the gates 6. These arcuate arms or stems 15 are disposed inwardly toward the rails 1 and from this construction it will be seen that through the medium of the weights, said rock shaft 10 will be normally disposed in such a position as will dispose the gates 6 in their open positions, as shown in Fig 1. This rock shaft 10 is disposed immediately forward of the tie having the gate posts mounted thereon, and mounted on the tie in the rear of this last mentioned tie are a plurality of transverse bars 16 which are disposed between said rails and on each side of the same, at the same time being spaced slightly above said tie. Pivottally mounted on these transversely disposed bars 16 are the platforms 17, each of which is provided with a pair of arms 18 and these arms are inclined slightly downward to project under the rock shaft 10. These platforms are pivoted at one end thereof on the bars 16 while the opposite free ends of the same are disposed toward and adjacent to the crossing 3 and as a weight is placed on any of said platforms, the shaft 10 will be caused to rock whereby the gates 6 will be swung horizontally across

the track to obstruct the passage way thereon. As soon as the weight has been removed from the platforms, however, the gates will be returned to their initial positions through the medium of the weights 13, and in order to guard the platforms from the sides thereof, the guards or the like 18 are mounted on the adjacent ties.

In the drawing and specification, I have shown and described a single cattle guard disposed on the one side of the crossing 3, but it will, of course, be understood that a similar guard is used in connection with the rails on the opposite side of said crossing (not shown). In view of the fact that the fence 3 extends along the line of rails, the animals will find that the only means for entering the space between the rails will be from the crossing 3, but it will be seen that as soon as a weight is placed on any of the platforms 17, the proper gate will be closed to obstruct the path. An animal finding the path along the track obstructed by the gates, will return to his proper pasture and thus be saved from a possible death by being struck by the passing train.

From the foregoing, it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention, and while I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in the form, proportions and in the minor details of construction may be resorted to for successfully carrying my invention into practice without departing from the spirit or sacrificing any of the principles thereof.

Having thus described my invention, what I claim is:—

In a cattle guard, the combination with a pair of rails and ties therefor, certain of

said ties being of greater length than the others; of vertical posts mounted on one of said ties of increased length adjacent the ends thereof, a pair of gates pivotally mounted on said posts and adapted to swing across the track formed by said rails, additional vertical posts mounted on the aforesaid tie beyond said other posts and in alignment therewith, projections formed on the outer ends of said gates and adapted to abut the last mentioned vertical posts upon the disposition of said gates to their closed positions to limit the movement thereof, arcuate arms formed at the lower portions of said gates, a rock shaft journaled in bearings on the under faces of said rails, the outer ends of said rock shaft being bent at right angles to form crank arms thereon, connecting means between the arcuate arms of said gates and the free ends of said crank arms, weights applied to said crank arms to normally retain said gates in their open positions, additional vertical posts mounted on one of the ties of increased length forward of the aforesaid tie, said latter additional posts being adapted to receive the outer ends of said gates in engagement therewith to limit the same in their outward movement, a plurality of platforms pivotally mounted on certain of said ties in the rear of the first mentioned tie, and arms carried on said platforms, having the free ends thereof disposed below and in engagement with said rock shaft, whereby when weight is placed on the platforms, said gates will be disposed to their closed positions.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

FERSON WALLACE LULL.

Witnesses:

J. C. BEESON,
M. D. KEENEY.