

(No Model.)

J. M. LEE.
CATTLE GUARD FOR RAILROADS.

No. 514,152.

Patented Feb. 6, 1894.

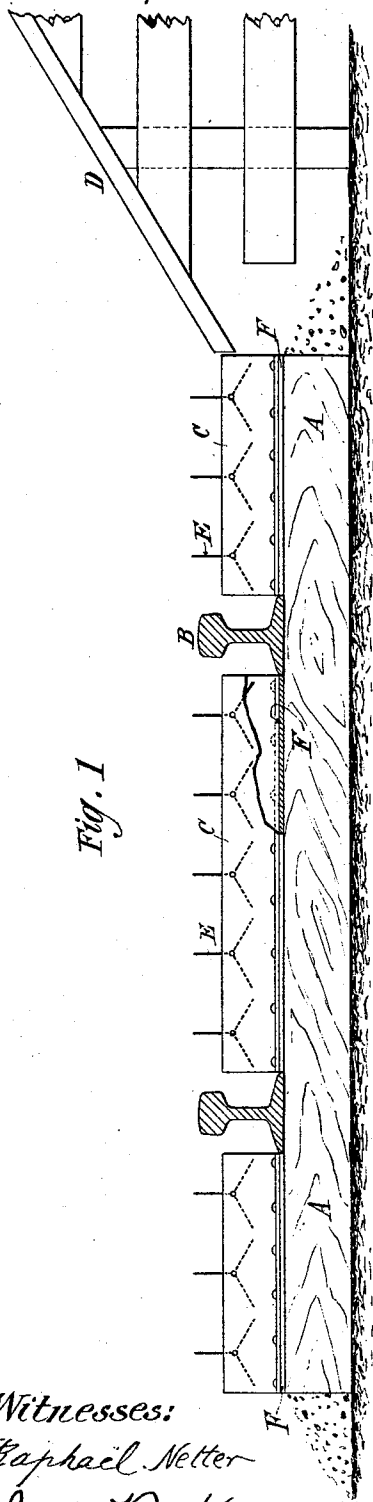


Fig. 1

Witnesses:
Raphael Netter
Jessie B. Kay

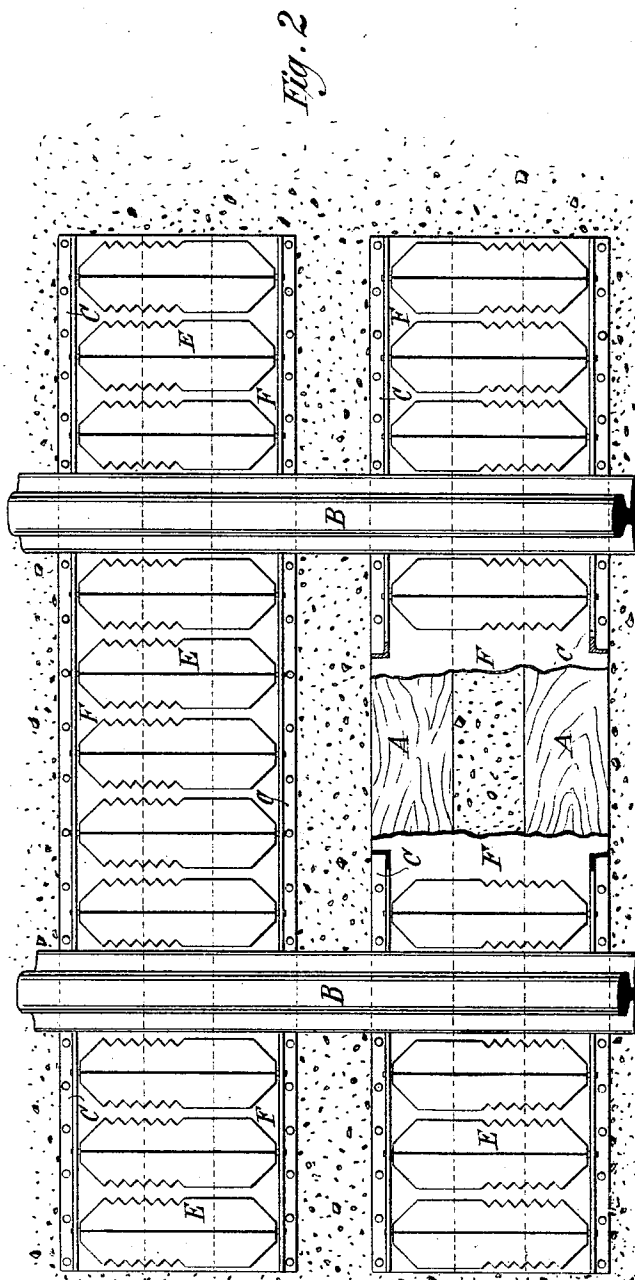


Fig. 2

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UNITED STATES PATENT OFFICE.

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CATTLE-GUARD FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 514,152, dated February 6, 1894.

Application filed October 10, 1893. Serial No. 487,732. (No model.)

To all whom it may concern:

Be it known that I, JACOB M. LEE, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Cattle-Guards for Railroads, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

10 This invention is an improvement in cattle guards or devices used generally in connection with side fences and across the track of a railroad for preventing cattle from straying from their inclosures, or passing along the road bed.
15 The object of the invention is to provide a more effective device for this purpose than the ditches and such other contrivances in the nature of barriers as have been used, which experience has shown that some cattle have little trouble in leaping over or breaking down;
20 and also to break up in the cattle the habit which is a source of annoyance and danger, of standing on the track at the guards. To this end I provide in connection with the rails
25 of a track at any desired point, a series of plates or slats mounted with the capability of partial or complete rotation on axes substantially parallel with the rails and between the said rails and on either side of the track so
30 as to span the road bed or space between the ends of the fence. These rotary plates or slats have at least three longitudinal flanges the edges of which are serrated along the whole or a portion of their length, and which
35 project at intervals of one hundred and twenty degrees. They are arranged at such height above a solid bed or plate that when the cattle step on them their hoofs will slip through between the edges of two adjacent plates and so
40 turn the latter that the other flanges will pinch the feet just above the hoofs and inflict sufficient pain to cause the animal to back off and in future to avoid the spot.

The bed plate above referred to is employed
45 with the special object of preventing an animal's feet from passing so far down between the slats that the latter can turn back above the hoofs and confine him to the track when once he has stepped upon the guard.

50 The result contemplated by the invention may be secured by devices of somewhat widely

differing construction, of which the special and preferred device illustrated in the accompanying drawings serves as an illustration.

Figure 1 is a cross-section of a road-bed with 55 my improved guard applied thereto. Fig. 2 is a plan view of the device, a portion of the slats and bed plate being removed showing the road bed underneath.

A A designate the cross ties of a railway 60 track, and B B the rails. Between two horizontal and parallel bars or plates, as C, suitably supported on the cross-ties and extending between the rails, and also on the outside of the rails up to the line of the fence D, I pivotally support the three flanged slats or similar 65 devices E E. I prefer to make these of sheet metal of the general cross-section shown in Fig. 1, although they may be otherwise constructed for the accomplishment of the same 70 purpose. Under the slats and at a sufficient distance to permit them to turn freely are plates F or other supports to afford a platform for the hoofs of the cattle at a predetermined distance beneath the revolving slats. 75

I prefer to arrange two series of the above described slats at each fence crossing, one on each side of the fence line so as to deter cattle from attempting to stand or cross on the track from either side of the fence. Also, 80 for the purpose of more effectively preventing the passing of cattle I cut teeth or serrations in the edges of the flanges either along their entire length or generally for some distance from the end of approach. 85

As will be seen from the construction and arrangement of the slats, it will be impossible for an animal to step upon the space covered by the slats without forcing his hoof down between two of the same, and this will rotate 90 those slats so as to bring the edges of the upper flanges against his foot just above his hoof, pinching it sufficiently to cause pain without inflicting injury. There is nothing that prevents the easy withdrawal of the hoofs 95 from the guard, owing to the position of the bed plate F which prevents the animal's feet from passing down too far through the slats, and no damage can be done to the latter by the cattle if the proper precautions are observed in its construction. 100

The invention is applicable generally to

railroad tracks whether in connection with fences or not, to prevent the straying and standing of cattle on the track, and affords an effective barrier to the passage of cattle in any case where a fence is not practicable.

5 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a road-bed, such
10 as a railway track, of a cattle guard composed of a series of revolving slats supported over a bed plate and provided with flanges that are brought together against the foot of an animal stepping between two adjacent slats,
15 as set forth.

2. The combination with the rails of a track of a series of slats angular in cross-section and having parallel edges or flanges and mounted on supports between and beside the

rails, and a plate or platform under the slats 20 for affording a footing for cattle stepping on the space covered by the slats.

3. The combination with the rails of a track, of cross supports mounted on the cross ties, a series of slats pivotally mounted in said sup- 25 ports and having a number of parallel and serrated flanges, and a plate or platform under said slats, as set forth.

4. A cattle guard for railway tracks, comprising two series of revolving slats having 30 parallel and serrated flanges and mounted between and beside the tracks over a plate or platform and on opposite sides of a fence line crossing said tracks, as set forth.

JACOB M. LEE.

Witnesses:

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