

No. 824,303.

PATENTED JUNE 26, 1906.

J. M. LEE.  
CATTLE GUARD.

APPLICATION FILED OCT. 2, 1905.

Fig. 1.

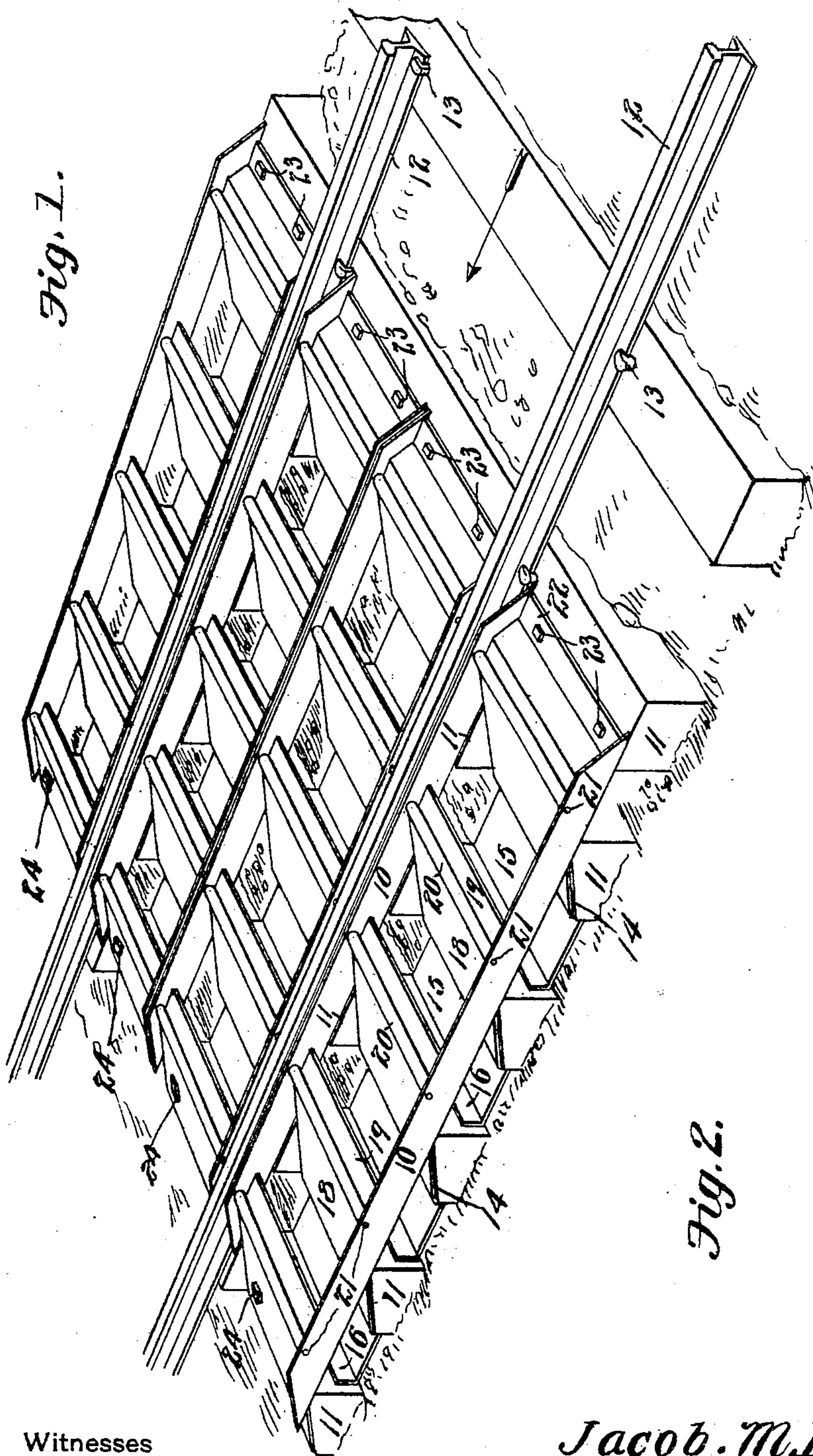
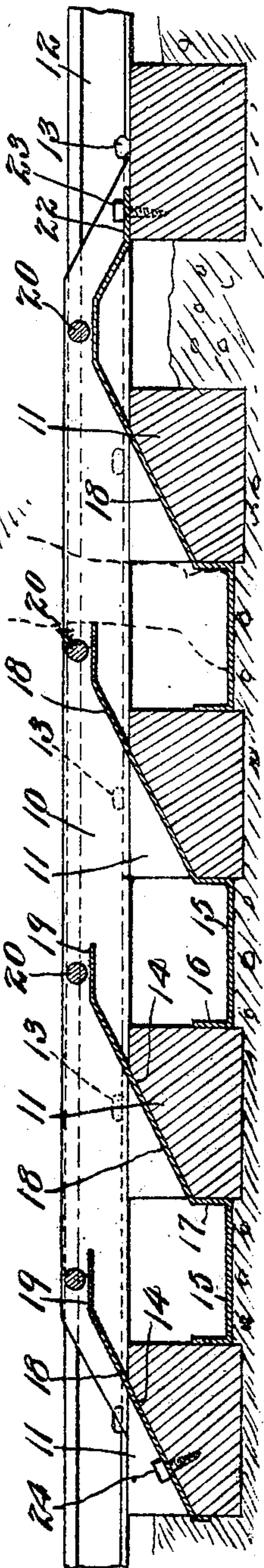


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JACOB MARTIN LEE, OF SAN ANTONIO, TEXAS.

## CATTLE-GUARD.

No. 824,303.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed October 2, 1905. Serial No. 280,965.

*To all whom it may concern:*

Be it known that I, JACOB MARTIN LEE, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Cattle-Guard, of which the following is a specification.

This invention relates to cattle-guards, and has for an object to provide a device of the class embodying new and improved features of durability, convenience, simplicity, and efficiency.

The nature of the invention is a cattle-guard having transverse drainage-conduits with overhanging plates and so proportioned that the foot of an animal will be projected into the conduit and the leg contact with the overhanging plate to prevent a step in advance, but permitting a backward movement to withdraw the foot.

It is well known that animals become accustomed to surface guards and learn to cross by stepping upon the portions forming the upper surface of the guard. This invention provides a cattle-guard having rollers mounted above the only available portion which may be stepped upon and which rotate beneath the foot and destroy the foothold.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of the improved cattle-guard applied. Fig. 2 is a longitudinal sectional view of the improved cattle-guard.

Like characters of reference indicate corresponding parts in both of the figures of the drawings.

In its preferred form of embodiment and application the improved cattle-guard forming the subject-matter of this application comprises four similar sections disposed two between and one upon each of the outer sides of the rails and extending longitudinally thereof.

Each section comprises parallel frame-pieces 10, resting upon the upper surfaces of the usual cross-ties 11, upon which the rails

12 are secured in any approved manner, as by the spikes 13, and between and without the rails the ties are beveled, as at 14. Between the frame-pieces 10 are secured sheets 60 of metal bent to form the bottom pocket 15 and the side plates 16 and 17. The side plate 17 is continued to form an inclined section 18, which extends upwardly between the frame-pieces and terminates in a short horizontal section 19, overhanging the next adjacent pocket. Above the horizontal section is mounted a roller 20, journaled in the side pieces, as at 21. At one end the sections may be provided with a plate, as 22, 70 through which bolts 23 may be inserted into the ties to hold the guard against accidental or mischievous displacement, and bolts 24 may be inserted through the plate 18 at the opposite end for the same purpose. 75

With spaces between the sections forming communication between the pockets it is obvious that they become transverse drainage-conduits.

It will be obvious that if an animal steps 80 upon one of the rollers 20 the foot will be thrown to one side and if forwardly then the foot slides down the incline 18 into the pocket or conduit. With an animal going in the direction of the arrow it will be readily 85 seen that the foot and leg will be disposed as indicated in dotted lines in Fig. 2 and that the plate 19, contacting with the forward side of the leg, will prevent a forward step, while not in any manner preventing or interfering with a backward movement to withdraw the foot. 90

Having thus described the invention, what is claimed is—

1. In a cattle-guard, inclined sheets of material disposed transversely of the track, and rollers rotatably mounted adjacent the sheets. 95

2. In a cattle-guard sheets of material disposed transversely of the track and inclined to the horizontal, and rollers rotatably 100 mounted adjacent the sheets.

3. In a cattle-guard, sheets of material disposed with their planes transverse to the track and inclined to the horizontal, and rollers rotatably mounted adjacent the upper extremities of the inclined portions of the sheets. 105

4. A cattle-guard comprising frame-pieces, inclined sheets of material mounted rigidly between the frame-pieces, and rollers mounted between and journaled in the frame-pieces. 110



5. A cattle-guard comprising frame-pieces extending longitudinally of the track, inclined sheets of material secured rigidly between the frame-pieces and with their planes transversely of the track, and rollers mounted between and journaled in the frame-pieces and disposed adjacent to the tops of the inclined portions of the sheets.
6. A cattle-guard comprising frame-pieces extending longitudinally of the track, sheets of material secured between the frame-pieces and forming conduits between the ties, inclined sections connected with the conduits and with their planes transversely of the track, and rollers rotatably mounted adjacent the tops of the inclined portions of the sheets and journaled between the frame-pieces.
7. A cattle-guard comprising frame-pieces extending longitudinally of the track, sheets of material secured between the frame-pieces and forming conduits between the ties, horizontal sections extending transversely of the frame-pieces and disposed above the conduits, inclined sections connecting the conduits and the horizontal sections, rollers rotatably mounted between and journaled in the frame-pieces and above the horizontal sections and adjacent the tops of the inclined sections, and means for detachably securing the device to the ties.
- In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.
- JACOB MARTIN LEE.
- Witnesses:  
IAGO MEUSEBACH.  
W. G. MINTER.