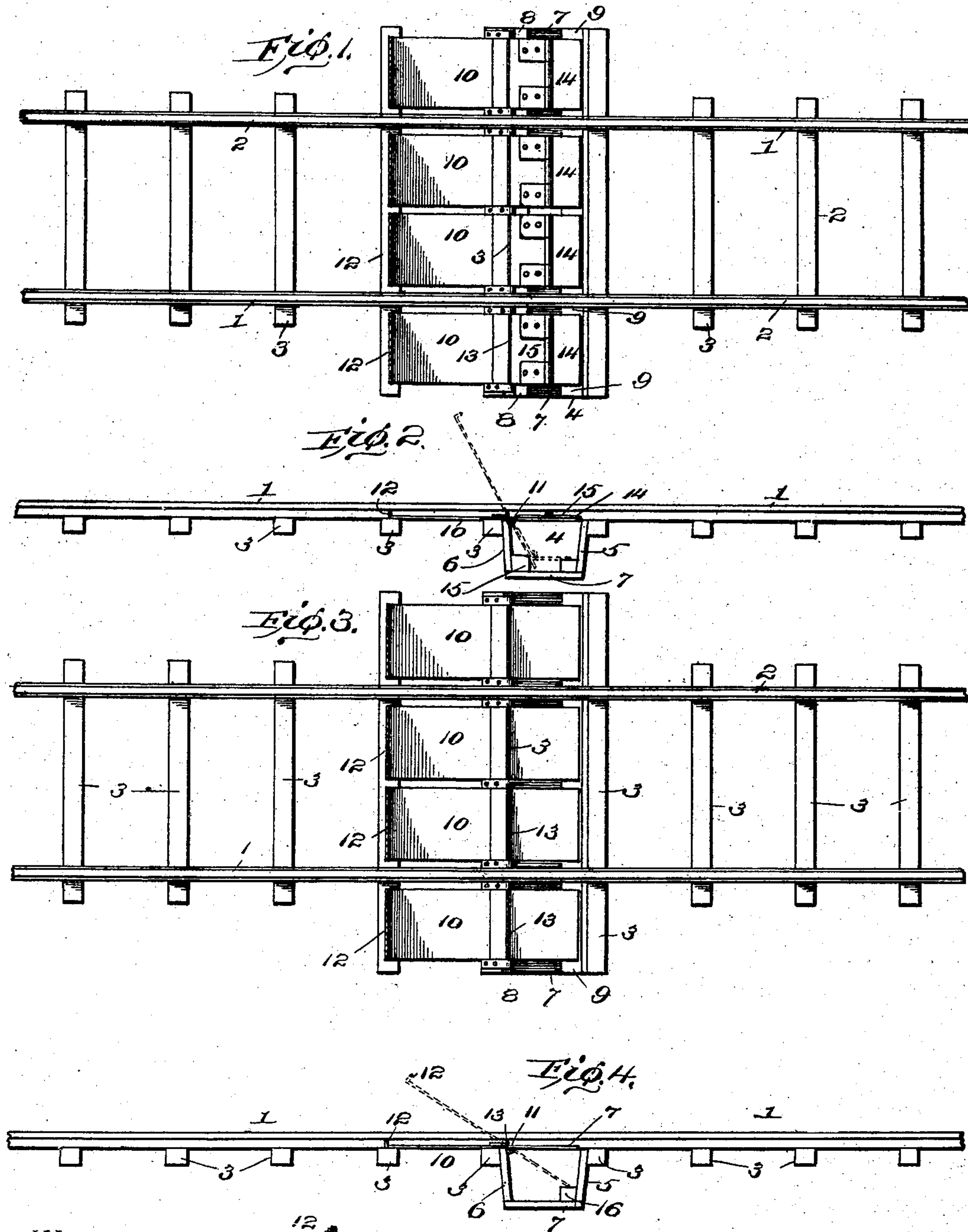


No. 762,854.

PATENTED JUNE 14, 1904.

J. L. WELLS.
RAILWAY CATTLE GUARD.
APPLICATION FILED SEPT. 28, 1903.

NO MODEL.



WITNESSES:

Andrew Engle

Geo. Ross

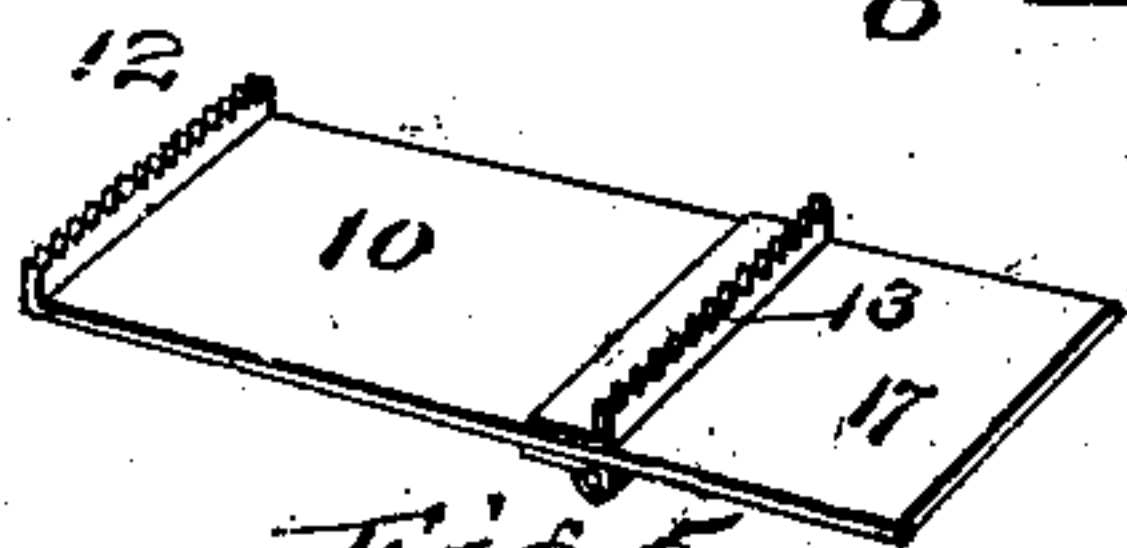


Fig. 5.

INVENTOR

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JOHN L. WELLS, OF EAST BERNSTADT, KENTUCKY.

RAILWAY CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 762,854, dated June 14, 1904.

Application filed September 28, 1903. Serial No. 174,968. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. WELLS, a citizen of the United States, residing at East Bernstadt, in the State of Kentucky, have invented new and useful Improvements in Railway Cattle-Guards, of which the following is a specification.

This invention relates to railway cattle-guards; and one of the principal objects in view is to provide a guard having its cooperating parts normally below the upper portion of the rails, so as to prevent contact of some part of said guard with a depending part of the gear of a car.

In actual practice it has been found that those guards now generally in use are of a bulky construction, and therefore extend above the ties to such an extent that they are frequently demolished by contact with a part of a moving car, especially cars heavily loaded, not only rendering the guard inoperative, but seriously menacing the lives of passengers by reason of possible derailments of the cars. In correcting this evil the present invention contemplates the provision of a light, strong, and durable guard that will be positive in its operation and one that can be manufactured at a minimum of expense.

A further object is to provide means whereby the action of the guard will be insured, so that the tread members will automatically return to their normal positions when pressure thereon has been relieved.

Further objects and advantages of the invention will be specifically set forth in the following description, it being understood that changes as to form, proportion, and minor details of construction may be resorted to without departing from the spirit thereof.

In the drawings, Figure 1 is a plan view of a portion of a track, showing my invention applied. Fig. 2 is a view in elevation, the abnormal position of the tread members being illustrated in dotted lines. Fig. 3 is a top plan view of a slightly-modified form of the device applied. Fig. 4 is a view of the modified form in elevation, and Fig. 5 is a detail perspective view of one of the tread members.

In the preferred form of my invention, as illustrated in Figs. 1 and 2, a track is shown

comprising the rails 1 and 2, secured to the usual ties 3. The cattle-guard is so disposed with relation to the track that no part thereof will be exposed above the rails or have any projecting part close to the rails. The guard, as illustrated in Figs. 1 and 2, comprises a trough or box 4, the depending sides 5 and 6 of which are secured to the adjacent ties by suitable fasteners, and the bottom 7 is fastened to the lower edges of the sides 5 and 6 and is provided with two strips 8 and 9, which constitute stops, against which the depressed ends of the tread members will rest, as will be presently explained. The tread members 10 are independently pivoted to a shaft or support 11 on one edge of the trough 4 and each comprises a plate having terminal and intermediate upstanding guards 12 and 13, respectively. These guards are illustrated as comprising a series of spurs, the terminal series being formed by bending one end of the plate at right angles, the spurs being previously formed in cutting the plate. The intermediate guard 13 is formed from metal in substantially the same manner as guard 12 and is arranged immediately above the pivot-point of the plate member, so as to protect this point from being trodden upon and cause the approaching animal to tread upon the short portion of the plate member and press the same down into the trough over which it projects, thereby confusing the animal and at the same time bringing the plate member into elevated or tilted position. The end of the plate which extends over the open portion of the trough is provided with a hinge leaf or extension 14, which is slightly overlapped by the edge 15 of the plate, so that when the plate is in its normal or horizontal position said edge 15 will act as a stop to limit the movement of the plate in one direction. When the plate is swung on its pivot, however, the overlapping edge will come into contact with one of the stops of the trough, while the free end of the hinge-leaf 14 will rest upon the other stop, so that the two stops will be spanned and whereby a false bottom will be provided for the support of the hoof of the animal, thus preventing injury to the hoof, as well as leaving it free to be extracted without difficulty.

As soon as pressure upon the depressed end of the plate is removed the weighted end will return to its normal or horizontal position.

In the modified form shown in Figs. 3 and 4 only one stop is employed in the trough, which stop is designated by the reference-numeral 16, and this stop will form a support for the depressed end of the pivoted plate or tread member 17, which is illustrated as being formed of a single piece of material. The operation, however, is precisely the same as in the form illustrated in Figs. 1 and 2, the only difference being that the hinge-leaf is not employed.

It will be apparent that the device can be easily and cheaply manufactured and will be durable and effective, and while I have illustrated in detail the various forms of the device I do not wish to be understood as limiting myself to the exact details shown, but reserve the right to make such changes and alteration as would properly come within the scope of the following claims.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A cattle-guard comprising a series of pivoted members and having terminal intermediate guards, the intermediate one being immediately above the pivotal points of the members.

2. A cattle-guard comprising a series of members pivoted intermediate their ends, and having a row of spurs arranged thereon over the pivot-points thereof, substantially as described.

3. A cattle-guard comprising, a suitable support, and a series of members pivoted intermediate their ends, adapted by gravity to lie normally in a horizontal plane on said support, and having an upstanding guard for the pivot-points thereof, substantially as described.

4. A cattle-guard comprising, a suitable support, and a series of members pivoted intermediate their ends, adapted to seek normally a horizontal position, and having an upstanding terminal guard, and an upstand-

ing guard for the pivot-point thereof, substantially as described.

5. In a cattle-guard, the combination with a railway-track having a transverse trough between the ties, of pivoted tread members secured adjacent to the edge of the trough, and having upstanding barriers normally below the rails.

6. In a cattle-guard, one or more tiltable tread members carrying each a hinged extension on its depressible end and having the outer end of said extension free of any support, and a stop below the fulcrum of said tiltable member for engagement with the outer end of said extension when depressed, substantially as described.

7. In a cattle-guard, one or more tiltable tread members carrying each a hinged extension on its depressible end adapted to move therewith as a single element during a part of its tilting movement, and a stop for engaging the said extension at a predetermined point of the depressing movement, substantially as described.

8. In a cattle-guard, one or more tiltable tread members, an extension for each member, hinged at its inner edge to the upper side of the depressible portion of said tread member and overlapping the same, and means for engaging the extension at a predetermined point in its depressing movement, substantially as described.

9. In a cattle-guard, one or more tiltable tread members, carrying each a hinged extension on its depressible end, a stop arranged below the fulcrum of said tiltable member for the outer end of said extension, and a stop for limiting the movement of the tiltable member, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN L. WELLS.

Witnesses:

S. L. BASTIN,
JOHN D. CASEY.