

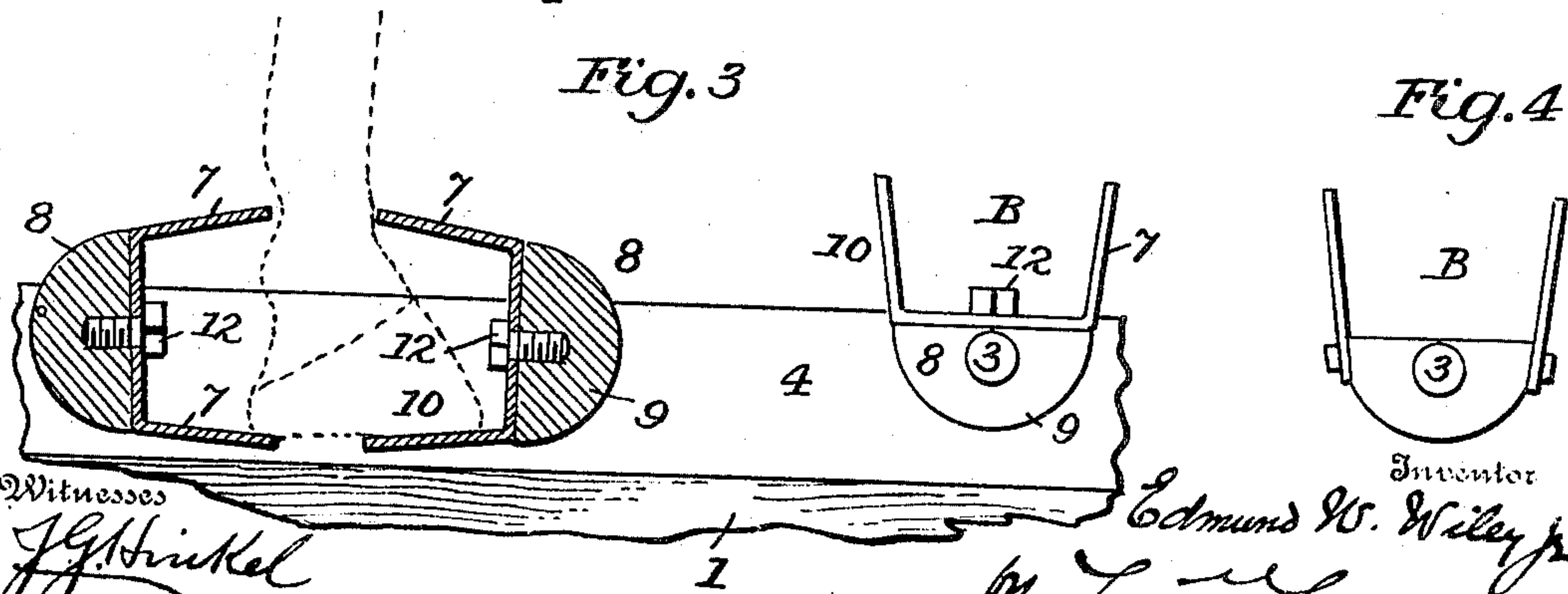
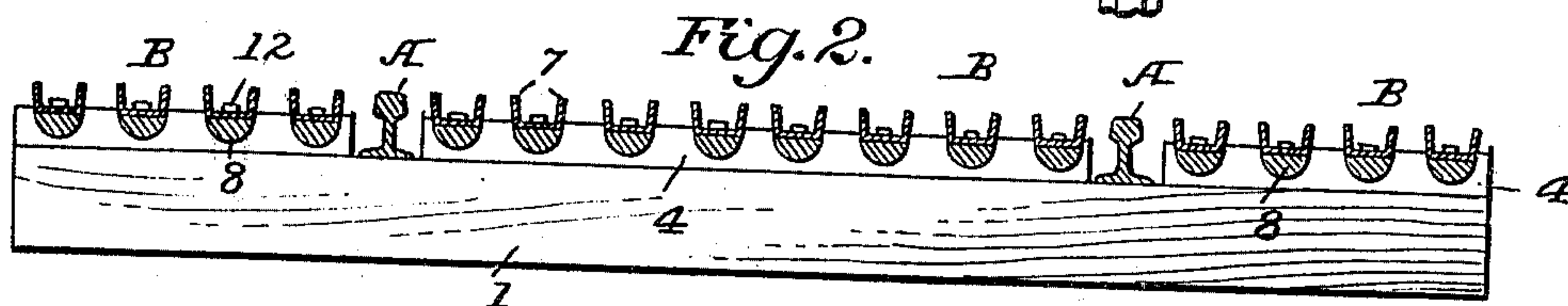
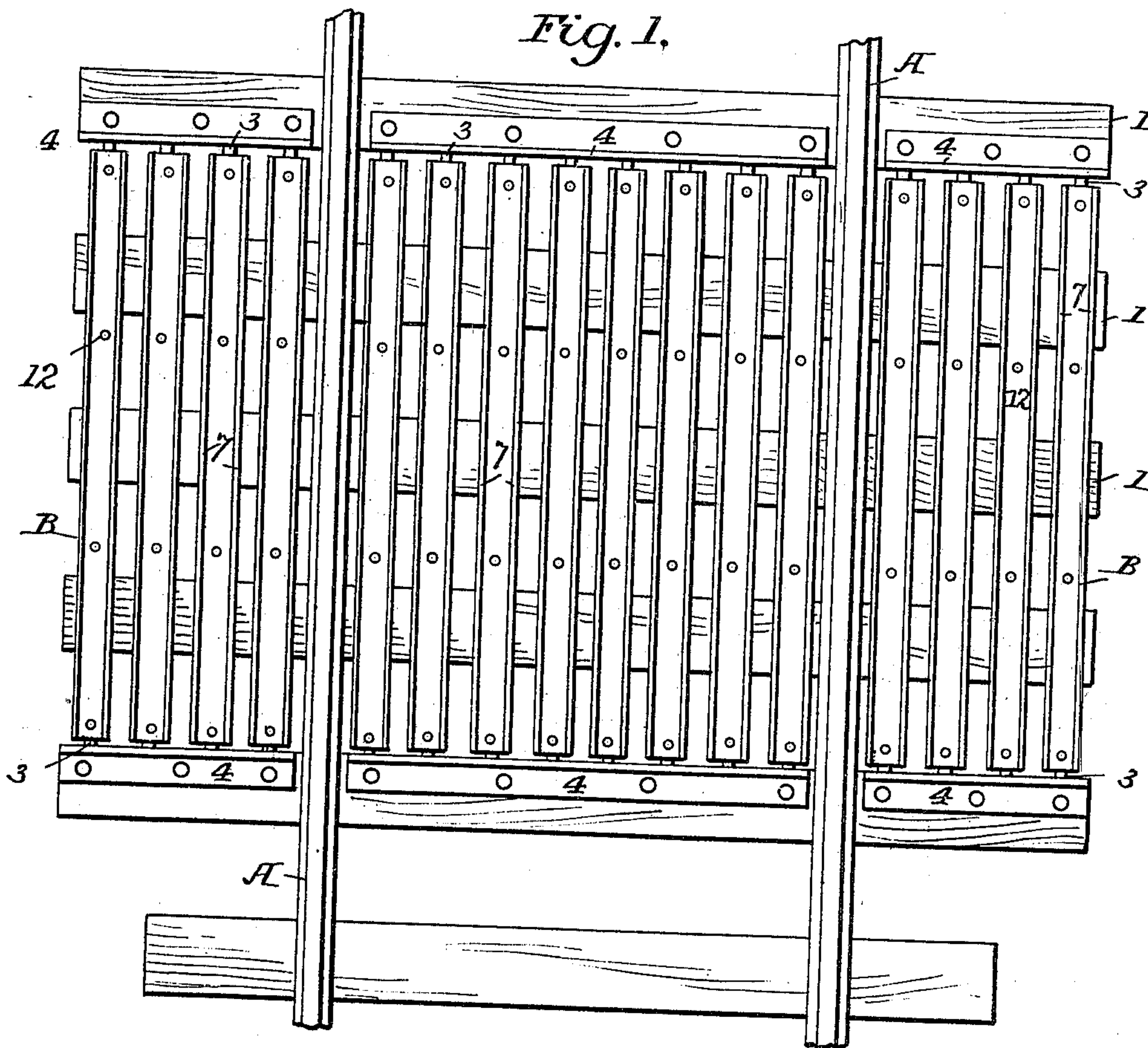
No. 672,343.

E. W. WILEY, JR.
CATTLE GUARD.

Patented Apr. 16, 1901.

(Application filed May 16, 1899.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

EDMUND W. WILEY, JR., OF LECOMPTE, LOUISIANA.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 672,343, dated April 16, 1901.

Application filed May 16, 1899. Serial No. 717,055. (No model.)

To all whom it may concern:

Be it known that I, EDMUND W. WILEY, Jr., a citizen of the United States, residing at Le-compte, in the parish of Rapides and State
5 of Louisiana, have invented certain new and useful Improvements in Cattle-Guards, of which the following is a specification.

This invention relates to certain new and useful improvements in guards for railway-
10 tracks, adapted to prevent live stock from traveling over a track from one section or portion thereof to another; and the invention has for its object to provide a simple, durable, and effective construction for accomplishing
15 the object above set forth; and it consists in the novel construction, arrangement, and combination of the parts hereinafter more particularly described.

In the accompanying drawings, forming a
20 part of this specification, and in which like characters of reference designate corresponding parts, Figure 1 is a plan view of an embodiment of the invention. Fig. 2 is a cross-sectional view thereof. Fig. 3 is an enlarged
25 detail sectional view of three of the guard-sections, and Fig. 4 is a detail cross-sectional view of a modified form of guard-rail.

Referring more particularly to the drawings, A designates a railway-track constructed in any usual way. As shown, the said
30 track is formed with cross-ties 1, to which the rails 2 are secured. Extending longitudinally of the track, between and at the outer sides of the rails thereof, are a series of guard-rails B, preferably formed straight and extending parallel and in close proximity to
35 each other and likewise parallel to the rails of the track A. Of course in some instances, if found desirable, the guard-rails may be curved in the direction of their lengths and arranged parallel to each other. At their opposite ends the said rails B are provided with
40 trunnions 3, received in openings of suitable supports 4, extending transversely across the track A, and are adapted to tilt or rock freely to one side or the other. The supports 4 may be constructed in any suitable or desirable
45 manner; but preferably they are formed of bars of metal angular in cross-section, as shown, and bolted or spiked to the track-ties.

Each of the guard-rails B is trough-shaped in cross-section and formed with upwardly-

diverging longitudinal side flanges 7, and in order to maintain said rails normally in an upright position they are each provided below their pivotal points with weights 8, which
55 tend to swing them upon their pivots when pressure is not exerted upon the upper portion thereof. Preferably, as shown, each of the guard-rails is formed in two sections, the
60 lower section 9 being provided with the trunnions 3, near its upper edge and at opposite ends, and constituting the weighted portion of the rail. The upper section 10 of each rail is formed of sheet or plate metal and bent so
65 that its base will conform to the top of the section 9, and its sides extend upwardly and diverge, the said upper section being preferably secured to the lower section by bolts 12, as shown, or it may be secured in any other
70 desired manner.

It will be understood, of course, that the guard-rails B may be of any desired length and weight and formed of any suitable material, and while it is preferred to form the said
75 rails as shown and described, obviously they might be cast or formed in a single piece, or each side flange could be formed of a single plate of metal and bolted to the solid or lower section, as indicated in Fig. 4.

With the parts thus constructed and arranged, should an animal attempt to cross the guard the weight of its foot upon one of the side flanges of a guard-rail will cause the
80 same to swing upon its pivot or trunnions, and by reason of the guard-rails being in such close proximity the leg of the animal will engage with the side flange of the next adjacent rail, causing it to turn likewise. Thus the pressure exerted by the animal upon the
85 two rails will cause its leg to be pinched between the most remote or outside rails, as indicated in Fig. 3, causing it to withdraw its leg, which may be easily done without injury thereto.

Obviously instead of arranging the guard-rails to extend parallel to the track-rails they might in some instances be laid transversely across the track.

It will thus be seen that my invention provides an improved cattle-guard of novel construction, in which the troughs are normally
90 balanced by the weighted portions and are yet permitted to turn in the manner de-

scribed when the animal's foot is placed there-
on, and still there is no danger of its foot get-
ting locked or fastened, so that it cannot be
withdrawn, while the pinching effect on the
5 leg or ankle will tend to cause the animal to
withdraw its foot and get away from the
guard. The guard does not require any
springs or auxiliary devices to retain it in
place or assist in its operation, which devices
10 are liable to get out of order; but it is ex-
ceedingly simple in construction and can be
made of any size and readily arranged in the
desired position, and when so arranged it does
not have to be countersunk into the ties, but
15 is out of the way of any brake-beams or other
attachments of a train, which can freely pass
over the same without danger. When the
guard-rails have been stepped upon and the
animal leaves the guard, the rails will quickly
20 assume their normal positions, and the whole
forms a cheap and effective construction for
the purpose desired.

Without limiting myself to the precise con-
struction and arrangement of the parts shown
25 and described, since it will be obvious that
various changes in the construction and ar-

rangement thereof may be made without de-
parting from the spirit or scope of my inven-
tion, what I claim is—

1. A stock-guard for railway-tracks com- 30
prising a series of parallel trough-shaped
guard-rails having diverging sides, and sup-
ports in which said rails are pivoted to turn
freely, each of said rails being provided with
a weight extending to a plane below the piv- 35
otal point of the rail, substantially as set
forth.

2. A live-stock guard for railway-tracks
comprising a series of pivotally-supported
guard-rails arranged parallel to each other, 40
said rails being weighted below their pivotal
points and provided above their pivots with
upwardly-diverging side flanges, substan-
tially as described.

In testimony whereof I have signed my 45
name to this specification in the presence of
two subscribing witnesses.

EDMUND W. WILEY, JR.

Witnesses:

B. C. PETERSON,
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