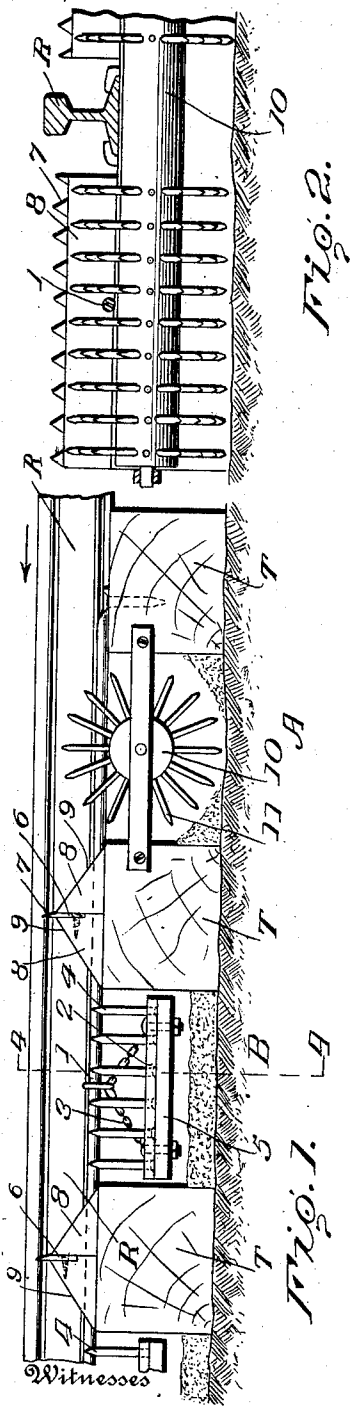


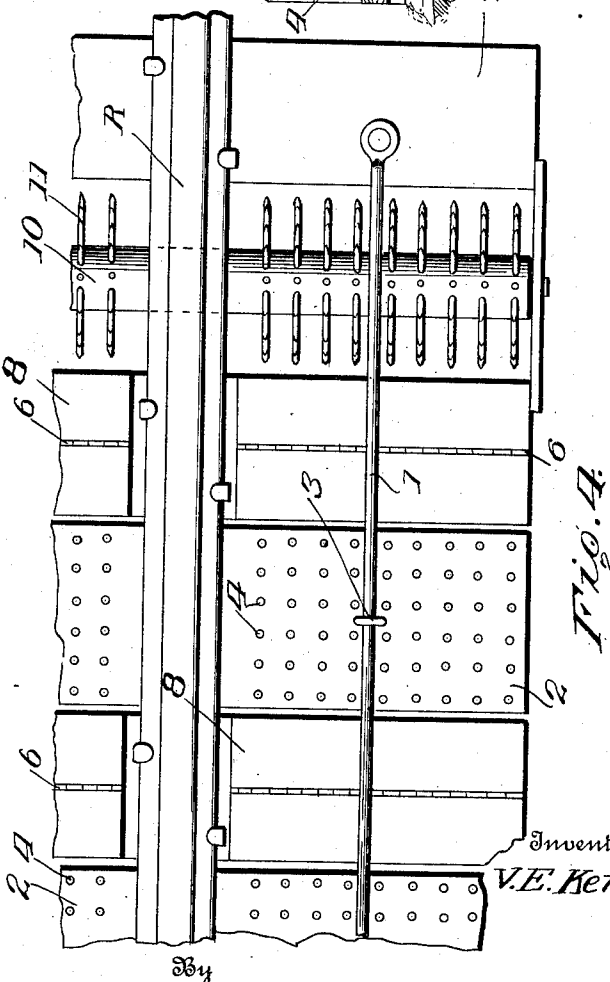
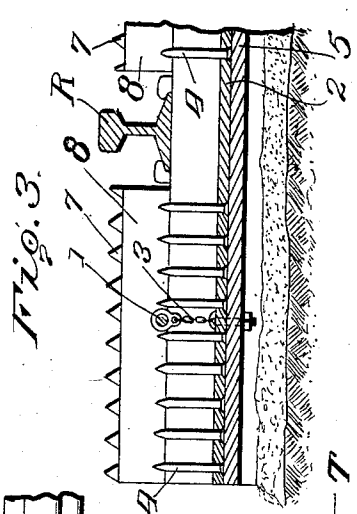
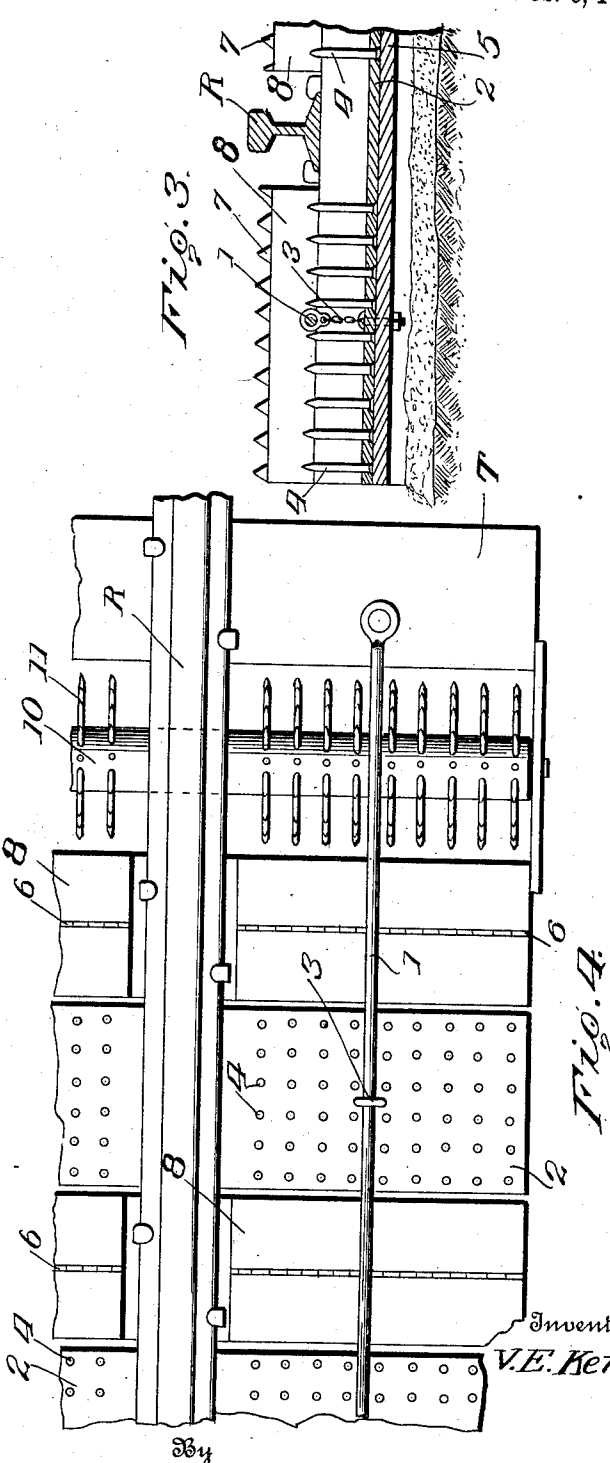
V. E. KENT.
CATTLE GUARD..
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Patented Feb. 6, 1912.

1,016,636.



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CATTLE-GUARD.

1,016,636.

Specification of Letters Patent.

Patented Feb. 6, 1912.

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To all whom it may concern:

Be it known that I, VICTOR E. KENT, a citizen of the United States, residing at Johnson City, in the county of Washington and State of Tennessee, have invented certain new and useful Improvements in Cattle-Guards, of which the following is a specification.

This invention relates to railroad cattle guards, and has for its primary object to provide a guard comprising relatively stationary and movable guard sections having teeth or spurs to prick the legs of an animal and thus to turn stock which attempts to pass over the guard.

A further object is to provide a device of this character which is simple in its construction, durable in its character and efficient in its operation.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of the device in conjunction with a railroad track; Fig. 2 is a side elevation of the detail at A and is transverse to the track, sectioning a rail of same; Fig. 3 is a vertical sectional view on the line 4—4 of the detail B; and Fig. 4 is a plan view of the device shown in relation to the rail of a track.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

For the purpose of clearness the various parts of the invention are shown in the drawing in their proper relation to a railroad track, in which R designates the rails and T the cross ties thereof.

The device comprises a rod 1 secured by means of bolts or other suitable connections to the upper face of the ties near the outer ends thereof and parallel to the rails R. Passing underneath the rails R between the cross ties T and parallel thereto is an oscillating member, preferably in the form of a plank 2, the latter being suspended from the rods 1, preferably by chains 3, and

pierced by upstanding teeth or spikes 4 which are retained therein by a second member or plank 5 secured to the plank 2 over the heads of said spikes. The exposed toothed surface effectually protects this space from the attempts of any animal to obtain a foothold therein, and the manner of its suspension tends to turn the animal.

Located between the oscillating toothed sections 2 and rigidly mounted on the upper face of the cross ties T is a vertically disposed flat bar 6 formed with upwardly extending spurs or teeth 7 and mounted between strips 8, preferably triangular in cross section, which have their upper faces inclined downwardly toward the oscillating sections 2. Said strips of course are secured to the upper face of the cross ties T.

It will here be noted that the teeth 7 of the rigid guard sections 6 in conjunction with the sloping faces 9 effectually prevent stock from obtaining a foothold on the cross ties of the track. Attention is also called to the tendency of the downwardly sloping faces 9 of the strips 8 to direct stock stepping thereon onto the toothed oscillating sections 2 located between the ties and in a lower plane than the rigid guard sections 6.

It is of course to be understood that the oscillating toothed sections 2, swung between the ties, alternate with the fixed spurred sections 6, mounted on the ties, throughout the prescribed length of the guard. If desired, each end of the series of alternating sections may be further provided with a roller 10 having radiating teeth 11, said roller being journaled between the ties beneath the track rails, thus forming a further barrier to passage over the track where the guard is mounted.

It will be clearly seen that should an animal, traveling in the direction indicated by the arrow in Fig. 1, attempt to cross the guard, it will first strike the spiked roller 10 which revolves and affords no foothold and also presents an irritating spiked periphery. Should the roller be overreached in subsequent attempts to pass the barrier, the toothed stationary sections 6 mounted on the cross ties may be struck, but neither do they nor the inclined surfaces 9 of the strips 8 which support them afford a footing, and the feet of the animal slip down onto the toothed oscillating section 3, between the ties, which does not prove a satisfactory

path because of the spikes and the unstable manner in which it is supported.

It is to be understood that this guard is adapted to be mounted either between the rails of a track, at one end, at both ends thereof or at all three places according to the demands of the situation.

Having thus described the invention, what is claimed as new is:

10 1. The combination with a railroad track, of a cattle guard embodying toothed guard sections flexibly mounted to oscillate between some of the ties, and toothed stationary guard sections mounted on other of said cross ties and provided with oppositely disposed plates extending downwardly in the direction of the flexibly mounted sections.

2. The combination with a railroad track, of a cattle guard including oscillating toothed sections flexibly mounted between some of the ties beneath the track rails, toothed, relatively stationary sections mounted on the ties, inclined plates extending downwardly from the fixed sections toward the flexibly mounted sections, and rods secured to the ties near the outer ends thereof from which are suspended said flexibly mounted sections.

3. The combination with a railroad track, of a cattle guard comprising a plurality of fixed toothed members secured to the cross ties of the track, and flexibly mounted toothed members suspended between the cross ties of the track and beneath the rails thereof.

4. The combination with a railroad track, of a cattle guard including a plurality of fixed guard sections, provided with teeth and secured to the upper face of the ties be-

tween strips triangular in cross section secured to the ties, said strips having downwardly extending lateral faces, and flexibly mounted guard members suspended between the ties and extending beneath the track rails.

5. The combination with a railroad track, of a cattle guard embodying a plurality of relatively stationary and movable guard sections extending transversely of the track and disposed in different planes, each movable guard section being provided with a plurality of rigidly mounted teeth adapted to move in unison with said movable section.

6. The combination with a railroad track, of a cattle guard including a plurality of relatively stationary toothed sections and movable sections extending transversely of the tracks and in different planes, each movable section being flexibly mounted between adjacent ties, and each provided with a plurality of upstanding teeth disposed in substantially the same plane, and the stationary sections being each rigidly secured to a tie.

7. The combination with a railroad track, of a cattle guard including spaced supporting rods, movable guard sections disposed between some of the ties, stationary guard sections secured to other of said ties and having plates inclined in the direction of the movable sections, and a flexible connection between the movable sections and the supporting rods.

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

VICTOR E. KENT. [L. s.]

Witnesses:

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