

G. W. NEWTON.
Cattle-Guards for Railroads.

No. 137,021.

Patented March 18, 1873.

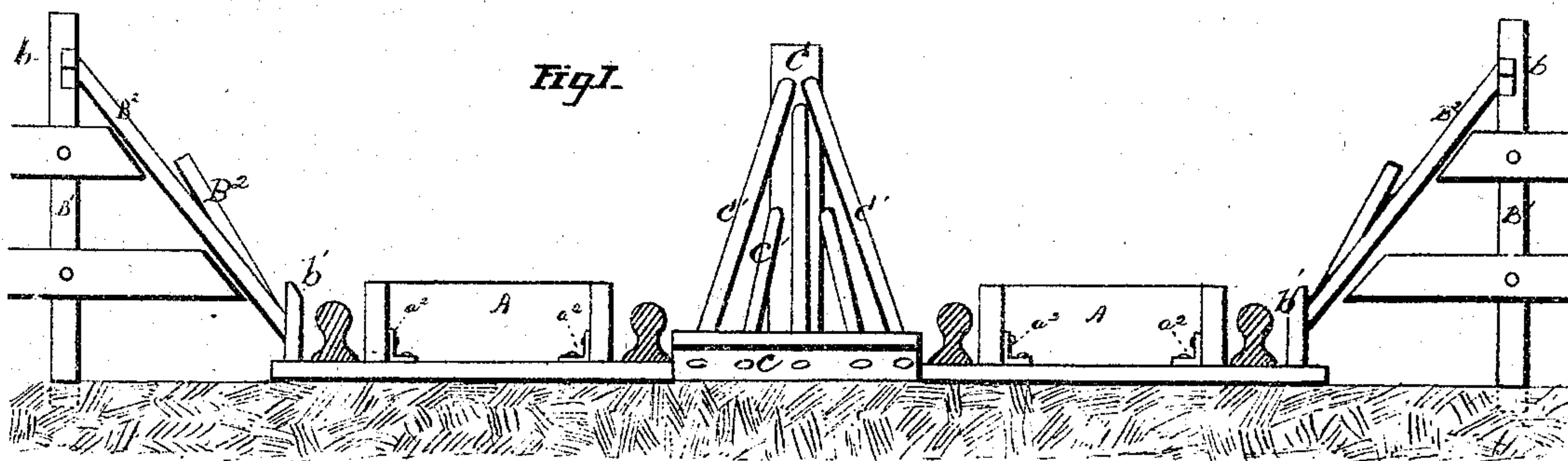


Fig. 2.

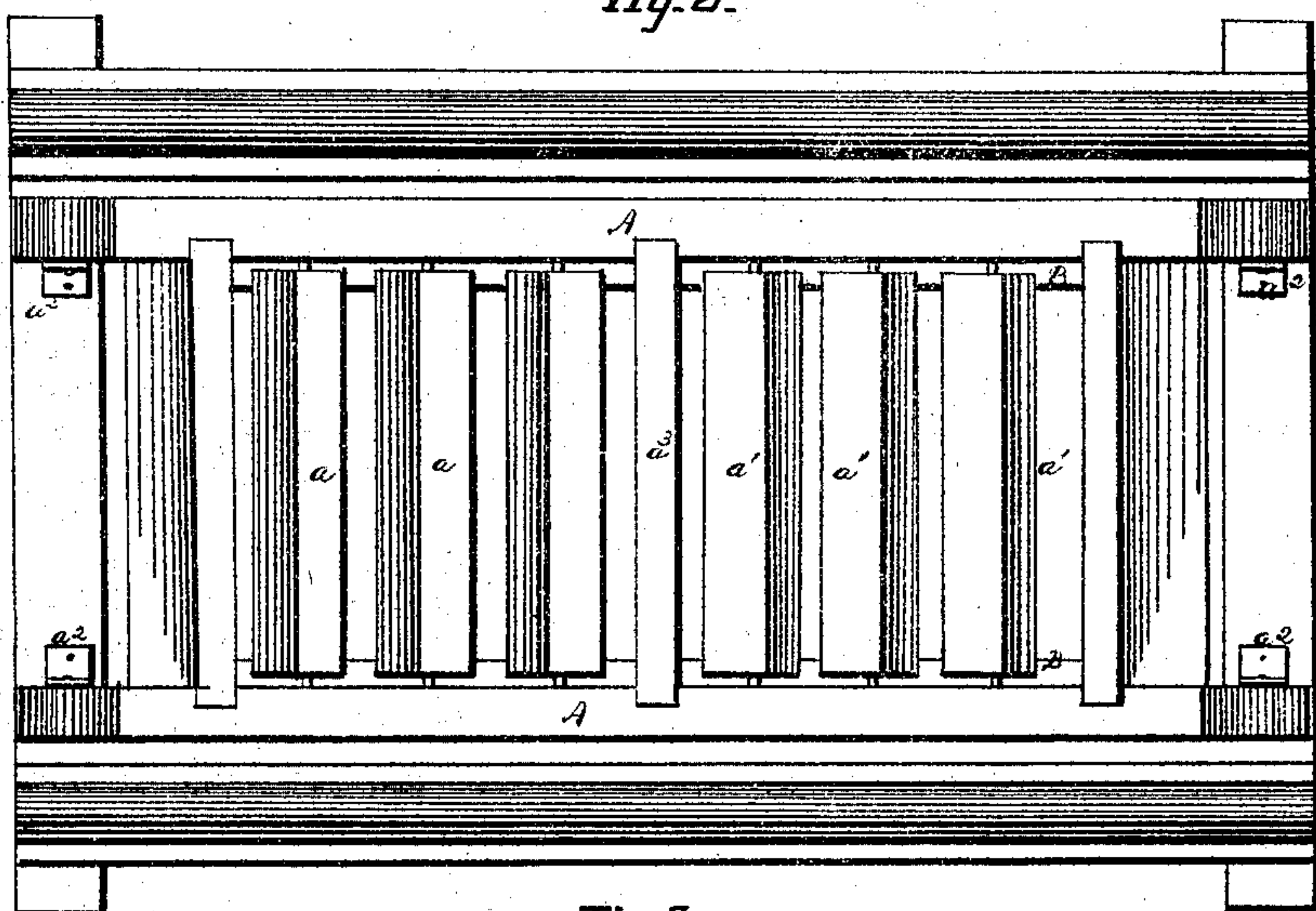
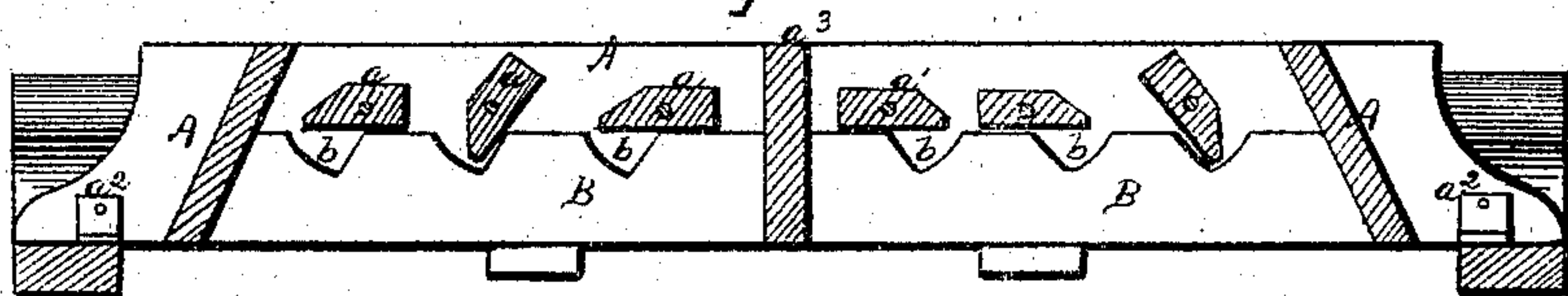


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. NEWTON, OF HUBBARD, OHIO.

IMPROVEMENT IN CATTLE-GUARDS FOR RAILROADS.

Specification forming part of Letters Patent No. 137,021, dated March 18, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. NEWTON, residing in Hubbard, in the county of Trumbull and State of Ohio, have invented a certain Improvement in Cattle-Guards, of which the following is a specification:

This invention relates to an improved cattle-guard; and the nature thereof consists of the disposition, between the rails of a railroad, of a frame having yielding or *quasi* revolving slats, substantially as hereinafter more fully set forth.

In the drawing, Figure 1 represents a sectional view of my invention adjusted to its position with reference to the rails of two railroad tracks. Fig. 2 is a plan view of the guard disposed between the rails of a single track. Fig. 3 is a longitudinal section of the latter-named guard.

In the several figures corresponding parts are designated by like letters.

A A refer to a frame, the parts of which are suitably braced together by a brace, a^3 , and supplied with the transverse slats $a a^1$. These slats are each furnished with journals having their bearings in the side pieces of the frame. The slats a are beveled or dressed in a counter direction to that in which those marked a^1 are beveled; or, in other words, each set which is divided from the other by the central partition or brace a^3 is dressed or beveled toward its respective end of the frame. The object of this construction is to prevent cattle both from entering the inclosure and leaving or getting out of the same, as will be fully apparent from the following description:

So soon as the animal puts its foot upon the beveled or dressed part of any one or more of the slats $a a^1$, it will yield or revolve and let the animal down, which will at once draw back and give up any attempt to get out of the inclosure in consequence of the fright thus sustained in losing its foothold. To prevent the slats $a a^1$ from wholly turning over or revolving, in which case the leg of the animal would be liable to become bruised, and to give them simply a partial revolution, which will overcome this serious difficulty, bars or stops B B are provided, one fastened in any known way to one side of the frame directly beneath one of the ends of the slats, and the other to the opposite side of the frame directly below the other ends of the slats.

These stops or bars are each provided with a series of triangular-shaped recesses, $b b$, cut into their upper edges, and for the purpose of allowing the slats $a a^1$ to be tilted downward, rendering them susceptible of the movement above ascribed to them. The frame A A can be fastened down in place upon the ties of the rails, through angle-irons or feet $a^2 a^2$ connected or attached in any known way to the projecting ends of the said frame, and having nails or like fastenings passing through their horizontal portions and entering the ties; or it can be secured in position in any other suitable manner. To prevent the cattle getting out through the opening required to be left between the section of the fence—whose end or terminus is at an angle to the direction of the track—and the side of the latter, the frame or guard $B^1 B^2$ is interposed within such space or opening. This guard is constructed of an upright, B, which may be the fence-post, and which is supplied at its upper end with a cross-piece, b , having a series of apertures or holes, and of a number of inclined bars or slats, $B^2 B^2$, converging one another at their upper ends and entering the said perforated cross-piece, while their lower or isolated ends enter and are confined in a perforated pillow or board, b' , standing edgewise with and upon the ground, or upon the projecting ends of the railroad ties.

The object of the guard can be accomplished and economy of timber obtained by simply extending the alternate ones of the slats only about half way up to the upper ends of the posts, as shown.

A similarly-constructed frame or guard, C C' c , is provided to prevent the cattle getting out between the tracks, and is arranged within such space as shown in Fig. 1.

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

The combination of the frame A, slats $a a^1$, and the notched or recessed stops B, substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name this 14th day of January, 1873, in presence of two subscribing witnesses.

GEORGE W. NEWTON.

Witnesses:

THOMAS A. WINFIELD,
NATHANIEL MITCHELL.