

(No Model.)

F. C. SEYMOUR.
CATTLE GUARD.

No. 469,049.

Patented Feb. 16, 1892.

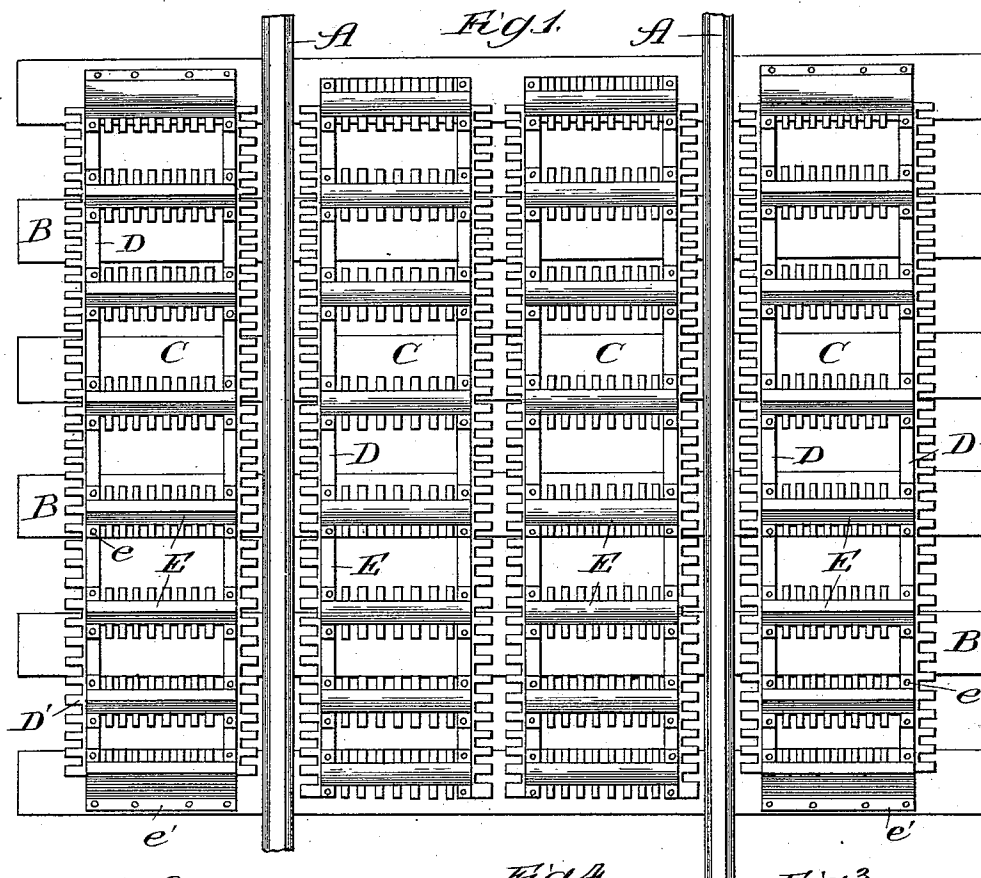


Fig. 2.

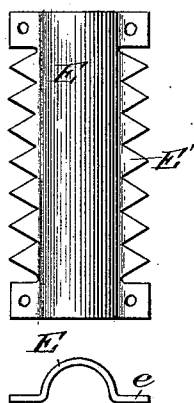


Fig. 4.

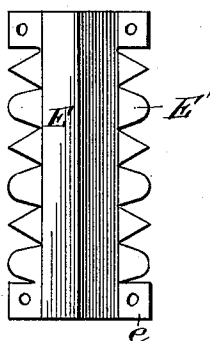
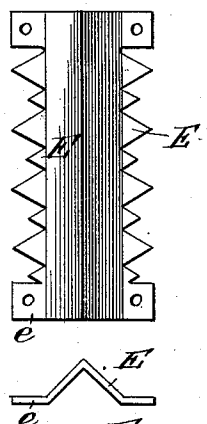


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK C. SEYMOUR, OF CHICAGO, ILLINOIS.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 469,049, dated February 16, 1892.

Application filed May 9, 1891. Serial No. 392,190. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. SEYMOUR, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Cattle-Guards, of which the following is a specification.

The object of my invention is to provide a simple and efficient guard to prevent cattle and other animals from straying upon a railroad-track when crossing the same; and the invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of my improved guard placed on the track at one side of the crossing; Fig. 2, a plan and elevation of one of the cross-bars, illustrating a modified form thereof; Fig. 3, similar views illustrating another modification, and Fig. 4 a plan view of a third form.

A A are the rails, and B B the ties, of a railroad-track.

The cattle-guard is made in any number of sections desired. In the drawings I have shown it made in four sections, two being placed between the rails and one at each side of the track. There may, however, if desired, be seven sections, three between the rails and two at each side, or three, one between the rails and one at each side, the only difference in such cases being one of dimensions, and therefore immaterial. Each of the sections C is made in the form of a grating or framework composed of side rails D, resting upon the upper surface of and fastened securely to the ties, and cross-bars E, resting upon the rails D and riveted or otherwise secured thereto. These cross-bars may be made in various forms. For example, they may be rounded or semicircular, as shown in Fig. 2, or the sides may be run up at an angle to each other, forming an edge, as shown in the other figures of the drawings. Each of the cross-bars is preferably provided with flanges or feet *e*, whereby it is attached or fastened to the rails D, and is furthermore provided, preferably, in substantially the same plane with these flanges with teeth *E'*, which may be of any form capable of accomplishing the purposes of this part of the invention, as hereinafter described. In the drawings I have shown

various forms of teeth. For example, in the frame-work or grating showing at the left-hand of the first figure I have shown the teeth as being square or rectangular. In Fig. 2 the teeth are triangular or pointed. In Fig. 3 they are triangular, but of varying sizes, alternating in any desired manner; and in Fig. 4 I use both the pointed and rounded teeth arranged in any desired alternation or series. The purpose of these teeth being to catch the feet or legs of the animals, thereby frightening them and driving them back on the roadway, any other form of tooth that will accomplish this purpose will fall within the spirit of my invention. Moreover, although I have shown these cross-bars as provided with teeth along both of their lateral edges, this is not essential, since good results may be attained when only one of such edges is toothed. The rails D are also preferably provided with teeth *D'* along each of their edges, as shown. I prefer to attach the cross-bars to the rails at varying distances, as shown in Fig. 1, and preferably with the cross-bars nearest the roadway placed nearer together than those at greater distances therefrom; and while this construction is not essential it has the following advantages: The smaller animals will be caught and scratched by the teeth of the cross-bars nearest the roadway and be immediately driven back. The larger animals may be driven back by the upper surfaces or tops of the cross-bars, but will not at first be affected by the teeth, the cross-bars being too near together. If, however, they persist in attempting to cross the guard, they will reach the point where the cross-bars are sufficiently wide apart for their legs to pass between and be scratched by the teeth, thereby effectually alarming the animals and driving them back to the roadway. The tops of the cross-bars will of course assist the teeth in frightening the animal, since they will afford a footing so insecure and insufficient that the animal will be unable to pass over them. The last cross-bar at each of the gratings, which is outside of the track, is carried down and turned to form a flange *d'*, adapted to rest upon the ties, whereby the grating is additionally secured; and, furthermore, any chains, &c., hanging or dragging from a passing train would slide up the inclined side of the cross-bar with-

out catching under the same, thereby preventing any breaking of the guard. The end bars between the track-rails may be similarly constructed, if desired. It is of course understood that a guard similar to that shown in Fig. 1 is arranged upon the other side of the roadway.

Although I have shown more or less specific forms, I do not intend to be limited thereto, but contemplate the substitution of equivalents as the same may be required.

I claim—

1. A cattle-guard comprising a series of cross-bars, of which those at one or both ends of the guard are set closer together than the rest, substantially as described.

2. In a cattle-guard, a grating comprising rails running substantially parallel with the track and cross-bars provided with at least one toothed lateral edge secured to such rails, substantially as described.

3. A cattle-guard made in three or more sections, each section comprising longitudinal supporting-rails and transverse cross-bars provided with teeth along their lateral edges, substantially as described.

4. In a cattle-guard, a section comprising longitudinally-extending toothed supporting-rails adapted to be secured to the ties, and cross-bars mounted upon such rails, the cross-bars being bent or rounded to form edges upon their upper surface and provided with teeth along their lateral edges, substantially as described.

5. In a cattle-guard, a grating comprising side rails resting upon and secured to the ties and toothed cross-bars attached to such rails, of which bars those at one or both ends of the guard are set closer together than the rest, substantially as described.

6. In a cattle-guard, a grating comprising side rails secured to the ties and cross-bars attached to such rails and provided with toothed lateral edges, the sides of the end cross-bars extending down to the ties, whereby a smooth surface is afforded to prevent dragging-chains, &c., from catching under the grating, substantially as described.

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Witnesses:

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