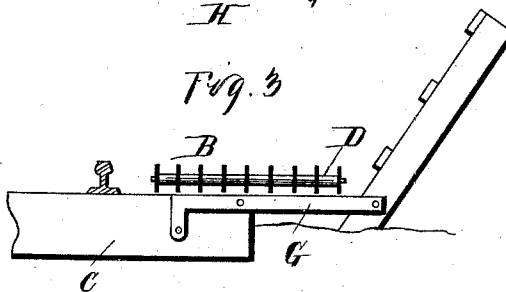
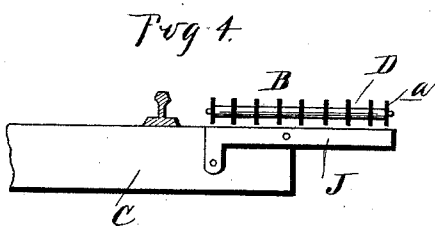
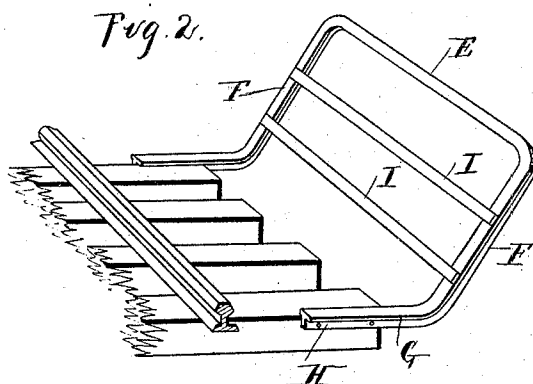
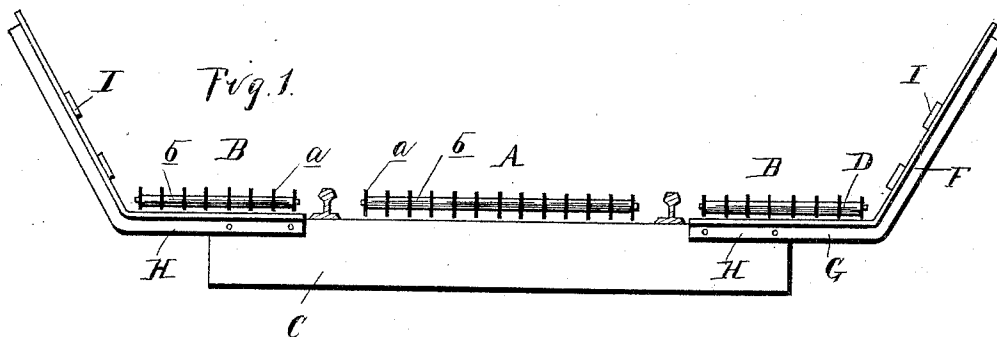


(No Model.)

J. WHITEMORE.
CATTLE GUARD.

No. 460,318.

Patented Sept. 29, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES WHITTEMORE, OF DETROIT, MICHIGAN, ASSIGNOR TO THE NATIONAL SURFACE GUARD COMPANY, OF CHICAGO, ILLINOIS.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 460,318, dated September 29, 1891.

Application filed January 6, 1891. Serial No. 376,928. (No model.)

To all whom it may concern:

Be it known that I, JAMES WHITTEMORE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Cattle-Guards, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in a cattle-guard support and side fence; and the invention consists in the peculiar means of supporting the ends of the cattle-guard which overhang the ties, and, further, in the peculiar combination, with the support, of the said fence, the support being made integral with or connected to said fence, all as more fully hereinafter described.

In the accompanying drawings, Figure 1 is a vertical section through a railroad-track to which my invention is applied, showing the cattle-guard and inside fence in elevation. Fig. 2 is a detached perspective view of the support and fence. Figs. 3 and 4 show end elevations of modifications of my device.

Cattle-guards are ordinarily constructed of three sections—a section A between the rails and sections B on the outside of the rails—all being supported upon the ties C. These surface cattle-guards have been made in various forms, that which I show in the drawings consisting of parallel guard-strips *a*, connected together by a cross-bar *b*.

Other forms of guard may be used, as the peculiar construction of guard is not herein claimed.

In laying the outside sections B in the track at railroad-crossings they are required to be of a length greater than the ties C, and this leaves an unsupported overhanging portion D at each end of the guard. Heretofore to support this overhanging end portion the practice has been to take out two ties from the road-bed at the sides of the guard and replace them with extra length, which must necessarily be sawed to order, adding materially to the time and expense necessary in placing the guard in the track.

My invention is intended to overcome these objections, and consists in securing to the ends of the ordinary ties suitable extensions or arms which will support the overhanging ends D of the guard. As each cattle-guard requires to have placed beside it a side fence parallel with the track, I preferably construct my support for these overhanging ends of the guards integral with the said fence, as shown in Figs. 1 and 2, in which I show a metal bar bent to form the horizontal portion E, running parallel with the rails, the substantially-vertical portions F, extending down to the ties, and the two lateral supporting-arms G, which extend from the vertical portions F to the ties C and are secured thereon in any suitable manner. I preferably make the side fence and supporting-arms of T-metal, in which case the flanged portion H, extending down beside the tie, may be used as a means of securing the portions G to the ties.

Any suitable material may be used to connect the vertical portions F to form the slats of the fence. In the drawings I have shown metal bars I used for this purpose.

In place of making the horizontal portions G integral with the side fence, as shown in Figs. 1 and 2, it is evident that they may be made independent thereof when they are to be applied to fences already in use. This construction I have shown in Fig. 3, the horizontal portion G being simply a bar secured at one end to the tie and at the other end to the fence. If sufficiently-strong support can be had upon the tie, it is evident that my device may consist simply of the bar J, preferably of angle shape, as shown in Fig. 4, secured at one end to the tie by means of suitable spikes and bolts, having its upper edge projecting parallel with the top of the tie and supporting the overhanging portion D of the guard.

What I claim as my invention is—

1. The combination, with a railway-track and the ties thereof, of a surface cattle-guard on the track, the outer sections thereof extending beyond the ends of the ties, and of supports for the outer ends of the sections secured to the ties and extending substantially

in line with the top thereof, substantially as described.

2. The combination, with the ties of a railway and a surface cattle-guard thereon, the
5 outer sections thereof overhanging the ends of said ties, of a bar or bars having their upper edge substantially in line with the top of the ties and secured at one end to the ties

and at the other end to the guard-fences, substantially as described. 10

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

JAMES WHITTEMORE.

Witnesses:

M. B. O'DOHERTY,
P. M. HULBERT.