

B. H. HERMAN.
 CATTLE GUARD.
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1,001,396.

Patented Aug. 22, 1911.

Fig. 1.

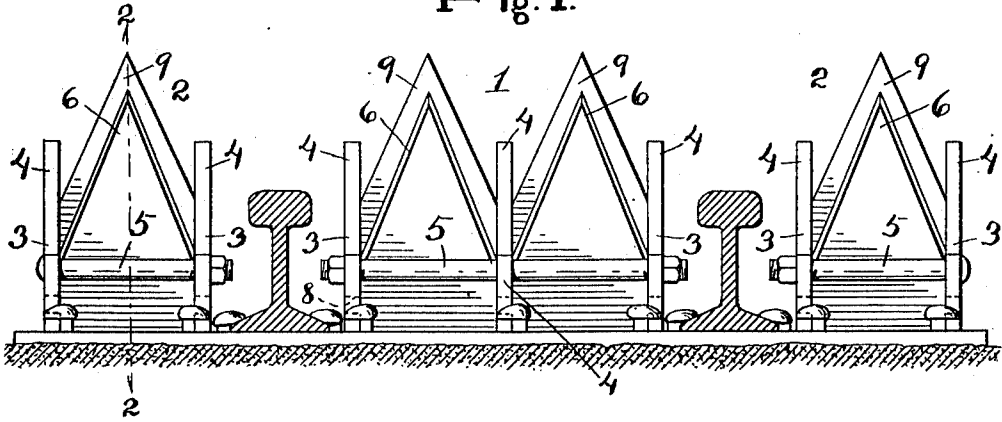


Fig. 2.

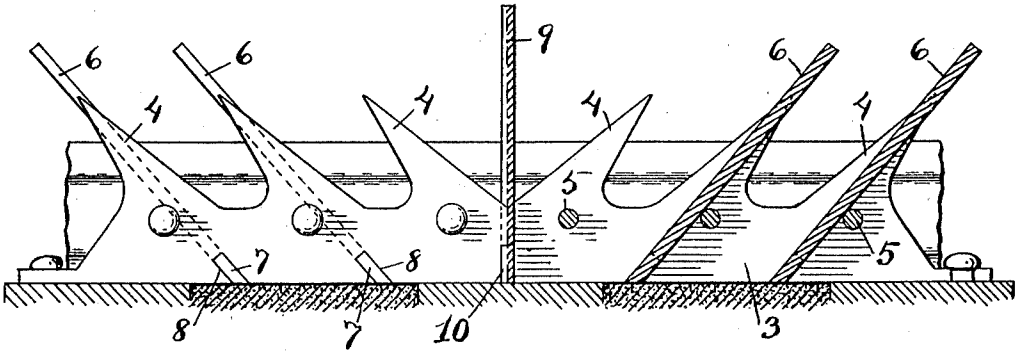


Fig. 3.

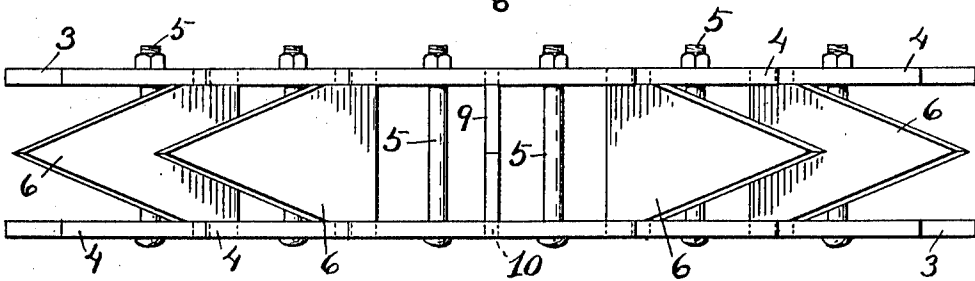
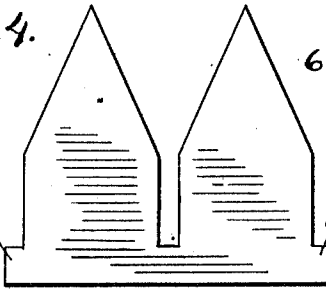


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

BILL H. HERMAN, OF WESSON, MISSISSIPPI.

CATTLE-GUARD.

1,001,396.

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Application filed February 14, 1911. Serial No. 608,575.

To all whom it may concern:

Be it known that I, BILL H. HERMAN, a citizen of the United States, resident of Wesson, in the county of Copiah and State of Mississippi, have made a certain new and useful Invention in Cattle-Guards; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a front view of the invention as applied. Fig. 2 is a combined side and sectional view of the invention, the section being taken on the line 2—2, Fig. 1. Fig. 3 is a plan view of a lateral section of the invention. Fig. 4 is a detail front view of two of the intermediate teeth for the central section of the invention.

The invention relates to cattle guards for railways, and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the numeral 1 designates the central section of the guard, which is disposed between the tracks, and 2, 2 designate the lateral guard sections, disposed at each side of the track. The central section is composed of three parallel longitudinal frame bars 3, spaced apart and each having a plurality of inclined, pointed, upward projecting teeth 4 in the same plane as the frame bar and pointing in opposite directions outward from the center of the bar. These frame bars are connected together by transverse bolts 5, and are held apart by means of a double series of intermediate inclined teeth 6, of wider formation than the teeth 3 and fitting closely between the frame bars. The planular bodies of said intermediate teeth have lower lateral extensions 7, also inclined and in the same plane as the teeth of which they form a part, said extensions engaging in a removable manner with inclined seats or notches 8 of the bars 3, whereby the teeth are held in inclined position. In order to brace these intermediate teeth in position and to take the strain from the lateral extensions, the lower face of each tooth 6 rests at an intermediate portion thereof upon one of the transverse bolts 5.

The lateral sections of the guard are com-

posed each of two longitudinal parallel frame bars, a series of teeth for each frame bar and a single series of intermediate teeth, similar in all respects to the frame bars and teeth of the central section of the guard.

A central vertical tooth 9 is arranged between the frame bars of each section of the guard, this vertical tooth being preferably longer than the inclined teeth of the frame bars and about on the same level at its upper pointed end with the upper pointed ends of the intermediate inclined teeth between the frame bars. The teeth 9 are also provided with lateral lower extensions 10, which fit in vertical notches or seats of the frame bars.

The sections of the guard may be placed in position between and at the sides of the track and spiked to the cross ties, when the lateral extensions of the teeth thereof will be held in their notch seats by the weight of the parts bearing thereupon. Upon lifting the sections the teeth may be readily removed and replaced by new ones should such be necessary.

My cattle guard is of simple nature, composed of few parts, easily assembled, and will be found of advantage for the purpose.

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

1. A cattle guard, having in combination longitudinal parallel frame bars spaced apart, provided each with lower marginal inclined notch seats and a plurality of inclined teeth in the same planes as said bars and pointing in opposite directions, transverse bolts connecting said frame bars, and a plurality of intermediate inclined teeth disposed between said frame bars and acting to hold the same apart, said intermediate teeth also pointing in opposite directions and having lower inclined lateral extensions fitting in said notch seats.

2. A cattle guard, having in combination longitudinal parallel frame bars spaced apart, provided each with lower marginal inclined notch seats and central vertical lower marginal notch seats, a double series of inclined teeth in the same planes as said bars and pointing in opposite directions, transverse bolts connecting said frame bars, a plurality of intermediate inclined teeth disposed between said frame bars and acting to hold the same apart, said intermediate teeth also pointing in opposite directions and

having lower inclined lateral extensions in the same plane thereas and fitting removably in said notch seats, and a vertical intermediate tooth having lower lateral extensions fitting removably in said vertical notch seats.

3. A cattle guard, having in combination longitudinal parallel frame bars spaced apart, provided each with lower marginal inclined notch seats, a plurality of inclined teeth in the same planes as said bars and pointing in opposite directions, transverse bolts connecting said frame bars, and a single series of intermediate inclined teeth disposed between said frame bars and acting to hold the same apart, said intermediate teeth also pointing in opposite directions, having bracing engagement with said bolts and lower inclined lateral extensions fitting in said notch seats.

4. A cattle guard, having in combination a central section designed for disposal between the tracks and lateral sections de-

signed for disposal at the sides of the tracks, each section being composed of longitudinal parallel frame bars spaced apart, provided each with lower marginal inclined notch seats, a central vertical notch seat, a plurality of inclined teeth in the same planes as said bars and pointing in opposite directions, transverse bolts connecting said frame bars, a plurality of intermediate inclined teeth disposed between said frame bars and acting to hold the same apart, said intermediate teeth also pointing in opposite directions, having bracing engagement with said bolts and lower inclined lateral extensions fitting in said seats, and a vertical intermediate tooth having lower lateral extensions fitting in said vertical seats.

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

B. H. HERMAN.

Witnesses:

WM. H. FOSTER,

R. W. CARTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."