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J. NELSON.

CATTLE GUARD.

APPLICATION FILED APR. 21, 1917.

1,252,153. Patented Jan. 1, 1918.

Fig. 1.

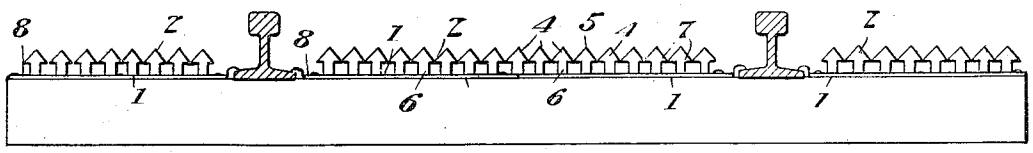


Fig. 2.

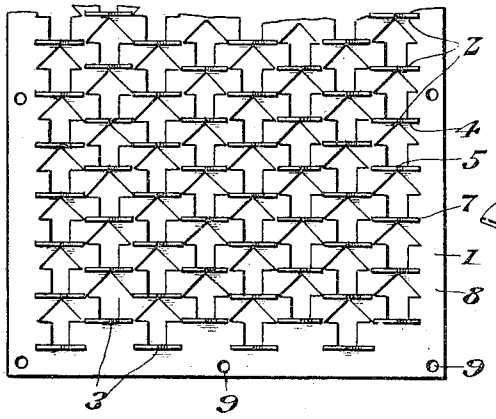
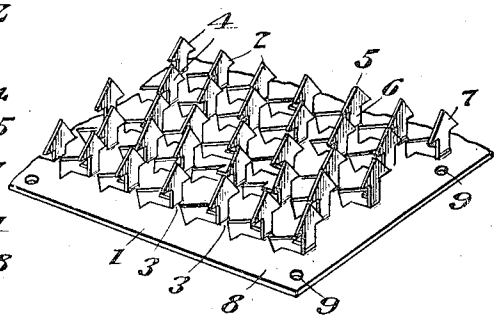


Fig. 3.



WITNESSES

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CATTLE-GUARD.

1,252,153. Specification of Letters Patent. Patented Jan. 1, 1918.

Application filed April 21, 1917. Serial No. 163,673.

To all whom it may concern:

Be it known that I, JOHN NELSON, a citizen of the United States, residing at Rathdrum, in the county of Kootenai and State of Idaho, have invented new and useful Improvements in Cattle-Guards, of which the following is a specification.

My invention relates to cattle-guards and has for its objects; first, to provide a cattle-guard which is well adapted to prevent cattle crossing the same, second, to provide a cattle-guard having a series of upstanding teeth, said teeth having laterally projecting points formed thereon whereby the number of teeth may be reduced without lessening the efficacy of the device.

A further object of my invention is to provide a cattle-guard which may be stamped out of a flat sheet of metal, the structure being such that sufficient stock is left in the plate to present a strong base for the support of the upstanding teeth.

With these and other objects in view which will be hereinafter fully described and particularly pointed out in the claim, the invention consists in the novel construction and arrangement of parts illustrated in the accompanying drawings forming a part of this specification, in which:—

Figure 1 is a partial cross section of a railroad track to which a cattle-guard embodying my invention is attached.

Fig. 2 is a partial top plan view of the cattle-guard.

Fig. 3 is a view in oblique perspective of a portion of the cattle-guard.

Like characters of reference indicate like parts in the various views.

In the drawings 1 indicates a plate of sheet metal upon which a cattle-guard embodying my invention is formed. Teeth 2 are formed from the plate by punching them therefrom and bending them at right angles to the base at the jointure of their lower ends and the body of the plate, as designated at 3. Each tooth comprises an arrow shaped head 4 having its point 5 projecting upwardly. The head is formed on the end of a relatively narrow neck 6 which has its other end integral with the body of a plate at 3 as above described. The lower end of the arrow shaped head extends laterally on the opposite sides of the neck and terminates in lateral projecting points 7. The teeth 2 are arranged upon the plate in a staggered order so that the lateral projecting points 7 may be utilized to the best advantage.

In the use of the device, when an animal tries to cross the guard his foot will either strike one of the upstanding points or be placed between the respective teeth. If the animal's foot strikes one of the upwardly projecting points of the teeth the bottom of his foot will be injured slightly to prevent his advancing across the guard. If the animal's foot is placed between the guards the movement of his foot will contact one of the lateral projecting points or barbs 7 which will slightly injure the same to cause him to withdraw his foot from the guard. Thus it will be seen that by my construction the teeth need not be set as close together as is required in other forms of cattle-guards whereby a stronger base is provided. A border 8 is left about the edge of each section of the cattle-guard and is provided with spike holes 9 for securing the guard upon the ties of the tracks.

Having thus fully described my invention, I claim:—

A cattle guard, comprising a metallic base having transverse, spaced, parallel rows of teeth struck up therefrom, the teeth of one row being staggered and similarly disposed with regard to the teeth of the adjacent rows, and each tooth having an arrow shaped extremity, the lateral adjacent arrow points of the teeth in adjacent rows lying substantially in alinement longitudinally of the plate.

In testimony whereof I affix my signature.

JOHN NELSON.

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